

Sociological Surveillance of the Pandemic: Exploring Interconnectedness, Panic, and Waves of Crisis

Dr. Maxim Lepskiy

Zaporizhzhia National University

✉ Email: waysensey@gmail.com

ORCID: <https://orcid.org/0000-0001-5604-641X>

Abstract

The significance of examining the COVID-19 pandemic from a sociological perspective extends beyond medical issues. It primarily encompasses the social dimension, focusing on the way individuals interact, and the pandemic's influence on social, political, economic, and cultural realms. This includes the transformation of social institutions and structures, as well as the dynamics of social processes in both management and self-organization.

The main subject of the article is the problem of studying the impact of a pandemic on modern society with its informational, cognitive-innovative, and hyper-realistic certainty. The author explores the phenomenon of the pandemic, its impact as a global threat and danger on micro, meso, and macro-social structures and organizations, on the main institutions of society, and on international institutions. The pandemic becomes a process of social “freezing” in the broad sense, meaning any relationships among people, but also entails social, political, economic, and cultural constraints; both public and international constraints of states and international institutions.

Keywords

social constraint, panic, crisis, media influence, simulation, hyperreality

Introduction

The pandemic produces panic as a social phenomenon in various dimensions of masses (socio-behavioral), socio-organizational and institutional, and on a global scale through prompt replication, repetition, modification, rumor, gossip, and information warfare. The theory of social fractality serves as a study of the processes of mimesis, replication, and scaling in masses, socially organizational and global dynamics. The author differentiates

various phases of the impact of the pandemic on international processes as certain phases and waves of interaction between countries in the struggle and solidarity. All these define new trends for governments and the world community.

Contemporary innumerable narratives have turned their attention to the pandemic (Kramer et al., 2020; Lippert, 2020; Prachand et al., 2020; Shaw et al., 2020; Warrillow et al., 2020). The relevance of the COVID-19 pandemic study is shaped not solely by medical concerns (such as patient zero cases, vaccine development, disease transmission speed, etc.), but equally by social issues related to human interaction, the pandemic's influence on social, political, economic, and cultural domains, the transformation of social institutions and structures, and the dynamics of social processes in both management and self-organization (Campbell, 2020; Chia & Oyeniran, 2020; Health, 2020; Schwartz, 2020; Yang et al., 2020).

The article emphasizes the ongoing importance of understanding the pandemic, including its connections, public panic, and successive waves of crisis. It positions itself as a study of the social dimension, exploring the future implications at macro, meso, and micro levels. Beyond immediate concerns, it addresses the global community, international relations, societal integrity, and resilience as fundamental institutions within the state. Additionally, it considers other aspects of institutional integrity and analyzes reference groups and interactions at the individual level.

Methodology

The author advocates for employing a range of sociological methods and approaches. The primary focus of the article lies in examining the pandemic's impact on modern society, encompassing its informational, cognitive-innovative, and hyperrealistic aspects. The article explores the phenomenon of the pandemic as a global threat, affecting micro, meso, and macro-social structures, organizations, and major societal and international institutions. The pandemic is characterized as a process of social "freezing" in the broad sense, referring to the halt in various human interactions. Moreover, it influences social, political, economic (Goodell, 2020), and cultural interconnections, both at a domestic and international level, encompassing states and international institutions.

The issue of the pandemic's social impact as a global and widespread threat, influencing human interactions in the information and digitized world, represents a novel phenomenon in the socio-cultural realm. The rapid dissemination and amplification of fear and panic are intensified not only by real processes but also by simulations and phantasms, which can have an equal, if not greater, effect on the overall situation.

The emergence of new meanings and challenges related to the dissemination of fear, panic, and changes in social interconnectedness due to the pandemic presents a unique aspect of this research. The novelty lies in the utilization of diverse levels of theoretical comprehension in sociology and socio-philosophical analysis to ascertain the trends of the pandemic's social impact. This includes exploring microsociology, which examines interpersonal relationships and individual interactions, mesosociology, which delves into social behavior and activities within groups, communities, institutions, and organizations, and macrosociology, which investigates the global dimension of the process.

The focus of our investigation was the influence of the pandemic on social bonds and connections. We aimed to explore the effects of the phenomenon of pandemic as a global threat and danger on micro, meso, and macro social structures and organizations, as well as on the main institutions of society and international establishments. Our scientific inquiry sought to examine the trends and implications arising from the pandemic's impact as a worldwide menace on various social dimensions and organizational levels.

Results

Our modest scientific inquiry seeks to delineate the dynamics, stages, and phases in the formation of crisis waves, examining the mechanisms of replication and scaling from the medical (pandemic) crisis to the transformation of crisis phenomena in other realms of life and in international and global relations. The objective is to comprehend the mechanisms of crisis dynamics resembling a “tsunami,” “storm,” and “whirlpools,” with the aim of constructing a scheme for modeling real processes of social interaction. This involves exploring temporality, strategies, and tactics of effective actions in the face of global peril across various levels of social actors making decisions.

The outcomes of conceptualizing dynamics as a model of essential relations in a pandemic focus on the macro dimension of connectedness, ascertained through the examination of challenges, prospective problems, and trends. On one hand, these dynamics alter social relations by posing a threat to individual health and the well-being of localized social communities, often with territorial or ethnic ties. On the other hand, they serve as a testing ground for the resilience and vulnerability of social institutions.

Hence, the ensuing discourse delves into the domains of political economy, economics, and the sociology of the economy, along with the field of health. These spheres are scrutinized through the lens of the functional significance of institutions, assessing their role in shaping the resilience or vulnerability of societal structures amid the impact of a “pandemic.” The turbulent processes that emerge are explored by the author through heuristic images of turbulence, specifically characterized as “tsunamis,” “storms,” and “whirlpools.”

Discussion

1. Challenges, promising problems and trends of the future

Let us consider challenges and potential problems that shape future trends, sparking the question: “What lies ahead?” Our world has entered an entirely novel reality of social and international relations, where ruptures have forcefully brought forth discussions about the possible collapse of the European Union and the strategies to preserve it. The current scenario witnesses a widespread limitation of external connections, and this is particularly significant as Germany’s economy, for instance, heavily relies on exports (accounting for 50% of its economic activity). The core connection between France and Germany is experiencing strain, signaling the need to address critical issues. In the face of crisis, the prevailing sentiment seems to be “every man for himself!”

In the realm of hyper-reality, the actual virus itself seems less intimidating compared to the exaggerated actions of the government and politicians, amplified through internet and media “hype” surrounding “tough” but sometimes inappropriate measures. The widespread dissemination of fear, backed by the “silent majority,” has led to a detachment of politicians from the reality on the ground, manifesting first as false helplessness and later as false omnipotence. This situation sets the stage for political tensions and potential political crises in the near future.

Our generation still recalls the book and multi-part movie titled “The Open Book” by Veniamin Kaverin (Titov, 1980), featuring the talented actress Iya Savvina. The story revolved around scientists studying the fight against viruses, and how they pitted science against intrigue and politics. Dealing with an epidemic involves containing outbreaks, the efforts of specialized medical teams, and preventive measures. The pertinent questions arise, such as

which doctors and specialists are involved in decisions to restrict movements, how outbreaks are localized, the establishment of response headquarters and medical teams, the availability of medicines and their procurement from the Ukrainian pharmaceutical industry, and negotiations for vaccines, possibly with China, for instance. However, instead of addressing these crucial aspects, the Ukrainian economy comes to a halt, following the actions of the European Union. Meanwhile, airlines reap significant profits from transporting Ukrainians from abroad and from the planned flights that are canceled.

The pandemic has revealed significant weaknesses and unpreparedness in public administration, particularly in organizing the "front line" and safeguarding society from global threats. This encompasses the domains of science, education, and practical medicine.

Firstly, the scarcity of national level 3 and 4 laboratories worldwide capable of researching and developing vaccines and tests against pandemic viruses became evident. Moreover, these laboratories, situated in pandemic-prone areas, often face accusations and conspiracy theories, linking them to the development of bacteriological and viral weapons (and the probability of this is quite high). Consequently, questions arise concerning the control, restriction, and potential banning of such weapons altogether.

Secondly, the unpreparedness of practical medicine in the face of the coronavirus threat was evident in various aspects. Doctors lacked technical support, and there was a lack of preparedness for setting up temporary field hospitals and mobilizing trained medical volunteers. Additionally, a shortage of capable military doctors was observed. The simultaneous implementation of medical reforms alongside reduced funding and increased non-medical responsibilities for doctors led to a discrimination of their social prestige. Many doctors were unwilling, and some even faced dismissal, due to the reluctance to work in risky conditions. These factors revealed a breakdown in the societal philosophy of the doctor's high mission.

Even military doctors, traditionally respected, found themselves overshadowed, with the exception of providing medical aid to Italy by Russia, which was interpreted as a display of "soft power" according to Joseph Nye (2009).

Thirdly, the illness of primary care physicians and attending virologists brought to light the need for an effective organization and configuration of medical treatment and care. It became evident that the influx of patients, including the "anxious" seeking to ensure their health, not only overwhelmed medical institutions but also hindered their effective functioning.

Fourthly, the information civilization exposed the lack of preparedness of most medical institutions to effectively communicate and promote necessary measures through the main channels of mass communication. Only popular medical presenters like Dr. E. Komarovskiy and V. Lyashko, Chief Sanitary and Epidemiological Doctor of Ukraine and Deputy Minister of Health, successfully managed this task. Employees of the Ministry, researchers from relevant institutes of the National Academy of Sciences of Ukraine, and the branch National Academy of Medical Sciences of Ukraine did not conduct the necessary work in this regard. The absence of official information gave rise to rumors and the spread of inaccurate information through reference networks. Even the Kyiv City State Administration made decisions based on a "fake" forecast from the NAS of Ukraine, which was subsequently refuted by the academic organization (Tarusova, 2020).

Fifth, the decision-making of state and local authorities has been inadequate. The challenge was to control the flow of people from the pandemic zone without causing severe damage to their own economy, to act within the framework of legislation while addressing the emergency situation, and to localize the medical crisis without letting it escalate and affect the economic, social, and political spheres. These bodies were not prepared to make balanced decisions regarding the pandemic, including measures for localization and closure. The mechanisms of scaling and replication of the crisis through symbolic and real "freezing" of connectedness

in relations will be further described.

Sixth, the lack of state reserves for effective emergency actions and the presence of “state egoism” shifted the burden of responsibility onto citizens or other states. The state also failed to swiftly implement state orders for protective equipment and treatment, and the pharmaceutical industry faced challenges in supporting both scientific research and practical medical solutions.

Seventh, the state relied more on tools of discipline and violence rather than medical strategies to tackle the pandemic. Law enforcement agencies and customs services took center stage in implementing measures to “close” the state and “freeze” social and other interactions.

Eighth, the lack of professional medical statistics and sociology of medicine resulted in uncertainty regarding accurate methods of recording the number of sick, recovered, and deceased individuals. This led to two opposing viewpoints prevailing in the mass consciousness and public opinion: some believed that the authorities were concealing the true scale of the pandemic, while others thought that the authorities were exaggerating the minimal number of cases and deaths (attributing other diseases and deaths to the coronavirus).

The lack of effective measures at the “first echelon” of defense against the pandemic resulted in significant shifts in mass consciousness. People resorted to spontaneous behaviors when faced with a threat to life, such as hoarding food and engaging in panic buying. There was a growing disillusionment with the authorities, leading some individuals to adopt mythological and religious worldviews as a means of coping with uncertainty, often resulting in a state of psychosis. Attention became intensely focused on information describing the “threat,” leading to an overwhelming abundance of fear and panic-driven behavior. In the absence of a viable solution to the challenge and the ability to influence its cause, individuals turned to ersatz objects (as per Konrad Lorenz’s terminology) to sublimate their fear. This aggression allowed them to release the built-up tension in their interactions “us-them” (Lorenz, 1994).

The lack of effectiveness of the “first echelon” in handling the direct threat of the virus and providing proper diagnostics and treatment with a humane approach has led to a shift towards the second “echelon” of state actions. This involves restricting people’s interactions and using legalized violence to combat the people, rather than focusing on the disease itself, as well as switching people’s behavior in scaling the crisis to other spheres of society.

As a result, inflation and transportation restrictions have directly impacted small and medium businesses, which heavily rely on their daily earnings. This situation necessitates the regulation of these functions and spheres. During the quarantine period, individuals, families, and organizations are struggling to maintain their “financial cushions,” using them to compensate for the soaring prices and loss of income.

The pretext of the epidemic in Europe is already triggering the redistribution of managerial positions and large property, and we can expect more changes in the future. Large property is rapidly losing value, and the reduction of consumer activity is causing a decline in economic links. Under the guise of force majeure circumstances, justifications and breaks in economic chains are occurring, often based on phantom rather than real reasons. This situation extends beyond medicine and becomes a complex issue involving economics, politics, and cultural implications.

The media played a significant role in triggering panic and irrational behavior among the public, lacking rationality, logic, and responsibility. There was a lack of clear, safe, and convenient channels for citizens to access medical institutions. The absence of a well-defined and understandable treatment plan further added to the confusion; it was compensated by an information overload from various sources, including TV shows and non-professional opinions. In contrast, in Wuhan, China, they swiftly built special hospitals, isolated patients, and efficiently managed the epidemic, resulting in the timely closure of these hospitals. In our

situation, the economy stopped. The approach and response to the pandemic varied depending on the location and the number of patients affected. The understanding of the virus's spread, incubation period, and the speed of organizational actions and countermeasures differed between the initial outbreak (first-time situation) and subsequent territories (already having knowledge from other affected areas).

The epidemic has become a significant pretext for disregarding the law in implementing the "second echelon" measures. There is no specific epidemic law adopted, and experts such as medical professionals, virologists, economists, and political scientists are not involved in modeling the situation, continuous monitoring, and proposing appropriate actions. The actions taken by law enforcement agencies to restrict movement and include measures sometimes violate constitutional and legislative frameworks, focusing more on restricting individuals suspected of the disease rather than addressing the medical crisis properly, which involves analyzing arrival territories, contact tracing, local movement, diagnosis, and more.

At this stage, the mythologization of the "us vs. them" consciousness is strengthened through symbolization. For instance, certain attributes serve as symbols of the "other" or the "them": those arriving from abroad or from a different direction; individuals who are distinct from "us," specifically, "us" are those who wear masks and follow all imposed norms (regardless of their efficacy); "us" are those who promptly adhere to restrictions and also experience panic like "us." On the contrary, the "them" group does not place trust in the "symbolic state" as "us" do and does not transfer responsibility for their security to it, etc.

This symbolism of "us" and "them" serves as fertile ground for the authoritarianization of power and the loyalty of citizens to illegitimate actions in the sphere of legalized violence. It creates a new world characterized by "transparency of evil," as described by J. Baudrillard (Butler, 1999), and combined with neo-feudalism according to Umberto Eco, within limited and closed territories. This is accompanied by populist statements (hype) from politicians, absurdities, and the loyalty of the silent majority. The hope for a world sanctified by meaning may be irretrievably lost. Symbolic representations of this world are seen in virtual glasses shown in Vodophone ads, the shift of main contacts to online platforms, the fashion for pro-



Figure 1-2. Lisbon airport. (Photo by Maxim Lepskiy)

tective masks, and selfies of people wearing masks, reflecting both real health concerns and the compliant behavior of citizens.

At the second stage, when facing the second echelon of society's defense, the strength of rationality, culture, and humanism is put to the test, often alongside panic and inadequate actions to resolve the situation. This reveals the fragility of institutions in law, economy, education, and culture. Panic not only demonstrates the vulnerability of social institutions and organizations but also results in a scaling of the crisis from the medical sphere to the economy, law, politics, and culture through group panic solidarity and mass behavior. This leads to the spread of the crisis across various domains, impacting the main institutions of society and international cooperation, creating a dynamic wave. The height of the wave is shaped by the impact on the main institutions of society and international cooperation, and this "height" determines the dynamics of the waves. The wave primarily targets the sociality and economy of resilience.

2. Attacked Sociality

The virus has triggered the emergence of new social practices and the dismantling of old ones. Increased social and physical distance has become a norm for hygienic safety. New object mediators, like plastic curtains and hand sanitizers, are now part of communication between people. Traditional handshakes have been replaced with fist gestures, reducing tactile and close distance practices due to fear and distrust. Even transportation and shopping malls have been affected. The only exception is the inner circle, the family, which led to the significant impact in Italy. The disruption of basic social connections and fear of losing fundamental support has created tension and panic. The consequence of these changes is yet to be seen, and the metaphor of the European family has been shattered due to the destruction of sociality.

The pandemic has accelerated the shift towards online activity and reduced offline interactions, leading to individualization and atomization as widespread practices. In Italy, for instance, attempts to maintain contact and distant solidarity resulted in activities like singing on balconies. Online platforms witness people expressing their fears and panic through comments, reinforcing their paranoia and creating a sense of distance in social relations, viewing others as a threat. These ruptures exacerbate the erosion of social trust and foster an "us versus them" mentality, where some countries are unwilling to forgive the lack of solidarity from others, while prioritizing solidarity and information hype over professional actions. The decline of sociality has prompted a migration of social activities to the hyperreality of social networks, magnifying individual fears and struggles without the collective intelligence and courage of rationality. As a result, misinformation spreads easily through social media, making verification a challenging task requiring scientific and comprehensive perspectives. Despite the fact that misinformation is the subject of extensive scientific discourse, we are still unable to prevent it and prevent its consequences (Lewandowsky et al., 2017; Benedict et al., 2019; Bessi, 2017; Ecker et al., 2017; Gilligan & Gologorsky, 2019).

In the social structure of society, the destructive processes are not evenly distributed, and the epidemic primarily affects people with weakened immunity. Vulnerable groups include the elderly, children, and individuals of all ages with chronic or severe illnesses. Low-income individuals who suffer from poor nutrition and lack of education are also at risk, as well as those living in unsanitary conditions, such as the homeless, beggars, and vagrants. Additionally, the shadow quick-contact businesses that are not effectively controlled by law enforcement systems, such as prostitution and drug addiction, are particularly susceptible to the impact of the epidemic.

The measures to restrict social contacts have a significant impact on freezing "social ties," including the activities of social structures that address social problems, such as social work and volunteer activities. This situation also affects shadow structures within criminal business. Deprived of their usual social supports, vulnerable segments of the population involved in social assistance programs and criminal activities may feel abandoned, leading to a potential increase in domestic offenses in the context of panic and loss of control by law enforcement agencies. The situation is further exacerbated by the heightened tension between "us" and "them".

By the way, Fernand Braudel extensively studied the correlation between the quality of nutrition, immunity, and survival during epidemics in history (Braudel, 2006). Among the vulnerable groups are pensioners and elderly individuals without sufficient social support from family or territorial connections (neighbors, community members, etc.). They are not only at risk from a health perspective but also face challenges in maintaining social contacts, such as grocery shopping and communication, especially during periods of restricted movement. Moreover, the social base for anomie and protest sentiments can emerge among the affected business sectors and defense echelons, who may feel abandoned by the state and politicians, and perceive themselves as "them" or marginalized identities in a divided society.

The situation of tension surrounding the reduction of physical and social contact spaces, such as homes and apartments, is intensified. It is well-known that the compression of space often leads to specific social tensions, similar to those observed in closed collectives like army barracks or prisons. For instance, in Italian prisons, the cessation of visits and food transfers has resulted in instances of revolt, resistance to administration, and even escape attempts. This tension can further manifest in cases of family violence or suicidal behavior. In the youth environment, a protest culture may emerge, characterized by violations of gathering prohibitions and a general distrust of restrictive measures, especially among certain youth subcultures that endorse rebellious or antisocial behavior. This behavior is more prevalent in settings with weak education and upbringing institutions, inadequate legal measures, or weak institutionalization of territorial criminal subcultures, such as those influenced by organized crime (such as 'Ndrangheta, Mafia and Camorra).

Macrosociological processes, which are the focus of macrosociology, reveal the state's weaknesses in organizing and managing situations arising from the growing confrontation between "us" and "them." These weaknesses often lead to politicization, providing a channel for directing tension towards opposition parties or externalizing it as a "threat from abroad," with confrontations with neighboring countries usually being more intense than those with distant ones, as observed by ethologist Konrad Lorenz (1994).

These macro-social processes fuel distrust in composite political associations, leading to the exacerbation of separatist sentiments, sometimes with the support of other geopolitical players. The initial high expectations of protection, care, and efficient handling of the danger from leaders of the European Union, particularly Germany and France, can later give way to disappointment, fostering resentment or even hatred. Similar tensions can emerge between the center and periphery of political entities, where ruptures may resonate with the mythology of "us versus them." Instances of this phenomenon include the removal of EU flags in Italy and the display of Russian flags after receiving assistance in the form of military medics.

These phenomena become evident as international institutions face exaggerated expectations due to the complex and interconnected nature of international relations. International social cohesion experiences similar or even greater pressure compared to social referential cohesion. This is why pandemics, as seen in the research of F. Braudel, frequently precede or coincide with global wars and revolutions. There is hope that the world will endure, but it is undoubtedly undergoing transformation.

3. Political Economy and a Critical Examination of the Pandemic's Political Economy. Issue of a Macrosociology

Classical political economy revolves around understanding how property relations, production, and productive forces define politics as a concentrated economy. However, when a pandemic strikes, it significantly impacts both the economy and politics (Schabas, 2015; see also Mitra & Ulubaşoğlu, 2016). Nobel laureate Wasily Leontief (1936), an American of Russian origin, emphasized the importance of intersectoral analysis, with special attention to transport connectivity. Interestingly, the initial actions to combat the pandemic targeted transport systems, not directly the coronavirus, because it was fighting against people but not viruses. The focus was on restricting people's movements, under the pretext that they could be spreaders or carriers of the virus. Air, railways, and road communications were affected, and filtration systems were established even in areas not recognized as epidemic territories, citing the global nature of the pandemic. It is important to note that the measures were more about controlling people living in certain territories rather than strictly containing the disease in those areas. For instance, in Lombardy, people who didn't reside in the region were allowed to leave without testing, leading to the virus being spread further by individuals moving between regions.

In this context, citizens of Ukraine faced the challenge of returning home as the price of tickets on UIA (International Airlines of Ukraine) surged to maximum levels. Instead of focusing on the localization of the sick and those in contact with them, barriers and limitations were imposed on transport connectivity, affecting not only the economy but also the global economy. The media further fueled panic and the "freezing" of social connectedness. This "freezing" of connectivity was compounded by the freezing of economic ties, including supply chains and offline relations within the "consumer-supplier-producer" model. The impact



Figure 3. Mask

extended to both reasonable measures like canceling mass events and unreasonable actions such as shutting down the service sector and affecting small and medium-sized businesses, especially those closely tied to systems of connectivity.

Indeed, in dealing with a pandemic, the priority should have been given to medical measures and the creation of specialized medical facilities, similar to what China did with the construction of new hospitals. Professional epidemiologists should have played a dominant role, supported by the assistance of police and military for localization purposes. However, in some countries, including Ukraine, the focus shifted to administrative protocols for businesses, leading to partisan and shadow services ("for friends"), as well as various forms of corruption. The inadequacy of the response can be attributed to the neglect of the sanitary-epidemic service and the lack of funding for scientific research on viruses and bacteria in Ukraine. This resulted in a shortage of specialists capable of handling crisis situations, as well as modern laboratories and scientific institutions, making the country more vulnerable to the dangers of a pandemic

The next trend observed was the draining of the financial resources of the majority of the population due to rising prices, the fluctuation of currency exchange rates, which acted as a kind of tax on the pandemic but did not address the underlying problems. On a global scale, the pandemic led to a redistribution of global assets, with global businesses being affected by the disruptions in transportation.

In the political realm, there has been a rise in neo-protectionism, with states taking greater control over exchange, distribution, consumption, and exerting indirect but significant influence on production. The decision-making process at state and municipal levels often lacks foresight (unwise decision-making), merely copying and replicating decisions made by major global players. This has resulted in a simulation of governance and a lack of personal responsibility, fueled by media hype during election times. In the face of the pandemic, some authoritarian regimes, like those in Belarus or China, have demonstrated greater efficacy in handling the situation. This poses a significant threat to democracy and liberalism as it challenges the notions of open and free societies. Fantastic fiction has shown that global fear and panic can lead to a shift towards totalitarianism, radical protectionism, and the preservation of false regimes. The economic and political world is undergoing significant changes as the 'wave' impacts major economic and political institutions.

4. Sociological Analysis of Economics and the Economic Particularities of the Coronavirus Pandemic

Economic forecasters in the United States are actively discussing the thesis that the pandemic-induced closure of large global economic masses is being referred to as the "Great Shutdown," drawing parallels with the "Great Depression." Howard J. Schatz, a senior economist and specialist in international economics and development, asserts that the pandemic's impact on the U.S. economy is the fourth most severe economic crisis in the nation's history, following World War I, World War II, and the Great Depression.

The U.S. is forecasting a 12% decline in GDP for the second quarter, which is compared more frequently with the 2008 crisis, where the decline was 8.4% in the fourth quarter. To address the crisis, the U.S. plans to allocate 10% (tithe) of its economy. This includes 1.8 trillion dollars for direct assistance to individuals, 350 billion dollars for small businesses (covering 33% of employees in firms with up to 100 people), and 500 billion dollars for other businesses primarily through credit guarantees. Congress is considering providing individuals with 1000-1200 dollars, subject to filling out their declarations, and 500 dollars for children. The U.S. economy's total value is 21.4 trillion dollars ("The Economic Wallop of COVID-19: Q&a With RAND Experts," 2020).

The coronavirus pandemic and the “freezing” measures implemented to combat it have significant economic and political implications. These measures can be costly and dangerous for various sectors of the economy, and they also threaten certain consumer expectations and dependencies. This situation is especially significant in the context of upcoming US Presidential elections and elections in other countries.

The geo-economic connectivity of the US is notable, with 15% of imports coming from China and 7% of exports going to China. Additionally, 34% of exports go to the EU, and 30% of imports come from the EU. However, there is little discussion about the double-freezing process concerning global players and even less so for border and transit states, such as Ukraine (this situation has been extensively discussed by Gorbulin (2018) and Mikhalchenko (2004).

Employed population by types of economic activity in 2012-2018							
(thousand people)							
	2012	2013	2014	2015	2016	2017	2018
Total employed	19261.4	19314.2	18073.3	16443.2	16277	16156	16361
Agriculture, forestry and fishery	3308.5	3389.0	3091.4	2870.6	2866.5	2860.7	2937.6
Industry	3236.7	3170.0	2898.2	2573.9	2494.8	2440.6	2426.0
Construction	836.4	841.1	746.4	642.1	644.5	644.3	665.3
Wholesale and retail trade; repair of motor vehicles and motorcycles	4160.2	4269.5	3965.7	3510.7	3516.2	3525.8	3654.7
Transportation, warehousing, postal and courier activities	1150.9	1163.6	1113.4	998.0	997.2	991.6	995.1
Temporary accommodation and catering	326.7	328.9	309.1	277.3	276.7	276.3	283.0
Information and telecommunications	297.9	299.9	284.8	272.9	275.2	274.1	280.3
Financial and insurance activities	315.8	306.2	286.8	243.6	225.6	215.9	214.0
Real estate operations	322.2	314.3	286.1	268.3	255.5	252.3	259.4
Professional, scientific and technical activities	504.1	493.6	456.0	422.9	428.1	415.8	437.9
Administrative and support services activities	343.9	343.3	334.3	298.6	304.3	297.9	304.3
Public administration and defense; compulsory social insurance	1003.6 ²	962.3	959.5 ²	974.5 ²	973.1	979.7	939.3
Education	1633.2	1611.2	1587.7	1496.5	1441.4	1423.4	1416.5
Health care and social assistance	1181.4	1171.8	1150.5	1040.7	1030.4	1013.6	995.4
Arts, sports, entertainment and recreation	225.6	226.5	221.2	207.9	201.6	199.8	196.9
Other economic activities	414.3	423.0	382.2	344.7	345.8	344.6	355.2

Table 1. Employment Statistics in Ukraine, 2012-2018.

The early exit of China, South Korea, and Japan from the economic "freeze" provides advantages in the global market, especially with their expansionist economic behavior. Additionally, the global criminal financial systems, as discussed by criminologists A. Nicasso and O. Maltsev, can benefit from the "freezing markets" (Sokolova, 2019).

The impoverishment and rising unemployment resulting from the pandemic serve as the social base for radical political, criminal, and shadow movements on a global scale, posing a threat to transit states. In summarizing the situation in Ukraine, we must consider the unique economic relations with global players and the country's limitrophic nature.

Firstly, it is important to note that solidarity and imitation of actions taken by global players (USA, EU, China) without considering the specifics of their economic scale and state structure may not be suitable. "Democratic" countries focus on self-correcting market mechanisms, while authoritarian nations emphasize maximum citizen control and state regulation of the economy. In Ukraine, we are proposing authoritarian measures to combat the pandemic, but the economic resources needed for democratic market measures are lacking, and the hope for external assistance is uncertain.

Secondly, "Freezing" as a response to the health crisis should be approached with caution, considering the potential consequences in other spheres. The Italian experience has shown that extending this approach to the financial and economic sectors could trigger a chain reaction affecting social and political realms. However, the situation in Ukraine is somewhat different. The state, acting as an instrument of corruption and exerting pressure on small and medium businesses, relies heavily on the police for imposing administrative fines and restrictions. Various sectors, including services, transport, civil service, education, small and large businesses, and production spheres, are now under threat. Refer to Table 1 "Employment Statistics in Ukraine, 2012-2018" (State Statistics Service of Ukraine, 2018).

Thirdly, the healthcare system needs a significant financial boost to enhance the speed of patient identification and treatment without resorting to totalitarian methods and violence. It is evident that medical science, virology, and biochemistry have not only suffered from insufficient funding but have also lost their research capabilities. The absence of licensed virus research laboratories and the lack of applied research in this field have made Ukraine dependent on geomedicine (medicine from global players) for vaccines and tests during pandemics and solidarity to it.

Fourthly, the media has flooded the discussion with numerous opinions, fears, and phantoms during the pandemic, leading to a hyperreality in the economy. In Ukrainian TV, there were even statements from so-called "experts" claiming that sick individuals are both victims and killers as they infect others (shifting the focus from the epidemic to a fight against people). These circumstances are shaping new economic relations for the future world.

In macroeconomic relations and international politics, there is an increasing burden on international institutions and global actors as their decisions are replicated throughout the global periphery. In the absence of effective solutions, the credibility and legitimacy of these global actors decline, leading to a fractal pattern of panic and inefficiency, amplifying the "wave of crisis." This growing "wave of crisis," in terms of both height and extent of influence, generates fear and renders decision-making at the global level incapable, replicating helplessness across all relations in the globalized world. The "freeze" and attacks on sociality in all spheres create both the fragility of social systems and the social base for aggressive processes in the context of "us vs. them" dynamics.

Conclusions

The first conclusion is that the pandemic, whether real or virtual, imposes specific requirements and creates significant tension in the two main echelons responsible for protecting

society. The **first stage** pertains to the professional sphere to which the danger belongs, in the case of a pandemic, it is the medical sector. As the threat is of a global scale, the demand is for the scaling up of society's protective capabilities. At this moment, the state, as the primary organizing institution (with civil society as the alternative, offering network scaling possibilities), must bolster the first echelon materially, organizationally, and procedurally to be fully prepared to proactively address this issue.

The focus is on mobilizing science, diagnostics, and preparing the organizational and process aspects of diagnostics, disease identification, and treatment. If the state delegates its functions to global players in the globalized world and negligently leaves the decisions solely to the medical sector without supporting it with the capabilities of other societal spheres (e.g., economic, political), then scaling occurs through the mobilization of panic (when organizational actions are lacking, the problem is amplified by the media, and fear is replicated through civil society and network information structures). The level of panic scaling determines the level of the crisis wave. The second trend of scaling involves the transformation of the primary crisis (in our case, the medical crisis) into other spheres of society.

The emergence of the crisis wave's apex during the first stage shapes the spatial impact of the wave during the second stage. The "wave of crisis" simultaneously engulfs the space of defeat and triggers the activation of the second echelon of societal defense. Instead of addressing the virus directly, the state resorts to measures of disciplinary and legalized violence against people who are sick or potentially at risk. Often it happens in violation of the law. Organizational actions become simplified through the "freezing" of social, economic, and other connections, rendering basic institutions and organizations vulnerable. Economic structures, like the "producer-supplier-consumer" chain, come under attack. The state, shocked by the lack of control, transitions to the illusion of omnipotence by involving law enforcement and power structures, while society delegates decision-making to the state in a state of panic.

The amortization of the wave height gives rise to waves and reflected waves in all aspects of society, primarily in economic, social, cultural, and political spheres. These 'mesowaves' (if we use the metaphor of the Strugatsky brothers) may seem to extinguish the global 'wind.' However, they also create a new crisis environment in all areas of society, laying the foundation for future upheavals.

The **second stage** of the "freezing" of connection and the replication of the crisis wave in all aspects of society is further intensified by the polarization of "friend or foe" imagery, leading to potential destruction and chaos. The second echelon of society's defense systems, involving discipline and legalized violence, faces either complete "freeze" and questionable legitimacy of actions by the masses or the formation of a social base for future upheavals. This can manifest as domestic impulsive offenses, such as family violence and looting, or shadow violations that destabilize the structure of society. It may also lead to transitions towards authoritarian or even totalitarian systems of government, illegal changes in ownership, and new configurations of society's structure and international relations. Digitalized information spaces, such as the Internet, become crucial arenas for imitation and transformation of connectedness during pandemics. These virtual spaces give rise to new meanings and brilliant works. They serve as platforms for consumption, education, and the creation of social relations in the form of phantoms. Crisis fosters the emergence of hyperreality as a "refuge" for individuals seeking escape and connection.

The **third stage** builds upon the foundation established during the first stage and fully develops by the end of the second stage. It is characterized by interactions in the context of international and global waves of the crisis, involving diplomats, customs and border guard services, and politicians - the "third echelon."

While the previous two stages were likened to tsunamis, the third stage represents a storm in the crisis spaces of global and international relations. As a result, the "country," and later the countries affected by the epidemic, face closure by the international community, leading

to a simultaneous "freeze" of imports from and limiting of exports to these countries. The international wave of the crisis escalates, causing further damage.

The second wave operates in the opposite direction. When an epidemic emerges in a secondary country during a pandemic, it leads to a reduction in exports and imports to and from that country. Meanwhile, in the primary affected countries, the phase of recovery from the pandemic may begin, prompting them to seek ways to offset their economic and political crisis at the expense of the "offender" countries that did not provide support or exacerbated internal crises. These countries, effectively managing the pandemic, become expansionist players in risky economic and political zones, leveraging the resonator of "us and them" during the crisis (those who provide assistance in times of crisis are considered allies, while others are perceived as strangers). The macroeconomic and macropolitical map of the world is undergoing significant changes as a result.

Thus, the confrontation transforms into a long-term trend, where the countries involved in crisis resolution utilize a combination of "soft" and "smart" power, and sometimes "hard" power. These global interactions and influences intensify the dynamics of "whirlpools" of internal political and economic processes within each country, and the possibility of global cataclysms like wars and revolutions cannot be ruled out. As a result, countries and international relations undergo structural changes, affecting institutions, communities, and overall functioning. During this stage, global and mass relations play a significant role in shaping cross-state spheres that transcend national boundaries, because the crisis calls for comprehensive, global solutions to address challenges in various domains and regions.

The pandemic's impact in the first two stages, followed by the storm in the third and whirlpools in the fourth, is causing significant changes in the world, and it will undoubtedly be transformed in various ways.

The perspective for future research lies in comprehending the dynamics, stages, and phases of crisis waves, examining the mechanisms of replication and scaling from the medical crisis (pandemic) to the transformation of crisis phenomena into other spheres of life and international relations. Understanding the crisis mechanisms within the dynamics of "tsunami," "storm," and "whirlpools" aims to develop a modeling scheme for real social interactions, exploring temporality, strategies, and tactics for effective actions in global emergencies across various levels of social decision-making.

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Author Biography

Maxim Lepskiy is a professor in the Sociology Department at Zaporizhzhia National University in Zaporizhzhia, Ukraine. Professor Lepskiy has both academic and governmental administrative experience and currently heads the Research Board in Social Forecasting of the Sociological Association of Ukraine. He is an Academician of the European Academy of Sciences of Ukraine and Ukrainian Academy of Sciences. He is the author of 16 monographs, 13 workbooks, and 2 textbooks on such subjects as social and political forecasting, conflict modeling and resolution, and peacemaking and human development.

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