Conflict potential of risk reflexivity: information management under the conditions of pandemic

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Abstract. The article problematizes a range of issues related to the emergence of new mechanisms of risk-reflective legitimization / delegitimization of information control over the spread of a pandemic in the context of Covid-19, taking into account the antagonistic definitions of its threats and dangers. The main substantive task of the study is to analyze the conceptual model of classification of various types of risk reflections - communicative, autonomous, critical, and disturbed, which adjust the hierarchies of the significance and social acceptability of risks. The authors focus on the features of the behavior of a modern social subject in the conditions of uncoupling of risky communications depending on the interpretation of information about risks. The conflict potential of information flows that impose forms of risk perception and risk behavior, the mechanisms of formation of information inequality of reflection of risks and social information exclusion in the policy of distribution and compensation of risk are revealed. The article argues that the inability to appropriate the constructive elements of risk reflections in the strategy of information management of threats destroys the security. The article proves that in the information field, the risk subspace is an asymmetric structure of production, reproduction, ranking and distribution of threats and risks, functioning simultaneously as a tool and a goal of struggle. The authors argue that incorrect attributive judgments and interpretations of the threats and dangers of the pandemic can escalate social and political conflicts.

1 Introduction

The COVID-19 pandemic has redefined the institutional parameters of informational and communicational constructs. The title of the article This time is really different by Carmen Reinhart, Chief Economist of the World Bank, has become a symbol of social and political reflexivity upon the crises and risks of the pandemic, perceived in theoretical and political-instrumental discourse [1]. According to V. Mau [2], the poor predictability and uncertainty of the virus' effects as well as the potential of a general existential threat make the current situation all the more similar to a war, necessitating the search for risk management and

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decision-making informational solutions amidst the newfound uncertainty and changes in the nature of communication.

The emergence of new mechanisms of communication under the conditions of a structural crisis, that is, new ways and forms of informational exchange, has revitalized the conflict between scientific and social knowledge within the risk society, as identified by W. Beck, involving the fierce debate of whether something is risky or not. The inability to apply constructive elements of risk reflexivity as part of an informational threat management strategy, when managerial decisions are made in uncertainty, disrupts the state of security. Sociologist Victor Vakhshtayn has pointed out the following: "Information about threats influences people's everyday routine ... What matters is the metaphor, the logic, the frame in which information about the epidemic is presented ... The virus is not just a coronavirus, but a language that's being actively spoken ... The choice of format entails far more serious consequences than public opinion influencers would think." [3].

Thus, the interrelation between the formation of trust in political-administrative institutions and information management represents an essential theme of theoretical and expert discussions in the context of the COVID-19 pandemic [4, 5, 6].

The search for informational parameters of pandemic risks revolves around debates about the problems of responsibility and accountability for risks, defining the characteristics of socially approved behavior in the context of pandemic, as well as adequate crisis communication strategies. This new situation is most comprehensively reflected in political-sociological theoretical programs that address ways of conceptualizing risk communication in the context of combating the epidemic. From this perspective, it can be noted that descriptions of communicative responses to the unique combination of exogenous shocks and political-managerial and economic crisis transformations are quite contradictory, as described in scientific literature. One hand, at the forefront is the dialectic of legitimization or delegitimization of COVID-19 spread control that is, gathering scientific and expert information on the tools of proactive response, taking into account the antagonistic definitions of the dangers of COVID-19 in both scientific and social discourse. The most important factors for making sense of the COVID-19 pandemic experience are the weak informational and political responses to social anxieties in risk production, distribution, and management. The factors of social change are related to the crisis of informational credibility.

2 Materials and methods

The Nobel Prize winner Douglass North has methodologically considered fundamentally different types of uncertainties, emphasizing the following: "The world we live in is non-ergodic, that is, with new changes constantly emerging,... new, fundamentally different types of uncertainties." He distinguished five levels of uncertainty depending on society's response:

1. Building up information while maintaining the existing body of knowledge leads to an increase in predictability and a transformation of uncertainty into risk.
2. Building knowledge within the existing institutional framework.
3. Changing the institutional framework within the existing structure of beliefs.
4. Changing the structure of beliefs.
5. Residual uncertainty, which acts as the basis for "irrational" beliefs - in the case of a truly new phenomenon, we are faced with uncertainty, the consequences of which are simply unknown to us. And in this case, the likelihood of successfully reducing uncertainty depends only on luck, and players will act on irrational beliefs." [7].

Importantly, risk in this research tradition is understood as the danger of loss when the degree of uncertainty or the probability of damage can be measured. In this situation, risk
communication can determine the emergence of forms of information product alienation, or "communicative exploitation."

The basic provisions of J. Dean's concept of "communicative capitalism" [8], which outlines a number of the following theoretical and methodological assumptions, seem significant for the present study. In our opinion, the toolkit for the analysis of information flows during the pandemic is determined by:

— competition in informational volumes, shaping inequalities and hierarchies of communicative capital;
— reflexivity, that is, the ability to generate many different and equally legitimate opinions, or "unlimited uncertainty." [9];
— the "fantasy of abundance of information," characterized by an inability to distinguish what is important and necessary in a vast flow of information;
— the "fantasy of inclusion," when information technology becomes a fetish that replaces real political activity with simple communicative actions (polemics, commentary) using politicized information technology platforms;
— the "fantasy of unity and integrity," which refers to the transformation of information platforms into "global zero institutions," where one of them politically presents itself as unified and all-knowing, excluding everything foreign [8].

In conceptualizing the phenomenon of risk reflection, we rely on Margaret Archer's sociological model of different types of reflexivity, which define different positions towards risks and threats. The theoretical premise seems to be fundamentally important, according to which risk reflexion is when a social subject poses the question "What next?" when under threat, while risk reflexivity is "What will I do next with this?" At the same time, the boundaries between them are not clear, and reflexion easily turns into reflexivity.

Therefore, it seems promising to use the distinction of four types in the study of risk reflexivity [10, 11]:

1. **Communicative reflexivity** is a type of reflexivity whereby before taking a risky step, a social subject needs to obtain approval for their actions from others.

2. **Autonomous reflexivity** is when a subject makes independent decisions about actions under conditions of uncertainty.

3. **Meta-reflexivity** is a pronounced "inner conversation," a critical dialogue where one critically evaluates the effectiveness of their own actions in risky circumstances, during positive experiences, as well as their ability to choose forms of risky behavior.

4. **Broken or impaired reflexivity** is a deficient inability to use power over oneself, a lack of meaningfulness in action under conditions of risk, disorientation, and situational expressiveness.

It may be possible to explain how interpretations of information about hazards and the recognition of certain risks as socially acceptable are related, and how this relationship affects the effectiveness of policy decisions to manage threats, based on the concept of lifestyles by H.-P. Müller [12]. It involves making sense of structured patterns of behavior under uncertainty, depending on the information available to producers and consumers of risk and their principles. Following Müller, four basic dimensions of behavior can be distinguished, depending on the interpretation of risk information:

— **expressive** (tendency to search for intense experiences, when the possibility of loss is justified by the subjective value of pleasure),
— **interactive** (taking risks while being able to independently choose the course of action),
— **valuing** (a conscious and appreciative attitude to risk, an assessment of the possibility of loss of something and the value of something else),
— **cognitive** (self-identification in the perceived information-based risk society when making a decision in a dangerous situation).
Based on this, explanatory models of risk perception and acceptability are built upon informational flows, either via assessments of political-emotional emotional perception on a scale of "distribution fairness," or via analysis of decisions built upon certain normative principles and ways of justifying evaluation of threats and dangers.

It is important that "reflexive control" [13] corrects the risk significance hierarchies in the multilevel system of "feedback loops" by "determining the dependence of conditions, principles, norms, etc. (including controlling influences) on previous and current performance and uncertainty factors." [14].

3 Study outcomes and discussion
Ortwin Renn argued that the perceived magnitude of risk depends on a subjective assessment of the likelihood of an event occurring. [15] If information targets quantitative measures of risk (such as vaccinations or severe cases of disease), then avoidance, escape, and risk evasion strategies become evident. Conversely, the more the information flow allows for reasonable risk or considers it the norm, the higher the tendency to take risks.

Controversial results of express tests on the effectiveness of risk and threat management point to the need to update the heuristic analysis toolkit both at the level of theoretical identification strategies and at the level of development of technological mechanisms and methods for solving the problems of political risk management.

The Italian philosopher Giorgio Agamben emphasized the following: "Fear is a poor advisor, but it causes many things to appear that one pretended not to see. The problem is not to give opinions on the gravity of the disease, but to ask about the ethical and political consequences of the epidemic. The first thing that the wave of panic that has paralyzed the country obviously shows is that our society no longer believes in anything but bare life" [16].

Having significantly expanded the conceptual scope of describing societies in a pandemic, Slavoj Žižek stated: "When we react in panic, we do not take the threat seriously—we, on the contrary, trivi-alize it. Just think how ridiculous is the notion that having enough toilet paper would matter in the midst of a deadly epidemic." He justifiably put forward as a subject of analysis in scientific discourse the following questions: "So what would be an appropriate reaction to the coronavirus epidemics? What should we learn and what should we do to confront it seriously?" [17].

In our opinion, all participants of the pandemic risk perception discussion somehow confirm W. Beck's thesis about the modern world society's shift from the "distribution of wealth" logic to the "distribution of risk" logic [18].

Failure to approve the constructive elements of risk reflexivity within the strategy of informational threat management, when management decisions are made in situations of uncertainty, disrupts the state of security. The search for informational parameters of pandemic risks revolves around debates about the problems of responsibility and accountability for risks, defining the characteristics of socially approved behavior in the context of pandemic, as well as adequate crisis communication strategies. This new situation is most comprehensively reflected in political-sociological theoretical programs that address ways of conceptualizing risk communication in the context of combating the epidemic. From this perspective, it can be noted that descriptions of communicative responses to the unique combination of exogenous shocks and political-managerial and economic crisis transformations are quite contradictory, as described in scientific literature. One hand, at the forefront is the dialectic of legitimization or delegitimization of COVID-19 spread control that is, gathering scientific and expert information on the tools of proactive response, taking into account the antagonistic definitions of the dangers of COVID-19 in both scientific and social discourse. The long-term psychological and
financial consequences, structural inequalities, deepening social divisions, discrimination under the influence of COVID-19 against socio-economic strata, ethnic minorities, women, the elderly, are no less difficult to address. [19].

A reasonable question would be: how does a modern social subject act under conditions of "risk communication decoupling", the combined "abundant communication" and "communicative poverty", the selectivity and politicization of information flow, social inequality, as well as ways of using digital technologies? [20]

Researchers have put forward reasonable observations about the subject's propensity for personal emotional confidence, rather than rational argumentation, when dealing with the dangers of coronavirus and contemplating ways of prevention and treatment. Facts are displaced by meanings, with the risk consumer in a given informational environment either constructing their own meaning or focusing on the already existing and dominant meaning [21].

We have already noted that the intensification of the search for new approaches to the interpretation of the influence of informational conflict on risk reflexivity is largely an informational culturing of pathological affects that determine the orientation of the communication process of constant risk perception exchange.

The destructive potential of disruptive information, according to some researchers, is not inferior to the viral threat and even surpasses it, being reflected in the society's weariness of the epidemic ("bad infinity") and being an additional source of tension, leading individuals to loss of the sense of belonging to society and the society's loss of control by blurring social norms and "turning norm into absurdity" (W. Beck) as well as by ignoring behavioral rules. This condition is defined as social anomie, "normlessness," where "some structures of society exert a certain pressure on its individual members, pushing them to the path of disobedience rather than to the path of behavior consistent with generally accepted rules." [22]

The coronavirus pandemic has exacerbated the problem of the hierarchy of risks - in today's world; the logic of the "distribution of wealth in society" has been replaced by the "logic of risk distribution" [18].

The situation is complicated by the fact that in modern society, there is always a conflict between different risk interpretations, while "the cognitive equipment of thinking with images of Other-ourself and Other-another allows us to identify a situation as conflictual, to problematize it, and to make decisions." [23].

4 Conclusion

The pandemic, as we can see, has introduced many changes to the problematic of reflexive information management in high-risk situations.

Information and disinformation in risk reflexivity are elements of reflecting the dominant power discourse that determines what is risky and what is not, as well as whether a person belongs to groups that are in a special risk zone, that is, imposing forms of risk perception and risky behavior, when seemingly reasoned risk descriptions come into conflict with managerial practices that provide reinforcement of risk prevention and threat distribution functionality, which are often interpreted as something irrational and fictitious. In the system of risk and threat stratification of the bipolar "informational capitalism" society, social polarization of producers and consumers of threat information, the question of distributive justice of risks, of who should bear the burden, is particularly acute. An analysis of Manuel Castells' theory shows that these institutional practices are "fundamental social fault lines in the age of information" [24].

In fact, we are concerned about the processes and mechanisms of the formation of information inequality of risk reflection, the growth of social information exclusion in the
policy of risk distribution and compensation, or "second-order exploitation" (Andre Gorz) [25], which entails the preferences provided in a situation of threat by a social group to the detriment of others, because risks are hierarchical and are most exposed to the social strata least capable of minimizing its consequences [26].

At the same time, in the "subspace of risk", which we consider as an asymmetrical structure of production, reproduction, ranking and distribution of threats and risks, functioning simultaneously as a tool and goal of struggle in the field of information [27], the blocking and replacement of informational feedback is ever increasing; the same goes for the increasing prominence of information dumps and provocations, as well as threats and manipulation of dangerous attitudes. We can agree with Evstafiev D. that "the networked information society has demonstrated the absence of built-in mechanisms to protect society from informational manipulation. The public involved in informational processes has largely come to terms with the manipulative nature of today's information society, which is confirmed, among other things, by the absence of efforts to neutralize the processes of fake information creation, as well as by the signs of the political legalization of such fake information" [28].

Hence, there is reason to believe that "human communication activity is to a significant extent characterized by the intentional production of informational noise and even of misleading or false information. This generates waves of unreliable and low-quality information with potentially very dangerous impacts on the social capacity to respond adaptively at all scales by rapidly adopting those norms and behaviors that may effectively contain the propagation of the epidemics. Spreading false information or even conspiracy theories that support implausible explanations of the causal forces at work behind the crisis may create serious confusion and even discourage people from taking the crisis seriously or responsibly, all the more so, the more such signals receive social validation and spread across social groups and communities." [29]

The key idea of our theoretical construct is that "in a subspace of risk," incorrect attributional judgments and conflicting interpretations of threats and dangers can lead to further outbursts. Such attributions can serve as the basis for, as we have already noted, "riskophobia" or "riskophilia." Russian researcher S.A. Kravchenko notes that "with the help of changing interpretations of risks, produced by scientific and everyday knowledge, the flowing fear is reinforced. As a result, both objective riskogenic realities and subjectively constructed risks and risk perceptions have actually become normal, contributing to permanent self-reproduction of riskophobia... Along with the trend of riskophobia, there exists and develops riskophilia, or craving for riskogenic activity, everything that causes positive emotions from activities associated with an increased degree of risk."[30]

Given the "reproducible algorithm of successful extreme behavior without rules" [31] characteristic of the COVID-19 pandemic, posttraumatic syndrome is intensified by risk-reflexivity determining patterns and strategies of conflict behavior, as well as informational "riskification" of social problems. According to Tedros Ghebreyesus, director general of the World Health Organization, there is a struggle not just with an epidemic of a disease, but also with an informational epidemic. "Fabricated news spread faster and easier than the virus, being no less dangerous." [32, 33]

A number of researchers have introduced the all-important concept of "infodemia" in this regard, or an overabundance of information of varying degrees of accuracy about the virus, coupled with political discourse, including fake, partially true, false and intentionally misleading information, which provokes risky behavior and distrust of the authorities and the healthcare system [29, 34,35]. Some also note the parallel phenomenon of "datademia" (excessive data on epidemics, disease statistics, etc.) [36]
Reflecting the current state of the problem in the context of the global pandemic, it should be emphasized that the conflict of interpretations arises when the two main information models of pandemic control clash - "solidarist" and "absentist" [37]. The "solidarist" model entails purposeful formation of public support in response to the coronavirus-induced crisis, based on trust in information about the scale and consequences of the epidemic;

The "absentist" model entails vague or fatalistic threat reflexivity, inconsistent information flows on the part of the authorities about the risks and dangers of the epidemic, manipulation of statistical data and restrictive measures.

Thus, there are reasons to believe that informational risk management should be studied from the position of analyzing the peculiarities of perception and the risk reflexivity of informational flows about the coronavirus crisis.

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**References**

1. C. Reinhart, Project Syndicate (2020)
2. V. A. Mau, Economic issues, 3, 5 (2021)
3. Will the Wuhan threat change our lives and ourselves? A sociologist on the impact of the epidemic on society, https://naukatv.ru/
4. L. Bennett, S. Livinston, European J. of Communication, 33(2), 122 (2018)
5. S. Guriev, D. Treisman, J. of Economic Perspectives, 33(4), 10 (2019)
6. A. V. Aleinikov, A. V. Kurochkin, D. A. Maltseva, Scientific and Technical Information Processing, 1, 38 (2021)
7. D. North, *Understanding the process of economic change* (NRU HSE, Moscow, 2010)
8. J. Dean, Cultural Politics, 1, 51 (2005)
9. D. Gavra, V. Dekalov, The J. of Sociology and Social Anthropology, 1, 27 (2018)
10. M. S. Archer *Structure, agency and the internal conversation* (Cambridge univ. press, Cambridge, 2003)
11. A. M. Kuchinov Method: Moscow Yearbook of Social Studie, 7, 365 (2017)
12. H.-P. Müller. Russian sociological review, 3, 111 (2017)
13. V. Lefebvre, *Conflicting structures* (Publisher: Soviet Radio, Moscow, 1973)
14. M. V. Belov, D. A. Novikov, Control Sciences, 1, 43 (2021)
15. O. Renn, Applied Systems Analysis, 2, 50 (1983)
16. *Coronavirus, Psychoanalysis, and Philosophy Conversations on Pandemics, Politics and Society* (Routledge, London, 2021)
17. S. Žižek *Pandemic! COVID-19. Shakes the World New Yorkand* (OR Books New, London, 2020)
18. U. Bek, *Risk society. On the way to another Art Nouveau* (Progress-Tradiciya, Moscow; 2000)
19. R. Rollston, S. Galea, *Harvard medical school primary care review* (2020)
20. J. Keane, *Democracy and Media Decadence* (NRU HSE, Moscow, 2015)
21. A. N. Chumikov, Russian School of Public Relations, *6*, 32 (2015)
22. R. Merton, Sociology of Power, *4*, 212 (2010)
23. A. I. Makarov, *The image of the enemy in territorial conflicts: methodological aspects in Social conflict in different normative-semiotic systems* (Publisher: Kazan University, Kazan, 2012), 77
24. M. Castells *The information age: Economy, Society and Culture* (NRU HSE, Moscow, 2000)
25. A. Gorz *Intangible. Knowledge, Value and Capital* (NRU HSE, Moscow, 2010)
26. K.J. Tierney. *Sociological Forum*, *2*, 215 (1999)
27. A. V. Aleinikov, G. P. Artemov, A. G. Pinkevich, RUDN J. of Sociology, *4*, 847 (2020)
28. D. Evstafiev, *Free Thinking*, *1*, 163 (2021)
29. R. Gallotti, F. Valle, N. Castaldo, P. Sacco, M. De Domenico, Nat Hum Behav, *12*, 1285 (2020)
30. S. A. Kravchenko, Sociological Studies, *2*, 3 (2017)
31. G. Pavlovsky, *Ironic Empire. The Risk, the Chance, and the Dogmas of the Russian Federation System* (Europe, Moscow, 2019)
32. T. Gebreyesus, Speech by the WHO Chief Executive Officer at the Munich Security Conf., World Health Organization (2020)
33. A. M., Klimova, K. S. Chmel, N. Y. Savin, Monitoring of Public Opinion: Economic and Social Changes, *6*, 266 (2020)
34. N. Mheidly, J. Fares, Public Health Policy, *41(4)*, 410 (2020)
35. J. Zarocostas. *Lancet*, *395*, 676 (2020)
36. *COVID-19 in International Media. Global Pandemic Perspectives* (Routledge, London, 2021)
37. *The COVID year: preliminary results and challenges of the decade* (The Liberal Mission, Moscow, 2021)