Chapter 11
Covid-19 Transition Turbulence: Structural Violence in a Time of Economic Paradigm Change

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Abstract This chapter uses Johan Galtung's typology of violence as an interpretative framework for contemporary shifts within the international economic system brought about by the dynamic of the transition towards more sustainable growth. The concept of sustainability is used here not only as a signifier of the direction of economic development, but also as a factor of resilience understood as the capacity of socio-ecological systems to withstand and respond to changes (Folke et al., Ecol Soc 15(4):555–520, 2010). The process of transformation towards sustainability, therefore, is seen as an essential factor in the maintenance of resilience, especially in the conditions of great acceleration of human activities and rising uncertainty. The operational layer of forces shaping the structural level of the global economic order is illustrated by the impact of the Covid-19 pandemic and responses to this threat, analyzed in the context of the transition towards sustainability. The moment of this major global crisis, revealing profound, longstanding vulnerabilities in the global system, can either open policy windows for a more effective transformation, or signify a major shock that fragile systems may be not able to absorb. It is argued that adaptation to changing external drivers and capacity to navigate transitions of different scale and nature is becoming part of the sustainability concept in its more general sense.

Introduction

The Coronavirus pandemic presents not only an immediate public health risk at the global scale, but also a long-term threat to both global stability and sustainable development. Its projected run-on effects exacerbate tensions and uncertainties across societies and produce challenges in other systems, undermining global well-being and amplifying risks associated with the structural conditions of economic and social life. The emergence of the pandemic directly influences the spheres of

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D. Kurochkin et al. (eds.), *Energy Policy Advancement*,
https://doi.org/10.1007/978-3-030-84993-1_11

economy and environment, bringing new findings related to the concept and practices of sustainability. In consequence of the economic lockdown, global emissions were reduced to record low levels, biodiversity was enhanced, forest and maritime regenerative capacities improved (IEA, 2019).

Coal-fired power generation is reported to have declined by 50% in China, whereas oil consumption declined by 20–30% (Carbon Brief, 2020). Such confirmation of the critical interrelationship between economic activities and environmental conditions doesn't, however, indicate a solution that might be an effective response to the challenges posed by unsustainable growth. Radical responses to pandemics sufficient to result in the improvement of the environment—at high social and economic cost—can only be imposed in the context of an extraordinary crisis.

The appearance and unprecedented intensity of the pandemic presents a factor seriously influencing the structural level of economic systems that is likely to leave a permanent imprint on the sustainability/peace nexus and inspire new perspectives on sustainable development. The scale of the crisis exposed mechanisms via which the structural violence permeates all of the spheres of social and economic relations (Galtung, 1985), and how they are legitimized by the cultural constructs (Galtung, 1990). The scale of the disruption caused, underlying structural conditions and the types of response present a framework for analyzing the present resilience of the socio-economic models and perspective for maintaining the transformative course towards sustainability.

The chapter examines the question of how the pandemic may influence the transition to sustainability and discusses resilience as a primary feature of the economic models currently being mooted. The concept of resilience encompasses all the structural imbalances that weaken the ability of countries, communities and individuals to effectively and efficiently cope with the challenges we are facing. Resilience has long been present in the sustainability debate (Adger, 2000; Brown, 2015; Walker & Cooper, 2011), but its importance has now been elevated by the systemic vulnerabilities exposed by the pandemic. The UN resolution adopting Sustainable Development Goals indicates that "…sustainable development recognizes that eradicating poverty in all its forms and dimensions, combating inequality within and among countries, preserving the planet, creating sustained, inclusive and sustainable economic growth and fostering social inclusion are linked to each other and are interdependent" (UN, 2015: 5). Yet the recasting of sustainability as a complex, multidisciplinary and, indeed, 'wicked' problem has also been a way to excuse the slow transition to the new models. Before the pandemic, progress in attaining sustainable growth as reflected in all the Sustainable Development Goals had been mixed (Moyer & Hedden, 2020). By analysing the impact of the pandemic this article asks how the approach to the complexities of the transition to sustainability might change, and how this change can be reflected in post-pandemic policy design. It focuses on two questions in particular:

- How does the pandemic influence the way in which sustainability is conceptualized and reflected in social practices? Sustainability provides here a conceptual and normative framework oriented at the direct interventions needed to reduce the potential negative impact of climate variability on the economic well-being of

the societies. The chapter's hypothesis assumes that the concept of sustainability is being transformed, as pandemics may result in a re-negotiation of the importance of inclusive growth as a part of systemic resilience, alongside efficiency and profitability.

- How have forms of structural violence existing in economic systems been exacerbated by the pandemic, and how will they influence views on social design in the post-pandemic world? The article uses Galtung's typology of violence (Galtung, 1969) as an interpretative framework for contemporary shifts within the international economic system caused by the dynamic of the transition towards more sustainable growth. The forces shaping the structural level of the economic order are illustrated by the impact of Covid-19 and responses to the pandemic examined in the context of the sustainability transition. Structure-oriented analysis reveals the mechanisms of economic reasoning that stand behind certain moves and the policies of individual and group actors. Within this framework, the roots of violence are traced to the way in which society is organized, how resources are distributed and what kind of opportunities are created.

The aim of this chapter is to understand the interplay between the forces building sustainability and driving responses to economic consequences of the pandemic. The point of departure for this text is the assumption that, due to magnitude of changes brought by Covid-19, the hierarchy of the factors shaping the socio-economic environment is being rescheduled. As governments consider public health and economic strategies responsive to the crisis, they also create the grounds on which the structural weaknesses of systems that inhibited their ability to respond comprehensively to the pandemic could be addressed in the future.

Coronavirus pandemic—The Turbulence of the Transition

The original concept of positive peace was built upon a reference to the human health system, in which health was understood not only as an absence of disease but also an ability to develop a strong immune system able to prevent and resist health hazards (Galtung, 1985). So not only the effectiveness of the global economic system in its actual (non-sustainable) and potential (sustainable) forms is taken into consideration, but also the system's resilience. Global economic changes are perceived here as factors influencing the systemic ability to resist causes of violence and develop more synergies that could reduce structural vulnerabilities. The framework conditions that increasingly challenge sustainable development and undermine systemic resilience are described by the VUCA (volatility, uncertainty, complexity, and ambiguity) concept, which identifies the high frequency and magnitude of change in the contemporary socio-economic arena (Bennett & Lemoine, 2014; Shambach, 2004).

Such an outlook has also influenced the conceptualization of social realities in the context of sustainability, giving prominence to the non-linear trends in both natural and cultural systems (Folke et al., 2010; Lovejoy, 2005). The first usage

of the concept coincided with the emerging field of complexity and chaos theory, and later the approach was widely adopted following the financial crisis of 2008–2009, when societies suddenly found themselves faced with similar conditions while addressing global economic turmoil. Another vivid example of complex system dynamic has been provided by the most recent global crisis, triggered by the Coronavirus pandemic.

A novel type of coronavirus (Covid-19) first appeared in Wuhan in China, in December 2019/January 2020. From here, this highly infectious virus caused a cataclysmic course resulting in over 2.6 million deaths worldwide by March 2021 (WHO, 2020). The real total number of cases remains unknown as testing is limited in most countries.

The appearance and spread of the virus prove the prominence of the VUCA factors of uncertainty, indeterministic tendencies, and non-linear relationships and feedback processes in defining a threat and response formulation. The pandemic not only confirms the diagnosis of the unprecedented level of threat that the global order needs to contend with, but also presents a major phase of turbulence in the evolution of the global economic system that may either accelerate or block the transition to sustainability. This is due to the nature of pandemics that have the features of the 'black swan'—a single, highly transformative factor that shapes social realities on a large scale (Taleb, 2007). While the nature of such pandemics is still open to debate, this outbreak matches the description of the three attributes typical for a 'black swan' event:

- It is an outlier, being outside the realm of regular expectations. The possibility of the pandemic has been long predicted, as disease outbreaks such as SARS, Ebola, Marburg, hantavirus, Zika and avian influenza are all considered to be outcomes of anthropogenic impacts on ecosystems (World Bank, 2012). Analysts of the US National Intelligence Council, in a report released in 2012, suggested that 'An easily transmissible novel respiratory pathogen that kills or incapacitates more than one percent of its victims is among the most disruptive events possible' (NIC, 2012). The timing of its appearance and exact nature of this specific SARS-CoV-2 coronavirus had not been predicted, but the probability of a global pandemic involving a highly infectious respiratory virus was considered a plausible scenario. This does not mean, however, that protective systems were in place when the outbreak occurred. So the effect of the shock and 'strategic surprise' that multiply the consequences of pandemics puts the Covid-19 in the category of being outside the realm of regular expectations.
- Explanations for the occurrence are concocted after the fact, making it explainable and predictable. The mechanism of cross-species transmission of viruses is already fairly well researched, providing an explanatory platform for the new mutation's appearance. The potential impact of the pandemic and the pace of its reproduction could also be assessed on the basis of global mobility and increased urbanization.
- It carries an extreme impact. A pandemic bearing a threat to the survival of a substantial part of the global population has triggered unprecedented responses that have impacted all levels of social interaction. At the initial stage, with a limited

medical capacity to treat the disease, nonpharmaceutical interventions (NPI) were the main strategy for containing the social risk. In consequence, one-half of the world's population was asked to stay home (Baker et al., 2020). The most popular measures varied from lockdown (home isolation, voluntary/required quarantine), to different forms of social distancing affecting vulnerable groups or entire populations. This framework of action included the closure of schools/universities and non-essential businesses/workplaces, and the cancelling or postponing events (i.e., major conferences and tradeshows, concerts and festivals, political debates and elections, sports seasons, including the Summer Olympics 2020). With international travel bans affecting over 90% of the world population within just two months, the framing of the global tourism system moved from over-tourism to 'nontourism' (Gössling et al., 2020).

The capacity of individuals, societies and systems to respond to and influence change has been tested, bringing a reorientation in hierarchies of policy objectives and shared beliefs. Governments around the world have been forced to impose a suite of extraordinary public policies, limiting the public health crisis but also producing long-term impacts in expectations of the role of government, national debt and general economic model.

The importance of resilience has grown drastically, both in the context of economic sustainability and recognition of the need to redesign social models so that they can better absorb and adapt to the crisis, as well as better address change and uncertainty more generally. The fragility of the international and national systems has been exposed, fueling changes in alliances, institutions and the global economy. Dealing with the immediate health crisis has accelerated adaptive mechanisms ranging from the rapid loosening of regulations regarding the manufacture of medical devices such as masks and ventilators, or eliminating barriers to the employment of medical professionals, to massive public increases in public welfare spending and in public debt. The extraordinary situation of the pandemic has revealed, however, an urgent need to build such adaptive mechanisms into the regular economic framework so as to ensure the rapid transformation of complex economic systems when local and structural circumstances change.

Covid-19 and the Global Economic Order

The global economy presents a complex, ever-evolving structure in which actors operate according the scripts driven by markets, technology, global value chain orchestration, open innovation and a whole variety of other factors. While economic activities are undertaken by actors, structural conditions provide the spectrum of options that they have at their disposal. In 2020 the pandemic has marked a deep change in the operational structures of the global and local economies. Limitations on international, regional and local imposed by governments immediately affected national economies, resulting in the most severe disruption since World War II. The

interconnectedness of economic relations caused a cascade effect in all sectors, even those only loosely related to the ones most impacted by the lockdown. Global supply chains have been interrupted and production in China dropped, which led to a negative supply shock. A direct impact on income and economic growth was noted due to premature deaths, workplace absenteeism, and decreased productivity. An estimated 81% of the global workforce has been hit by full or partial lockdown measures (ILO, 2020).

The situation was particularly pressing for informally employed workers: in India, 90% of street vendors have not been able to work; in Africa 35 million informal service sector jobs, as well as 15 million in the manufacturing and construction sectors, are vulnerable (Jayaram et al., 2020). Job market uncertainty decreased income and the inability of households and companies to make long-term budgeting plans have modified consumers' spending behaviors, undermining market confidence (OECD, 2020). Many economic actors have adopted a 'wait and see' approach, minimizing their market activities. Substantial detrimental effects on tourism, air transport, public transport, accommodation, cafes and restaurants, conferences, tourism and services have been reported. Travel restrictions have cost the tourism industry alone over $200 billion globally, excluding other loss of revenue for tourism and travel, and were forecast to cost the aviation industry a total loss of US 113 billion (Peterson & Thankom, 2020). Constraints on production and supply chains resulted in obstacles to food production and transport, eroding the food security of millions of people. The World Bank estimates that 40–60 million more people will find themselves in the condition of extreme poverty due to the Covid-19 pandemic (Pangestu, 2020).

According to the International Monetary Fund, the global economy is expected to shrink by 3% in 2020 with 'the worst economic fallout since the Great Depression,' while global debt increased this year by 19% relative to gross domestic product (IMF, 2020).

The world financial and oil markets significantly declined as well. Since the start of 2020, leading U.S. and European stock market indices (the S&P 500, FTSE 100, CAC 40, and DAX) have lost a quarter of their value, with oil prices declining by more than 65% as of April 24, 2020 (Pak et al., 2020).

The economic impact of the Covid-19 pandemic can be measured also by the scale of the recovery plans designed by governments all around the world to prevent the crisis from having devastating long-terms effects. The stimulus packages in the leading world economies were the highest ever recorded, reflecting the premise that the economic damage has to be stopped at any cost for the sake of minimizing the escalation of the human tragedy. Provisions of the Coronavirus Aid, Relief, and Economic Security Act, or CARES Act, signed in March 2020 secured US 2.7 trillion in March and April (about 13% of the gross domestic product) to provide economic relief to individuals, firms and states. It was the largest economic stimulus in American history. The European Commission agreed to dedicate a US 2.1 trillion budget and coronavirus relief package, which is the biggest in European history, far outstripping the post-World War II Marshall Plan (Hepburn et al., 2020).

The pandemic has tested the resilience of national economies, their structural conditions indicated by the level of income inequality, the dynamism of ecosystem for entrepreneurship, degree of the precariousness of employees, amongst other factors that will shape the long-term consequences of this disruption.

In some countries, economic turmoil is likely to reverse positive trends in socio-economic progress, which means pushing a significant number of people into unemployment and poverty while increasing inequality. The level of health inequalities is directly combined with the fluctuations in income distribution in the aftermath of Covid-19, which is especially striking in systems without universal healthcare coverage. The market inequalities deepened by the pandemic are likely to shape the structural features of highly developed economies. The impact of the pandemic on different economic sectors and occupations has been related to their digital maturity. Firms at the technological frontier strengthened their dominance in increasingly concentrated markets. The growing level of automation of low- to semi-skilled tasks has resulted in a demand for higher-level skills, negatively impacting wages and jobs at the lower end of the skill spectrum (Rose, 2020). While technology has become a core enabler in responding to the challenges of the pandemic, it is probable that the benefits of technological transformation will continue to be shared highly unequally. The 'winner takes it all' principle, reinforced during the pandemic, is likely to provide transformative opportunities to those with access to infrastructure, capital and knowledge, leaving those without further behind (Quresh, 2020).

The extreme situation of the pandemics revealed that economics has been the major point of reference in both imposing responsive strategies and balancing mitigation efforts with the potential social harm connected to the severe limitation of economic activity. Resources were needed to prevent the spread of the virus on the one hand, and have to be invested in systems that have been seriously weakened by the massive consequences of the 'lockdown' on the other.

While the general impact and full consequences of the pandemic 'black swan' cannot yet be estimated, its appearance undoubtedly carries the transformative potential for both. Further, its magnitude and scale may carry the transformational potential for the structural order of the global economy. This is the essence of major crises—unexpected events of high magnitude redesign realities and reframe cognitive references, transforming the way people think about their social environments and behave in shaping them.

Covid-19 and Structural Violence

The emergence of the major security and economic threat in the form of pandemics, reinforced the need for renewed attention to structural violence. Global data provide evidence that the unprecedented public health crisis has exacerbated income inequality, the long-run distribution of resources, and inequality of opportunity on several dimensions (Stiglitz, 2020). Even in the wealthiest countries, Covid-19 disproportionately affects certain demographics; the limits of public health responses

are visible in the experiences of poor and ethnic communities. In many aspects these circumstances can be directly related to Johan Galtung's observation about the structural elements in which the asymmetries and patterns of domination, present in social and economic relations are rooted. Galtung describes structural violence as 'avoidable impairment of fundamental human needs or…the impairment of human life, which lowers the actual degree to which someone is able to meet their needs below that which would otherwise be possible' (Galtung, 1993: 106). The concept was further elaborated in "Typologies of Violence" (1981), leading to the conclusion that both direct and structural violence undermine the need for bodily and psychological integrity, basic material needs and human rights. Economic exploitation and deprivation are frequently linked with sexism, racism, xenophobia and other forms of social pathology. All these circumstances, therefore, create "a broad rubric that includes a host of offenses against human dignity… ranging from racism to gender inequality…[to] extreme and relative poverty" (Farmer, 2005: 8).

The pandemic sheds new light on social and economic inequalities throughout the world, as the systems considered the most economically resilient—the United States and Western Europe—proved to be strongly harmed. The blows struck by the pandemic have not, however, operated as a great equalizer. The distribution of harm has been unequal, disproportionately affecting the most marginalized and vulnerable groups. As Public Health England's report confirms, "the impact of COVID-19 has replicated existing health inequalities and, in some cases, has increased them" (PHE, 2020: 4). Biocultural research also suggests that in most of the states where the data is gathered (mostly in the UK and the USA) inter-population variation in vulnerability to coronavirus isn't located in genes, but mostly in social and structural differences between groups (Bhala et al., 2020).

Health disparities, including inadequate access to healthy food, housing and financial insecurity, discrimination, and uncertain legal status have all played role in differentiating individual and group responses to the pandemic. These are rooted in historical, political, and social injustices which hamper effective prevention, detection, and treatment in outbreaks of communicable diseases (Devakumar et al., 2020).

The United States provides a striking example, as Covid-19 mortality rates are double the average in poor communities, and the impact of the pandemic has been considered equally defined by economic circumstances as by the biological characteristics of victims (Patterson & Clark, 2020). The US Centers for Disease Control and Prevention indicated that 33% of hospitalized patients in March 2020 were Black, compared to 18% in the general population (Garg, 2020). The moment of crisis amplified the consequences of existing health disparities. Black Americans are 1.5 times more likely to be underinsured or lack health insurance than Whites (Artiga et al., 2019), which has determined the timing and quality reactions to Covid-19: "In Los Angeles county low-income zip-codes have triple the Covid-19 mortality rates of wealthy ones" (Shamsher et al., 2020). In Louisiana, 70% of deaths have occurred among African Americans (Cabral, 2020). In Milwaukee County, 81% of the deaths from Covid-19 were among Black residents, despite their comprising only 26% of that county's population (Johnson & Buford, 2020).

The connection between the economic and public health consequences of the pandemic creates a vicious circle of disparity: the rising unemployment rate and the increasing number of individuals lacking health insurance coverage exacerbate the prevailing social breakdown, thereby exacerbating health inequalities. An additional burden has been imposed on vulnerable populations (including those in nursing facilities, prisons and the homeless) that already face barriers predisposing them to worse health and economic outcomes. The correlation between poverty and resilience to shock seems straightforward, indicating a further dynamic in the struggle to cope with Covid-19 and future risks.

The features of the job market make the members of certain groups more compelled to risk exposure to COVID-19 (Laster Pirtle, 2020), and social factors such as resource allocation, geographic location, and public-versus-private hospital systems have heavily influenced access to necessary supplies and COVID-19 testing. The circumstances of the pandemic, where protective measures have been linked to certain behaviours or access to the resources, have revealed the effects of the unequal distribution of these resources on health risks. Black and Latino individuals in the US are overrepresented in the low-paying jobs considered essential for the condition of the economy during lockdown (Laster Pirtle, 2020). Many of them can least afford to comply with stay-at-home or work-at-home mandates, as they depend on daily wages and losing one or two paychecks may lead them into homelessness. In the US only 9.2% of workers in the lowest quartile of wage distribution can telework, compared with 61.5% of workers in the highest quartile (Blow, 2020). Low-wage workers neither have the power or resources to change their high exposure jobs, nor demand workplace protections. In comparison, White workers in high-status, high-wage jobs (like physicians) and easy access to protective equipment have infection rates similar to the general public despite high levels of exposure (McClure et al., 2020).

Structural violence existed long before the emergence of Covid-19, but the psychological conditions of the pandemic—growing anxiety, fears connected to economic and health insecurity, and stress, have amplified its impact on social tensions, rising levels of xenophobia and racial proliferation. Many historical health crises have resulted in the stigmatization of certain ethnic and social groups, as mechanisms of fear and frustration associated with crisis produce cognitive bias. As a result, certain ethnic groups have faced accusations of spreading germs, as others have perceived them to be “dirty” or “sickly” (Taylor, 2019).

An FBI investigation of hate crimes against Asian and Asian-Americans reported an increase in anti-Asian hate crimes during the pandemic, due to the belief that people of Asian descent are solely responsible for causing it. The president’s introduction of the terms of “Chinese virus” or “China virus” to the public debate reproduced existing patterns of anti-Asian violence and served as a legitimization of their manifestations (Chiu, 2020).

The extreme situation of the pandemic has not only revealed the scale of oppression mediated by political and information power centers, but also the pace of its reproduction in the aftermath of the significant socio-economic disruption it caused.

The historical context, cycles, systems, and structures exposed minority and underprivileged communities to disproportionate risk, undermining the effective pandemic response and leaving a permanent imprint on people's lives and livelihoods.

Covid-19 Implications for the Transition Towards Sustainability

The global medical emergency caused by Covid-19 has created a major challenge in maintaining the momentum of environmentally responsible practices and frameworks. The risks created by the pandemic triggered a radical response focused on saving lives and preserving livelihoods, thereby tackling the essence of sustainability logic. Although the concept of sustainability is problematic (Caprar & Neville, 2012; Faber et al., 2005), it unquestionably focuses on the natural limits to human survival. Sustainability emerges in the form of sustainable development, defined by the Brundtland World Commission in 1987 as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland Report, 1987: 43). The seminal Club of Rome report "Limits to Growth" defines sustainability as a "condition of ecological and economic stability that is sustainable far into the future" (Meadows, 1972: 24, 158).

Sustainability, especially in the context of development, is inextricably linked to the postulate of strengthening both social equity and economic growth in the way human societies are organized. The conceptual underpinnings of sustainable development have been clearly linked to economic optimization in the reality of scarce natural resources. In effect, the sustainability-peace nexus cannot be analysed without taking into account the effects on a society's welfare spread through a number of transmission channels, which have recently been modified by the pandemic.

Covid-19 has directly influenced the economic conditions of societies for years to come and may lead to a redefinition of policies related to sustainable growth. The scale of the pandemic's consequences has transformed not only markets, but also the hierarchies of social needs, the definition of safety, and the financial policies of states. It is symptomatic that the pandemic crisis has been called a sustainability crisis, and a direct resemblance between Covid-19 and climate change has been recognized by many authors (Hepburn et al., 2020; Klenert et al., 2020; Manzanedo & Manning, 2020). Both phenomena cause unprecedented, large-scale changes around the world, becoming directly translated into security and economic terms.

"The climate emergency is like the COVID-19 emergency, just in slow motion and much graver. Both involve market failures, externalities, international cooperation, complex science, questions of system resilience, political leadership, and action that hinges on public support." (Hepburn et al., 2020).

There are two kinds of possible strategies that may be derived from the resemblance and collaterality between these two crises, bearing fundamental consequences for the sustainable development in the years to come. On the one hand, post-pandemic

trauma may reinforce discourses and policies in favor of the sustainable models of growth that address climate change and environmental concerns (EC, 2020). On the other, the momentum could be just temporary, as the global system faces a difficult path to recovery and on the way economic effectiveness may gain priority over environmental sustainability. The emergency track may either negatively influence the prospect of investing substantial resources in environmental policies, or raise the profile of sustainability concerns in the hierarchies of social needs and political agendas.

There are some strong voices in the debate, arguing that the pandemic marked a turning point in sustainability performance. CO_2 emissions have fallen sharply due to the shut-down of economic activities, while the trend in recent years has been towards rising emissions, as growth in energy-use from fossil fuel sources outpaced the rise of low-carbon sources and activities, especially in developing countries (Peters et al., 2020). The various containment measures and mobility restrictions created unique circumstances for a large-scale socio-environmental experiment, providing data unquestionably demonstrating the unsustainability of the dominant economic model.

Therefore, the introduction of economic recovery efforts has been widely seen as an opportunity to enhance key societal objectives, connected to the transition towards sustainability, understood as a way of improving the structural resilience of the current economic model. The socio-economic experiment of guiding the world through the pandemic can be useful in projecting more sustainable solutions, as emergency preparedness and sustainability strategies share similarities in terms of modelling human behavior and systemic changes in economic scenarios.

The Covid-19 outbreak also brought with it more securitization of climate policies, as cognitive frames of the notions of prosperity and well-being have been renegotiated, making sustainability issues more prominent. If security is "defined by actors who respond to cultural factors" (Katzenstien, 1996), the pandemic has definitely been perceived as a grave global security threat, causing chaos, conflict and a destabilization of the global order. It could therefore become a turning point in the sustainability transition triggered by passing a critical threshold that tips the current socio-economic system out of this stability domain (Rockström et al., 2009).

Such a scenario, originating in Joseph Schumpeter's notion of 'creative destruction' (1942), sees the crisis as an opportunity to destroy over-accumulated and inefficient capital, by reducing overcapacity and creating openings for new market players. The scale and reach of the crisis present an opportunity for reducing structural deficiencies by introducing more sustainable patterns of economic activity and redesigning current market relations. 'Green technologies', the priorities of the European Green Deal, structural leverages for private investments in smart electricity grids or electric car charging infrastructure can become a new engine of capitalist growth (Bina, 2013).

The logic of this process assumes that the accumulation of new ideas, technologies and concepts will increase to reach the point of overcoming 'the green growth

paradox', occurring when the effects of emissions reduction are not a direct consequence of renewable energy expansion, but are connected to a reduction in aggregate demand and production due to increased unemployment (D'Alessandro et al., 2020).

A 'creative destruction' scenario for a global post-Covid-19 economy seems tangible, given the scale of the harm experienced by societies due to lack of structural resilience, as well as the amount of investment dedicated to the economic recovery. Such a prospect is not, however, directly embedded in the policies guiding the stimulus investments, which in May 2020 accounted for about US 7 trillion in spending for the G20 economies (Segal & Gerstel, 2020). It has been estimated that 4% of the policies guiding these investments have the potential to support the development of the green economy, but the beneficial effect is likely to be balanced by the equivalent of 4% of policies likely to cause further climate disruption (Hepburn et al., 2020: 6). Estimates from climate change researchers suggest that the US package does not include any direct green or climate commitments, except for USD 900 million for the Low Income Home Energy Assistance Program (LIHEAP) (Smith, 2020). Furthermore, the UN Department of Economic and Social Affairs (2020) expects that the pandemic is likely to undermine efforts to achieve the 2030 Sustainable Development Goals, with highly differentiated impacts on lower-income countries.

On this basis, it does not seem that the shock of the pandemic will contribute to establishing the models of development that could increase structural resilience. As the scale of global threats concerning the peace/sustainability nexus expanded due to pandemic 'transition turbulence', economic unsustainability is likely to manifest itself in increased vulnerability to future risks (Burke et al., 2020).

Conclusion

This chapter has aimed to investigate the impact of the pandemic on approaches to the complexities of the transition to sustainability. Empirical data on the structural conditions of the global economic order, and interlinkages between structural violence and sustainability principles have been presented. The Covid-19 pandemic crisis was seen as having introduced major turbulence into the introduction of sustainability standards, as well as representing a possible turning point in approaches to social and economic design. Increased recognition of the importance of the systematic consideration of the complex adaptive nature of social systems has been built here, especially in relation to two areas of analysis:

- Conceptualization of sustainability in policies and social practices: the coronavirus pandemic has influenced economic relationships and preferences, altering the way people think about social and economic relations. The scale of the pandemic's consequences further undermined the established economic model, so economic growth per capita cannot be linked automatically with human well-being and social cohesion. The usual, immediate gains in economic welfare are increasingly seen as directly derived from actions that generate environmental

and social harms, weakening the resilience of the system. The focus in sustainability practices may shift from the trade-off between climate damages and lost opportunities for consumption to the ability of human systems to anticipate, cope, and adapt.

- The role of structural violence in social design: analysis of the Covid-19 pandemic in the context of the notion of structural violence provides an overview of the weaknesses of the economic system that limit states' and people's ability to protect themselves against the major disruption. The pandemic itself does not fit into Galtung's original definition of violence, as it bears the features of a random accident and could not have been be prevented by infrastructural improvements or better standards of nutrition. Rich and poor states have been equally hit by the disease. The consequences of the crisis, however, appear to be differentiated and dependent on socio-economic structures and the ways in which societies are organized. Structural conditions rooted in the long-term accumulation of socioeconomic advantage and disadvantage along the lines of race, class, and other factors determine the unequal impact of COVID-19 on people's health, ability to protect themselves from infection, and economic wellbeing.

A crisis of this scale, revealing profound, longstanding vulnerabilities in the global system, can play a role of a 'focusing event', rescheduling conceptual frameworks and widening a policy window. Its repercussions have touched citizens of the developed and developing world alike, creating a unique situation in which a common goal can be recognized. It has become apparent that material abundance does not have equal protection and structural resilience, so the rich, Western world must more intensively implement positive peace-building measures strengthening social relationships within the framework of more just and equal models of society. The pursuit of the new sustainable economy and sustainable human development leads through efforts to manage and resolve conflict—between different groups competing over resources, and between clashing ideologies, values and interests. The essence of the ongoing transformation lies not only in arguments about the need to adjust the existing economic practices so as to reflect higher environmental standards, but more in a redefinition of the logic of growth and ability to implement these new principles in very diverse social landscapes.

The pandemic has been a dramatic 'signifier of sustainability threat', having arisen as a consequence of the neglect of the issues of environmental and social justice in the shaping of the economic realm. But if the transformation towards greater resilience is insufficiently decisive, this multilayered shock may not be absorbed by too-fragile systems. The latter scenario allows mechanisms of power imbalances that perpetuate structural violence and unequal experiences of citizenship, as in the process of Covid-19 crisis management "the insight and resources are channeled away from constructive efforts to bring the actual closer to the potential" (Galtung, 1969: 169).

Funding The research leading to these results received funding from Jagiellonian University, Future Society POB.

Conflicts of Interest The author has no financial or proprietary interests in any material discussed in this article.

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