

Perception of the Connection between the Covid-19 Pandemic and Climate Change in the Czech Blogosphere*

DANIEL ČERMÁK**, JANA STACHOVÁ, MATOUŠ PILNÁČEK
Institute of Sociology of the Czech Academy of Sciences, Prague

Abstract: The article is dedicated to reflecting the links between the climate crisis and the Covid-19 pandemic crisis in the context of Czech social media, specifically on several blogging platforms. The processes leading to the climate and pandemic crises are highly intertwined, based in the way humans interact with the environment on a global scale. However, the circumstances and consequences of both crises, as well as the ways they are dealt with, also share common features. The authors identify such contexts as reflected on blogging platforms by undertaking a qualitative analysis of texts from an interpretative phenomenological perspective. Climate scepticism is connected to pandemic scepticism, on the one hand, and to acceptance of the pandemic as a real threat, on the other hand. Conversely, acceptance of the climate crisis can be associated with both acceptance of the pandemic and pandemic scepticism.

Keywords: climate change, Covid-19 pandemic, scepticism, neutralization techniques, blogs

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In the past few years, the world has been impacted by a combination of two crises – the Covid-19 pandemic and climate changes influenced by human activity. The combination of the two crises presents a significant challenge that requires intensive, coordinated, and costly solutions. At the same time, the two crises have revealed a number of problems that need to be addressed. There are several differences between the two crises, but also a number of connections, and it is on people's perceptions of the latter that our research is focused.

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** Direct all correspondence to: PhDr. Daniel Čermák, Ph.D., Institute of Sociology, Czech Academy of Sciences, Jilská 1, 110 00 Praha 1, e-mail: daniel.cermak@soc.cas.cz.

People can use different channels of communication to share their views on these connections. For the analyses carried out in this article, we used contributions (texts or 'blog posts') published on one of three selected Czech blogging platforms (blog.idnes.cz; blog.aktualne.cz; and blog.respekt.cz). Using a qualitative analysis of the texts conducted from an interpretative phenomenological perspective, our analyses sought to identify the links between the two crises, as reflected on the blogging platforms.

Climate change and the SARS-CoV-2 virus pandemic

When Ursula von der Leyen announced the European Green Deal in December 2019 to address the biggest global crisis in the European Union – human-induced climate change – few people knew that humanity would soon face another crisis. That was the SARS-CoV-2 pandemic. The year 2020 was then marked by a global pandemic, which was and still is the focus of considerable efforts by humanity. This current crisis somehow overshadowed the fact that, according to the World Meteorological Organization (WMO, 2021), 2020 was one of the three warmest years since the pre-industrial era (1850–1900).¹ It was also a year significantly marked by the effects of climate change, such as widespread wildfires, flooding, and extreme temperatures (EClinical Medicine, 2021). Nevertheless, in the shadow of actions undertaken to address the pandemic, voices could be heard among politicians, economists, and other experts in industry, agriculture, the non-profit community, and a wide range of scientific disciplines, that were calling attention to the connections between the two global crises and the possibilities and challenges that these connections present for the future. The similarity of both crises is clear from the fact that they both cause a loss of life that could have been prevented through collective effort at the global level. Moreover, the pandemic has amplified the risks of climate change for populations and their sources of livelihood (ibid.).

The connection between climate change and the pandemic crisis

The literature has long recognised the existence of processes that contribute to climate change or environmental degradation, and to the appearance of new pathogens, including zoonoses such as Covid-19. Zoonoses account for up to 60% of emerging pathogens, and the transmission of zoonoses to humans is affected by various anthropogenic, natural, and climatic factors (Naicker, 2011). The processes leading to the two crises are highly intertwined and depend on how humans affect the environment. Deforestation, land grabbing, habitat destruction, and the associated loss of biodiversity to make way for livestock farming or urban development, tourism, and international trade contribute to both greenhouse gas production and reduced CO₂ absorption and to a higher risk of the transmission and multiplication of pathogens. Similarly, globalisation and international trade

¹ According to NASA, 2020, along with the year 2016, was the warmest ever (NASA, 2021).

are only possible through the widespread use of fossil fuels and at the same time they facilitate the spread of pathogens (Barouki et al., 2021; Joshi et al., 2021).

According to experts, not only are the two crises' economic impacts substantial, they are also in many respects quite similar, with both leading, for example, to job losses, weaker economic performance, and rising poverty and inequalities (Joshi et al., 2021). A number of social impacts are associated with this. In relation to people's current living situation and position in the social structure there may occur an increase in social isolation and racial and gender inequalities – for example, in the labour market or in access to health care and to education and resources (EClinical medicine, 2021; Joshi et al., 2021; Zang et al., 2021). Considerable impacts of both crises on public health are connected with higher morbidity, increased mental illness, and higher mortality (Joshi et al., 2021). For example, in the United States, the risk of such impacts is also associated with socioeconomic differences in people's access to health care, in their health status, and in how their health is impacted by Covid-19 (Khanijahani & Tomassoni 2021) and climate change (Lal et al., 2011; USGCRP, 2018). In the Czech Republic, the crisis has likewise revealed a need to balance the different impacts on diverse socioeconomic groups, whether in terms of educational opportunities, labour market status, or access to health care. All this suggests that both crises have an uneven impact on different communities and socioeconomic groups (persons with lower income, racialised individuals, people with chronic illnesses, etc.); the consequences of both crises are more strongly felt by deprived communities and the poorest and most vulnerable people (Botzen et al., 2020; C-Change, 2021).

In the scientific literature, there are a number of points in common shared by the two crises and the approaches to dealing with them. According to Wu (2021), coordinated international cooperation is essential, as globalisation is the major contributor to both crises. However, new solutions for the relationship between people and the environment must be sought not only at a global level but also at a local level. Efforts to solve both crises must be coordinated and complex, involving a wide range of actors in the decision-making sphere, but also from industry, as well as citizens themselves (Markard & Rosenbloom 2020; Zang et al., 2021). Several areas need to be addressed. These include the protection of biodiversity, the reduction of wildlife trade (Wu, 2021), and the transition to a low-carbon economy.

The whole world is now facing the challenge of coping and continuing to cope with the effects of both crises. Intensive economic stimulus and the investment of considerable resources are required. The European Union has allocated a large budget to combat the pandemic and intends to proceed in the same way in the near future to tackle the climate crisis. To reboot the economy affected by the Covid pandemic, the EU has its own *Recovery Plan for Europe*, which aims to make Europe greener, more digital, and more resilient (European Commission, n.d.a). This is in accordance with one of the EU's six priorities for 2019–2024, the so-called *European Green Deal*, which is a reaction to the climate crisis and environmental degradation (European Commission, n.d.b). How the world copes with crises is reflected in the communication about them in public debate and in traditional and social media.

Communicating the climate and pandemic crises

There are several challenges involved in any effort to communicate information about climate change to the public. Moser (2010) highlights several reasons why achieving the desired effect on the target audience is difficult. One is the invisibility of the causes of the change itself, when the increase in the concentration of greenhouse gases in the atmosphere is not directly visible, and when the consequences of the rise in gases on health, for instance, are not immediately apparent. Related to this is the fact that the consequences of climate change are often remote in both time and place from its onset. Compared to the immediacy and urgency of other crises, such as economic ones, people do not, or at least have not for a long time, had the opportunity to experience gradual, small, but increasing changes in the climate in a modern, urbanised, human-controlled environment. Likewise, people today find it difficult to observe the connection between mitigation measures and favourable climate changes, as they are unlikely to live to see them. All the above make communication difficult and reinforce distrust in the global influence of man, and this is further compounded by the complexity and uncertainty that results from the lack of data and the limitations of theoretical models of future development.

Further uncertainty concerns the development of society and the future of individuals and their careers. As a result, the tendency is for people to try rather to maintain their lifestyles. This situation plays into the hands of climate change sceptics and deniers. For example, fossil industry-backed scientists, politicians, and think tanks have commented on climate change issues in the media to challenge the scientific consensus, raise doubts about the existence of climate change or the need for mitigation and adaptation measures, or at least delay and weaken the effects of potential solutions (Mann, 2021; Moser, 2010). They also achieve this by means of an expedient framing of their messages – for example, by trying to create the impression that these messages are part of a dialogue between multiple opposing scientific views and by highlighting the uncertainty of scientific knowledge (Antilla, 2005; Michaels, 2008; Moser, 2010; Sharman, 2014).

On the other hand, in the case of the pandemic crisis and communication on Covid-19, the consequences of the crisis cannot be considered invisible or difficult to describe. In addition to people who became directly ill or died as a result of the coronavirus, others were affected by falling into poverty, by losing their business or job, by the decline of the economy's performance, etc. (Fuchs, 2021). To help combat the pandemic, governments temporarily introduced several measures, which included placing restrictions on movement and other freedoms (Coman et al., 2021). While the reduction in social contacts led to a decline in personal communication, other forms of communication have become more critical, particularly television, news portals on the internet, and social media (Fuchs, 2021; Van Aelst et al., 2021).

First, television viewership might have been increased by the frequent press conferences with corona updates by political leaders and medical experts. Second, internet-based news might have been boosted by the need to look for specific information

related to the crisis and its consequences. In addition, people probably relied on online media, and social media in particular, to get an idea of how others were reacting to and evaluating the crisis. (Van Aelst et al., 2021, p. 16)

The existence of conflicting opinions in the public domain makes it difficult for citizens to navigate the issue. The public debate around any scientific knowledge is shaped by an insufficient understanding of science and the process of scientific knowledge. This understanding is influenced both by citizens' scientific literacy and by an insufficient or lack of effort on the part of scientists and experts to explain the issue to the public in an understandable way (Bauer et al., 2007).

As reported by Fuchs (2021), the public was presented with a wide range of ways in which to approach the crisis, many of them contradictory, from social Darwinism and survival of the fittest to an appeal for solidarity. It was difficult to navigate the rapidly evolving and deepening pandemic and social and economic crises, so conspiracy theories, often associated with radical right-wing movements, came into play. According to such theories, Covid-19 was not dangerous, it was natural in origin, and, conversely, the vaccines against it were dangerous. Social media and the internet then contributed to the rapid spread of these theories. In the Czech Republic, this was compounded by the permanently chaotic communication from the government, which failed to act in a unified way and provided people with incomprehensible, contradictory, or misleading information (Eibl & Gregor, 2021).

Scepticism and techniques of neutralisation

One of the reactions to the climate and pandemic crises that can also be observed in the media is the expression of a greater or lesser degree of scepticism. The term 'climate scepticism' was coined to refer to distrust in the idea that climate change exists or has anthropogenic causes. But climate scepticism is not a straightforward concept – it originally referred mainly to doubts and uncertainties about the scientific knowledge on climate change itself, but over time acquired other dimensions. Capstick and Pidgeon (2014) distinguish two basic types of climate scepticism: epistemic and responsive. Epistemic scepticism relates to the perception of the legitimacy of climate claims; there is doubt about the state and creation of knowledge about climate change as a physical phenomenon, its impacts, and anthropogenic influence on climate change. Epistemic scepticism has profound implications because it essentially rejects the basic principles of scientific knowledge about climate collected by scientific institutions (e.g. the IPCC) and it is represented in a broad spectrum of academic literature. Viewed through the lens of this form of scepticism there are plausible alternative explanations of facts that are otherwise difficult to ignore (e.g. rising temperatures on Earth) and a concept that sees climate change as 'natural'.

'Responsive scepticism' means having doubts about the effectiveness of actions against climate change, the personal and social relevance of climate change, the willingness and ability of social actors to respond to climate change on an in-

dividual, political, and social level, and the effectiveness of such responses. This kind of scepticism is more significantly related (than epistemic scepticism) to a lack of interest in climate change and a more general tendency towards fatalism or resignation (it makes no 'sense' and is 'too late' to react to climate change, there is little prospect of finding an effective solution to climate change). This kind of scepticism about the policy response to climate change may reflect a broader disconnection from politics in recent years (Hay, 2007) and is probably also a consequence of the gradually increasing politicisation of climate change.

An important point is the connection between climate and pandemic scepticism and Euroscepticism, which opposes decisions and solutions 'imposed' by the EU, such as the European Green Deal. Climate sceptics in the Czech Republic are often also Eurosceptics. Vidomus (2013, p. 116) has described concerns in a certain segment of the Czech population about the 'dictatorship' of the European Union: 'The European Union is considered globally to be the area with the most ambitious climate policy. Sooner or later, its energy concept and environmental legislation become part of the Czech legal order. It is not surprising, therefore, that the Czech climascepticism overlaps strongly with pronounced Euroscepticism.'

However, it is not always the case that sceptics in Czech society both reject climate change and distrust the government or the European Union. Čermák and Patočková (2020) have shown that no significant link can be identified between epistemic scepticism and Euroscepticism. On the contrary, they found a relatively strong positive relationship between responsive scepticism and Euroscepticism. Not only were there overlapping groups of supporters of both kinds of scepticism, but the relationship was also reversed – the less sceptical people were about the EU, the weaker their responsive scepticism, as if they believed that the EU was a guarantee of the implementation of measures related to climate change.

The goal of sceptics, whether pandemic or climatic, is to raise doubts about the very existence of the crises in question or at least to question their severity. The literature review shows that by promoting and disseminating claims that contradict the scientific mainstream, sceptics seek to fuel controversy and constant debate, thereby giving the appearance of participating in an ongoing scientific discussion (Hoggan & Littlemore, 2009; Mann, 2021; Oreskes & Conway, 2010). With media support, it affects both the public and political figures. The result is a sense of ambiguity and doubt about the scientific consensus on, for example, climate change, a divided public opinion, and a delay in taking necessary action (Mann, 2021). The same can be said of the pandemic crisis. Different media, including blogs, are used to disseminate divergent views. Sharman (2014) has pointed out that it is particularly in the blogosphere that climate change continues to be framed as an active scientific controversy. Scientifically based climate-sceptic arguments may become increasingly rare in the traditional mainstream media, as they withdraw into the unregulated environment of the blogosphere. Blogs not only act as intermediaries between scientific research and the non-expert audience, but through a reinterpretation of existing statements about the knowledge of climate science and criticism of scientific institutions, they themselves serve as alternative public sources of expertise for the climate-sceptic audience (Sharman, 2014).

To generate doubt, sceptics use several techniques that are referred to as 'neutralising'. According to Sykes and Matza's original neutralisation theory (1957), juvenile delinquents use such techniques to justify actions they engage in that are at odds with generally accepted norms. These techniques were also later described in the context of efforts to explain the activities of stigmatised economic sectors, such as the tobacco and gambling industries (Grougiou et al., 2016). The aim was to deny certain scientific knowledge (about the harmfulness of smoking, the existence of climate change, etc.) or to maximally delay the introduction of resolutions to the problems it identified. Various interest groups have used techniques of neutralisation in their strategies in order to challenge certain scientific knowledge, whether it was the fact that smoking causes cancer or the existence of human-induced climate change. Their aim has been to create the belief that there is no broad scientific consensus on the given topic and to question the credibility of scientists, etc. (Bruelle et al., 2012; Greenberg et al., 2011; Oreskes & Conway, 2010).

As McKie (2018) has shown, climate sceptics also use similar techniques of neutralization. The author modified the techniques initially described by Sykes and Matza as follows (see McKie, 2018, pp. 119–120):

- Denial of responsibility: climate change is happening, but humans are not the cause.
- Denial of injury: there is no significant harm caused by humans to the earth's climate, in fact there may even be benefits to these changes.
- Denial of victim: there is no climate change and no climate change victims. If climate change victims do exist, they deserve to be victimised.
- Condemnation of the condemner: climate change research is misrepresented by scientists, and manipulated by the media, politicians and environmentalists.
- Appeal to higher loyalties: Economic progress and development are more important than preventing climate change.

The research objective and methodology

We aimed to identify the currents of opinion in Czech society that reflect the concurrence of crises referred to above – climate change and the Covid-19 pandemic. For our analysis, we chose blogs as representatives of social media in which the topic of climate change and epidemic were also reflected. They are used by interest groups, think tanks, scientists, and individual actors without wider ties and serve to spread and share the arguments desired for the given type of actors (Greenberg et al., 2011).

Selection of texts

The texts (articles by individual bloggers) used for the analyses were collected on the pages of three blogging platforms (blog.idnes.cz; blog.aktualne.cz and blog.respekt.cz), which are available for free and are among the best known in the

Czech Republic. Two are connected with news websites (idnes.cz and aktualne.cz), and the third is connected with the website of the weekly magazine *Respekt*. The first blogging platform belongs to the media company Mafra, and the other two to the media house Economia.²

Two conditions concerning the topic limited the choice of texts. The first condition concerned time, as only texts published in 2020, the first year of the Covid-19 crisis,³ were selected. The second condition concerned the selected keywords about the two topics of interest – the Covid-19 crisis and the climate crisis. A range of keywords was selected for each issue. For the Covid-19 crisis, these were words: covid*, koronavir*, pandemi*, sars-cov-2 (the asterisk could be replaced by any string of additional characters). The climate crisis was about the following words: klimatick* změn*, změn* klimatu, globáln* otep*, pařížsk* dohod*, zelen* dohod*, zelen* úděl*, european green deal, new green deal.⁴ These words were selected in reference not only to climate change but also to the economic transformation programmes associated with it. Only texts that contained at least one keyword related to the topic of the pandemic crisis and, at the same time, at least one keyword associated with the case of the climate crisis were included.

As a first step, we used the Heritrix 3 program to automatically crawl blogging platforms from the home page (i.e. blog.idnes.cz; blog.aktualne.cz; blog.respekt.cz) through links of up to 10 links and downloaded all the content thus obtained. Subsequently, we used the jusText program (Pomikálek, 2011) to remove the content of the pages outside the main text, such as advertising or the website menu. In the purified texts, we identified all the keywords mentioned above in the required combination (see the previous paragraph). Then we went through all the automatically selected texts and checked the relevance of the blog posts. If the posts did not address the link between the two crises, they were excluded from the sample.

Analytic framework

In the content analysis of the data, the perspective of an interpretative phenomenological analysis was used, in the spirit of which we formulated our basic open research question (Smith & Osborn, 2003).

The question was: How do Czech bloggers perceive and experience the concurrence of the ongoing Covid-19 pandemic and the climate crisis, what similariti-

² The original intention was to download the texts and identify the selected keywords as far as possible on all relevant Czech blogs. This proved to be impossible as there is no list of such blogs or a simple way to search for them. Therefore, we focused our attention exclusively on the three blogging platforms where it was possible to conduct a search in the above-described manner.

³ The disease appeared in late 2019 but was not yet perceived as a pandemic.

⁴ These terms translated into English: climate change, Paris agreement, global warming, european/new green deal.

ties between these events do they perceive, and what in their view is the nature of any such connection?

The data were analysed in the first step without any deeper knowledge or thorough study of the literature; however, in the final stages of the analysis, we worked with the scientific literature in the interpretation process. The implicit assumption of the research question was that in their writings bloggers would to a greater or lesser degree comment on the connection between the Covid-19 epidemic and the climate crisis, and this assumption was confirmed.

Inductive coding was used in the data analysis. The codes (a character for a group of units of meaning representing their topic) were created from reading the texts, and relevant segments were encoded. A segment is a part of the text that expresses the blogger's messages, to which we assigned a given code. During the coding we made theoretical notes, codes with a similar meaning were merged into categories, and some significant and essential codes became categories in their own right. During the axial coding, we identified patterns and relationships between categories that form the basis for our line of argumentation. In the later stages of the analysis, the results were evaluated in the context of findings published in the scientific literature. Although this methodology assumes some distance from what we know about the subject from the literature, the literature may influence the research as another data source or model that makes sense to the data (Dick, 2005; Šimandl & Dobiáš, 2021).

The analysis was carried out through the MAXQDA qualitative data analysis program. A total of 15 categories and 11 subcategories were identified in the dataset, and 460 segments were encoded in 124 texts (blog posts). Of these, 67 texts were published in the reporting period on the blog *idnes.cz*, 40 on the blog *aktualne.cz*, and 17 on the blog *respekt.cz*. In the following sections, we will begin by analysing the empirical material itself and will then compare it with relevant concepts in the scientific literature.

The concurrence of the Covid-19 pandemic and climate change as reflected in the Czech blogosphere

The set of texts originating in the above-described blogs form several loosely defined groups in terms of the attitudes towards climate change they express. These range from significantly pro-climate attitudes (in the sense of a belief in the anthropogenic causes of climate change and the need for radical climate policy) to more neutral ones, where a belief in the existence of climate change is accompanied by scepticism about human influence on it, and to texts that strongly reject the notion of anthropogenic impact on the climate while also being highly critical of climate policy and in particular the European Green Deal.

It is interesting to see how these attitudes intersect with attitudes towards the Covid-19 pandemic, as the connections are not as straightforward as they might seem. The division of attitudes towards the Covid-19 pandemic is somewhat clearer, with two main groups emerging, as we can see in the wider Czech media space. The first group accepts the pandemic as an actual event and em-

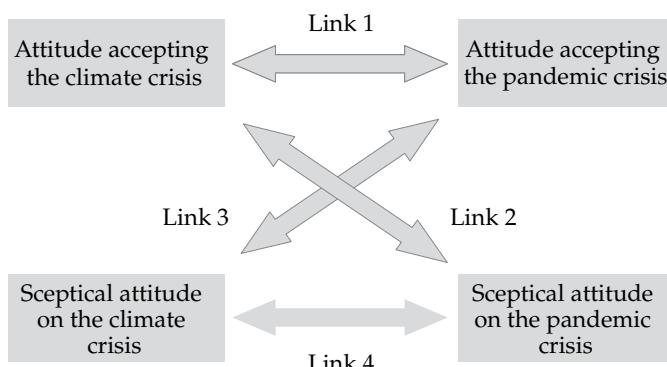
phasises collective responsibility and the need for societal solidarity. The second one perceives the pandemic as a kind of media or political construct that does not have its origin in reality, emphasises individual freedom and the responsibility of individuals for their health, and criticises political measures for restricting fundamental human freedoms.

The themes of Covid-19 and climate change are, to a greater or lesser extent, compared and inferred in the texts, either implicitly or in explicit attempts to analyse the connections between the two phenomena, which are global in nature, intersect in countless ways, and have common manifestations and solutions. Most of the articles mention a connection somewhat marginally, in one sentence, and then focus on some other problem. Others refer more emphatically to the concurrence of the two processes, comparing their meanings and mentioning shared characteristics, such as the global dimension of the two phenomena, responsibility, freedom, opportunity for change, political solutions and so on. Only some texts devote themselves extensively to monitoring the connections at various levels. During the analysis, several categories were identified at the intersection of the terms 'pandemic' and 'climate crisis', such as change, opportunity, globalisation, economic growth, freedom, responsibility, nature, and the environment. However, the expressions in these categories have different meanings depending on the speaker's attitude to the climate crisis or the pandemic.

The various connections identified between attitudes to the climate crisis and the Covid-19 pandemic

How do the blog posts we examined reflect the synergy between the two crises? The severity of the two topics is viewed on a scale that ranges from 'in light of Covid-19, the climate is unimportant', to an equivalence between the two issues (whether equally unimportant or important), to the view that 'Covid-19 is a minor problem, just a precursor to major climate change disasters'. The latter means that compared to climate change the Covid-19 pandemic is a lesser and time-limited, or no threat to humanity and society, but paradoxically it produces

Figure 1. Visualisation of the connections between the identified attitudes



a much stronger response. And it is the different perception of the severity of the two crises that predicts how bloggers reflect on the mutual position of the two crises in society. The following illustrates the two poles on this scale:

Some celebrities and institutions probably don't care that Covid is crushing economies and are still singing the old climate-alarmist song. Greta Thunberg, the UN Secretary-General, and even the Pope himself! And, of course, the EU. (B103)

Covid is a substituting problem. The real problem is the destruction of the environment, overpopulation, endless economic growth, endless consumption, migration, exhaustion of energy resources, lack of drinking water, climate change, and debt. Because global leaders don't know what to do about it, they have used the coronavirus as a diversion. They're fight a virtual problem, so they don't have to solve a real problem. (B14)

The analysis revealed four possible forms of relations between perceptions of the two crises. Figure 1 shows these four basic attitudes of bloggers and the potential links between them.

Link 1: Acceptance of both the climate and pandemic crises

The most noticeable connection is between the pro-climate attitude, i.e., recognition of the need to protect the climate, and the positive attitude about the need to address the pandemic at a societal level, with an emphasis on social responsibility for both the environment and human health. This view focuses on the opportunity for change – the impulse for personal and, especially, societal and universal behavioural change towards environmental friendliness and protection. In texts containing an explicit description of the connections and parallels between the two phenomena, we encounter this comparison on several levels, one of which is the willingness to limit one's needs and freedom in favour of a solution to both the climate and pandemic crises. Moreover, this connection is accompanied by a certain moralism and a critique of the social values of capitalism, such as materialism, individualism, and the emphasis on consumption.

Here we are with values and the much-discussed ability to postpone the immediate gratification of needs (and experience discomfort in the present) for a more distant or valuable goal in the future ... The common denominator of the psychological and sociological factors that result in a reluctance to limit oneself in the case of Covid is just the same as in the case of global warming, ecological threats, or perhaps the suffering of hens in factory farms. It is not a mental deficiency to understand that the planet is overwhelmed with disorder and that a hen with its feathers torn off is suffering. A five-year-old would understand that. The principle is that other emotions, needs, and contents are more comfortable, quicker, and pleasurable - which is why we prefer them in our mental choices. (B03)

The two crises have the same solutions for addressing them at the political and individual levels. The pandemic has revealed these solutions much more con-

cretely and with greater urgency than climate change, which for many remains elusive. The hope is expressed that society will recognise and adopt strategies that can be used to manage these crises in the case of the pandemic. Social solidarity and a change in priorities, or even the need for a change in the system, are highlighted. Often this thinking is coupled with an emphasis on the need for European and global institutions that will promote such changes.

Amazingly, one crisis can become another's solution, showing us the way out of a seemingly hopeless situation. (B33)

The positive side that the coronavirus epidemic has brought to us is the opportunity to compare the two threats from different perspectives. The epidemic is, without a doubt, a more tangible threat and, for a number of reasons, also easier to grasp. Society overwhelmingly accepts the restrictions on the freedoms of movement and gathering. Society respects the closure of borders and various operations. Society understands that a successful fight against the threat will mean a decline in the economy and austerity for everyone. People are voluntarily accepting what many of them reject when it comes to the threat of climate change, saying that nobody knows for sure whether the dark scenarios will materialise, that we cannot, therefore, endanger the economy, that it is not clear in advance what procedures will be effective, that we do not even know who or what is the real cause of climate change ... Yet the effects of climate change still do not seem as palpable to us as they did with the epidemic. The damage, whether economic, environmental, social, or health-related, will undoubtedly be much more significant. Unlike the pandemic, it is not enough to restrict industry and services for a while. (B35)

Social and political solutions are proposed in the area of sustainability, self-sufficiency, resilience, and other climate and environmental policy strategies. Concrete measures need to be implemented to address both the pandemic and the climate crisis, while society needs to get used to and accept them. Both the pandemic and the climate crisis require the same policy approach not only at the international and global levels, but also at the national level.

I think that, paradoxically, this year's coronavirus crisis, compounded by extreme drought, could help us in this regard. The coronavirus pandemic has taught us that self-sufficiency is not something to be underestimated in today's globalised world. And it doesn't matter if it's medical supplies or food. (B140)

In doing so, we could now use this crisis as an opportunity to build a social and economic system that is resilient, self-sufficient in key respects, and, above all, consistent with the scientific knowledge on our planet, biological cycles, and the renewable and non-renewable nature of various resources, which means one that will be sustainable. (B128)

The pandemic response shows us that both systemic and behavioural change is possible. At the same time, the very existence of the pandemic points to the inevitability of this change to preserve the human community. It reflects the real factual change of relations in the global approach to the world and, by extension, to the climate, whether in a negative or a positive sense. The pandemic represents

an opportunity to start applying sustainable climate strategies; some even see it as an opportunity to change a societal system that is based on economic growth and consumption. Changes in individual behaviour and world views also depend on this. A key focus in reflections relating to the crises is the need for temporary restrictions on freedom in favour of social solidarity and responsibility.

We have the opportunity to figure out this situation and to change our approach to life, interpersonal relationships, and nature. To stop chasing profit and enjoyment, and instead to create good interpersonal relationships and start living in harmony with nature. (B54)

Does anyone really think they can continue to act as they have done so far? Recklessly, egotistically, to their own advantage? Can you really fly 'freely' on weekend trips around Europe?⁵ Can you 'freely' buy more and more useless junk? Can you 'freely' pollute the city's air and destroy the health of your fellow citizens? Can you? Why are people panicking so much about the virus and are unable to see the consequences of their behaviour? Isn't it true that as you sow, so shall you reap? (B42)

It is good to know that because of the long-term imbalance between human consumption and everything related to it, on one side of the scale, and our planet and its possibilities and capabilities, on the other side of the scale, similar and rather even tougher restrictions and interferences in everyday life will be the music of our future. And it is also good to know that we can influence the extent of these impacts alone by our current consumer behaviour. (B128)

In this sense, the epidemic is perceived as an obvious consequence of economic growth and unlimited consumption and human treatment of the planet and nature in the form of the exploitation and destruction of the environment, and as an opportunity to reassess our 'predatory relationship to our planet'. Most such observations are of a general sort about natural laws, but sometimes the consequences are assigned a kind of transcendental significance.

The threat of the coronavirus is a war that Nature has declared on humanity. It doesn't care about borders, social classes, race, or skin colour. It attacks and kills the weakest. It sends a clear message to all of us: the need to stop drifting away from Nature and realise again that we are part of it. Just as we get back what we give in our relationship with other people, the relationship between Nature and us works the same way. We have treated her appallingly for so long, taking advantage of what she has to offer, and forgetting to thank her. That has to change. (B36)

The coronavirus is not just a medical problem, but a civilisational one. For decades we have venerated a social system based on endless growth and consumption. All this is in the confined space of our planet. Such a social system behaves like a tumorous growth. It grows and grows... until it destroys the entire organism (civilisation)! (B11)

⁵ In the Czech Republic these are called 'Euro weekends' and they are popular among Czech travellers.

Link two: Accepting the climate crisis and rejecting the pandemic crisis

Another link can be shown between the pro-climate belief on the one hand and the denial of societal responsibility for the pandemic on the other, which corresponds to the conviction that the pandemic is a significantly less serious problem than climate change. The pandemic is perceived as an exaggerated problem that undermines the real crisis of climate change and finding solutions to it. Our society and civilisation are presented as soft and lacking resilience, and incapable of rationally and proportionately combating the spread of the disease. Criticism is particularly directed at the fact that, unlike in the case of the climate threat, society is willing to address the threat of disease with unprecedented vigour and interference with individual freedoms. The causes of the epidemic are again sought in society's irresponsible relationship to the planet, but the emphasis is then placed on individuals' personal responsibility for their own health and their freedom in this regard. If we look at this connection through the lens of techniques of neutralization, we can talk about an 'appeal to higher loyalties', where the climate crisis represents a far greater imperative than a pandemic.

It's all a matter of perspective and possibilities. If it was now World War III, nobody would care about the coronavirus. But we have peace; we have fifty years of bliss; for the first time in our existence, for the first time in two hundred thousand years, 'we have nothing to think about', because we ignore real threats like global warming or water shortages. (B20)

Unfortunately, the coronavirus drama has had the effect of delaying the resolution of other important issues. One of them is the desperate shortage of water in the landscape. (B42)

Surprisingly, the coronavirus has done what millions of people calling for a stronger fight against climate change caused by the burning of fossil fuels have been unable to do. (B24)

Thus, in the pro-climate paradigm, we can identify two ways of looking at responsibility and freedom. Unlike the previous emphasis on temporary restrictions on freedoms in favour of a societal solution to the pandemic, the focus here is on the absolute liberty of individuals in how they approach the disease and the pandemic (but in the climate crisis restrictions are considered necessary). While these authors think Covid-19 is a tool for the totalitarianisation of society, they criticise people's approach to the planet and demand a radical climate policy.

The slogans 'We can do it together'... 'We have to pull together' are reminiscent of the communist agitprop 'Proletarians of all countries unite'... 'Whoever is not with us is against us'. But what can we do together? Wear masks in a disciplined manner? That, I fear, will not be enough. The problem is deeper. Increased consumption, overpopulation, the depletion of energy resources, climate change, a lack of drinking water, and the destruction of the environment. A mask from China will not save us from that. (B10)

The current pandemic may be over in a few weeks. But the battle will be far from over. It has not rained for several weeks. We must urgently address the shortage of drinking water and basic food, the migration crisis, and climate change. To survive, we must reduce consumption and care for the environment. We will have to change our way of existence from the ground up. No face mask will protect us from that. (B9)

Link three: Climate scepticism and acceptance of the pandemic crisis

The third group of associations is the opposite of the previous one and links climate scepticism with the need to address the pandemic, the consequences of which are far more severe and the solutions more meaningful and non-ideological (as opposed to climate policy). In blog posts, there are expressions not just of responsive scepticism, which predominate, but even epistemic scepticism (as the quote below proves). This, too, is accompanied by disagreement with climate policy. The Covid-19 epidemic, along with others, is deemed a more significant threat to society than climate change, which, unlike the epidemic, is purely ideological in basis. As regards techniques of neutralization, here, unlike the previous context, the pandemic is more important and a higher imperative than the disputed climate crisis.

But the strongest motivation for action is reliably fear, as demonstrated by the Covid-19 pandemic. Its victims are real; the victims of global climate change, but also, for example, of internal combustion engines, had to have been invented by climate activists. (B77)

But will the price of combating warming match the result? With the example of Covid-19 we see that there are more serious threats, not just a virus, but large volcanic eruptions, extreme solar flares causing widespread blackouts of electricity and telecommunications, celestial body impact, migration pressures, or simply the power lust and unpredictability of some autocrats to the (south)east of Europe. (B107)

The pandemic is also an opportunity to highlight the demands of environmental activists as illegitimate, and that the promotion of climate policy is irrelevant and purely ideological. Climate scepticism is intertwined with Euroscepticism in these arguments (see Čermák & Patočková, 2020; Vidomus, 2013). For some, this is an opportunity to criticise both the climate movement, which is not doing enough to help in the pandemic, and global climate policy, especially European policy. The pandemic is deemed to present a unique opportunity to abandon the path of the European Green Deal and focus on economic development. In some texts, the criticism of European and global climate policy in general is extreme.

But what disappointed me the most were the eco-activists. They literally made no effort to combat the pandemic. Blocking the motorway to help some lame little frog across the road, that they're good at. And where are their demonstrations against the spread of the virus today? If you can stop all global warming with a strike, don't tell me you can't stop some tiny little nasty thing. (B110)

What have you heard about the spread of the coronavirus from the activist groups that have dominated the media in recent years? Not much. Or actually nothing. With a few exceptions. (B100)

It is amazing how EU leaders stick to their green deal despite the current coronavirus crisis when the economy will have very limited ability to generate resources for the implementation of climate change measures. (B125)

Link four: Climate and pandemic scepticism

In the last connection, both anthropogenic influence on climate and climate policy and the need for a societal solution to the pandemic are rejected. The elements in common are their emphasis on individualism, their criticism of a collective approach to these events, the fear of losing freedom, and the fear of crisis management as an opportunity for manipulation. Several techniques of neutralization can be identified in these arguments, as well as an 'appeal to higher loyalties', a 'denial of injury', and a 'denial of victims' of both the climate and the pandemic crisis.

Today, we are haunted by climate change, the coronavirus, and I don't know what else. There's lots, depending on who finds what useful. (B82)

And will the kids go back to school? Better not. Have you forgotten about Greta and global warming? She was just not going to school only on Fridays, and that's not enough. Will there be travelling again? Better not. What if people there aren't vaccinated? Do you know how un-environmental tourism is? And until everything is normal, I mean environmental – will we all still be getting subsidies, compensation, and benefits? (B119)

In addition, there is a huge manipulation of facts behind this. Like climate change, migration was a central issue in the US election campaign. The Covid epidemic compounded this. (B73)

The texts reveal a strong fear of a changing conception of individual freedom and the danger of the emergence of a new totalitarianism, both external (China's influence) and internal (the rise of populist totalitarian movements), including the bureaucratic and ideological influence of the European Union. In connection with climate change, there is a fear of the way being paved for restrictions on freedom in favour of climate policy measures. The pandemic manifests itself in the '*coronaviral destruction of the legal and constitutional order*' (B44), and there is a real danger that '*politicians will fall in love with some restrictions*' (B64).

The Green Deal itself would bring unprecedented contraction of the economy, astronomical costs, restrictions on freedom, and the further weakening of member states. We may fear the EU falling even further behind the dynamic economies in other parts of the world, but also indoctrination, the creation and exploitation of a climate of fear, pervasive surveillance and control of our behaviour. (B55)

The restriction of personal freedom is a theme raised in criticism of fearmongering as dangerous for society and also as a kind of class hatred. Going even further, however, are the warnings against manipulation that will result in the domination of humanity by elites, in some places unspecified, in others personified, for example, by Bill Gates. A concept that runs through both themes and is closely related to views on both the climate and the epidemic is manipulation, in particular as exercised through fear: *'evoking an unwarranted fear of climate change does more environmental and economic harm than good'*. (B107)

The methods for getting the population to do something or suffer some inconvenience, or to devotedly or even enthusiastically give up a substantial part of their freedom, are the same. It does not matter whether it is a fight against contagion or bad weather. The situation invites us to compare everything that we are now not doing, are not allowed to do, or, conversely, have to do, with how climate activists would like things to be. (B77)

Opponents of climate policy see the pandemic as a chance to abandon the path of climate alarmism once and for all, to focus on new technologies and economic growth, and to avoid an ideological view of climate change. In these statements, it is possible to identify a responsive scepticism that lies in the distrust of possible solutions to the crisis (Capstick and Pidgeon 2014) and Euroscepticism.

We will not get to a quality environment by reducing consumption, but by introducing new innovations that will lead to the more efficient use of natural resources, including our time. (B124)

The real solution for the EU's economic recovery would be to reconsider or at least postpone monstrous climate-alarmist ambitions. (B55)

Someone might have expected EU institutions to put the brakes on the Green Deal to relieve weakened economies. But the opposite has happened. Brussels has found another 'benign crisis' in the coronavirus, which it intends to use to strengthen the Union or to push its aims further. The Green Deal is at the forefront of these ambitions. The 'Green Transformation' is not only to remain unchallenged, it is to be further affirmed. Economic recovery should be fully harnessed in its favour. (B55)

Conclusion

We identified several basic attitudes to the climate and pandemic crises in the blogs we analysed. Some were characterised by positive perceptions and focused on the need for cooperation and solidarity in dealing with crises and related changes, usually highlighting the link between the two crises. Among those who see the pandemic and climate crises as a real threat and an opportunity to transition towards a gentler approach to the planet, we find a belief in an indisputable link between the two crises under consideration and an accent on their causal

interconnectedness. This includes an awareness of the need to change society's approach to the environment, its use and limits, and a definition of the consequences of globalisation and the devastation of nature. In their adverse reactions, the authors of the blog posts focused on topics such as climate and pandemic alarmism, restrictions on personal freedoms, and manipulation by the ruling elites. There was a marked tendency to be sceptical about climate change, pandemics, and the European Union. However, the need for changes and solutions to the problems that have arisen, whether attributed to one or both of these crises, is articulated in all the attitudes expressed. The two main changes articulated as required are, on the one hand, the transition to a sustainable and responsible relationship with planet Earth and, on the other hand, the abandonment of climate policy and the start of economic growth.

The analysis revealed four basic categories of attitudes: pro-climate attitudes in the sense of a belief in anthropogenic causes of climate change and the need for radical climate policies; climate-sceptical positions in the sense of both responsive and epistemic climate scepticism; attitudes that accept the Covid-19 pandemic as a real threat; and attitudes that reject the existence or severity of the Covid-19 pandemic.

There are multiple connections between opinions on the pandemic and the climate crisis, and they are not straightforward. Scepticism about one of these issues does not automatically mean scepticism about the other. As regards views on the approach to the pandemic, in one group we find texts that see it as a real threat, accompanied by an emerging need for a society-wide response to it, while the other group sees it as a media construct that is not based on facts. But the combinations between these attitudes and attitudes towards the climate are very diverse. The most direct connection identified is between a pro-climate and a pandemic-accepting attitude – a connection that corresponds with an emphasis on the opportunity for a society-wide and planet-wide change in behaviour, solidarity, and responsibility. The second connection is between pandemic scepticism and an attitude that accepts the climate crisis. The emphasis is on societal responsibility for the climate and individual responsibility for health. The third connection identified is between acceptance of the pandemic crisis and rejection of the climate crisis, which, unlike the Covid-19 pandemic, is described as unrealistic, non-existent, or natural. The last connection is between attitudes that reject both crises, scepticism of both of these 'artificial' crises, and an emphasis on individual freedom and economic growth.

Pandemic sceptics are therefore found among both bloggers unencumbered by any prior agenda and among those whom, based on the opinions they presented, we can rank in the group of climate sceptics or in the group of Eurosceptics, and often in both groups, when the topic their scepticism is united around is the European Green Deal. In the group of climate sceptics who accept the pandemic, it is possible to identify the opinion that Europe has not been able to confront and address the objective (understand non-ideological) threat posed by the disease, whereas nation-states have. Thus, although Eurosceptical attitudes resonate in the texts we analysed, particularly in the context of climate scepticism, the link

between Euroscepticism and the trivialisation of the pandemic is unclear. There is also a link between pandemic scepticism and calls for a solution to the climate crisis by European and global institutions.

The analysis of texts reflecting climate and pandemic scepticism also revealed the use techniques of neutralisation to deny these phenomena. Both climate and pandemic sceptics most commonly use techniques of neutralisation called 'condemnation of the condemner' and the 'appeal to higher loyalties'. They focus mainly on denying the severity of crises and criticising politicians, the EU, the media, environmental activists, etc., while highlighting other priorities, such as economic development and preserving individual freedom. The strategies and techniques used to challenge a pandemic crisis are similar to those of climate scepticism, most notably questioning the number of sick and deceased people or hospital overcrowding, trivialising the symptoms of the illness, and disparaging the credibility of experts appearing in the public space, etc. Interestingly, the 'appeal to higher loyalties' is a neutralisation technique that is used in both directions. In such a case, sceptics who deny the danger of just one of the crises invoke the importance and relevance of the other crisis.

The concurrence of the two crises we analysed, their causes, how they have unfolded, and their consequences and possible solutions have been widely discussed in both the media and the scholarly literature. Although we realise that our selection of blog posts is just a sample of opinions on the concurrence of the two crises, and the distribution of opinions may not be representative for the entire Czech population, the analysis nevertheless helped us significantly to identify the basic, recurring narratives about the concurrence and interconnectedness of the two crises, which to a certain extent also reflect the academic discourse and bear the marks of a reflection of scientific knowledge. On the other hand, it is also possible to identify in this discussion interpretations that diverge entirely from the widely accepted views of science. We can conclude that Sharman's aforementioned assumption (2014) applies here, which is that radical alternative views that are not given space in the traditional mainstream media are heading into the blogosphere, be it views on climate change or the pandemic.

The variety of connections between attitudes noted above points to the openness of the meanings of the two crises to construction by the social actors. The most exciting finding is that scepticism in one respect does not automatically mean scepticism in the other. That climate sceptics will also be sceptical of the pandemic and that people demanding solutions to the climate crisis will accept the severity of the pandemic can be assumed. What seems surprising is that not all climate sceptics deny the pandemic and that, conversely, people who accept the severity of the climate crisis may not accept the severity of pandemics.

Moreover, when comparing the climate and pandemic crises in terms of apparent impacts, it is clear that, although the effects of the Covid-19 pandemic are easier to objectively describe and observe than the effects of the climate crisis, it, too, has become the subject of scepticism, denial, and techniques of neutralisation.

Scepticism is not necessarily related in any way to the abstract nature of a phenomenon, but it certainly has to do with the many contradictory arguments

appearing in the media, as these can be found in relation to both the subject of climate change and the pandemic. Room for further research thus presents itself in the area of observing the connections between specific attitudes to the two crises and their mutual relationships on the one hand and general value and socio-demographic characteristics on the other.

DANIEL ČERMÁK works in the Research Department of Local and Regional Studies of the Institute of Sociology of the Czech Academy of Sciences. His research interests are local and regional public administration, institutional trust, electoral behaviour and social aspects of environmental issues.

ORCID: 0000-0001-6118-2168

JANA STACHOVÁ dedicates to sociological research in the Department of Local and Regional Studies of the Institute of Sociology of the Czech Academy of Sciences. In her research work, she focuses on civil society, social capital and the topics of environmental sociology: environmental values, landscape and forestry.

ORCID: 0000-0002-2831-6942

MATOUŠ PILNÁČEK works in the Research Department of the Centre for Public Opinion Research of the Institute of Sociology of the Czech Academy of Sciences. His research interests are the methodology of social-scientific research with a focus on polls, dynamics of public opinion and network analysis of attitudes.

ORCID: 0000-0002-2871-0667

References

Antilla, L. (2005). Climate of Scepticism: US Newspaper Coverage of the Science of Climate Change. *Global Environmental Change*, 15(4), 338–352.
<https://doi.org/10.1016/j.gloenvcha.2005.08.003>

Barouki, R., Kogevinas, M., Audouze, K., Belesova, K., Bergman, A., Birnbaum, L. ... Vineis, P. (2021). The COVID-19 Pandemic and Global Environmental Change: Emerging Research Needs. *Environment International*, 146, 106272.
<https://doi.org/10.1016/j.envint.2020.106272>

Bauer, M. W., Allum, N., & Miller, S. (2007). What Can We Learn from 25 Years of PUS Survey Research? Liberating and Expanding the Agenda. *Public Understanding of Science*, 16(1), 79–95. <https://doi.org/10.1177/096362506071287>

Botzen, W., Duijndam, S., & Beukering, P. van. (2021). Lessons for Climate Policy from Behavioral Biases towards COVID-19 and Climate Change Risks. *World Development*, 137, 105214. <https://doi.org/10.1016/j.worlddev.2020.105214>

Bruelle, R. J., Carmichael, J., & Jenkins, J. C. (2012). Shifting Public Opinion on Climate Change: An Empirical Assessment of Factors Influencing Concern over Climate Change in the US, 2002–2010. *Climatic Change*, 114(2), 169–188.
<https://doi.org/10.1007/s10584-012-0403-y>

C-Change. Center for Climate, Health, and the Global Environment. (2021). *Coronavirus, Climate Change, and the Environment. A Conversation on COVID-19 with Dr. Aaron*

Bernstein, Director of Harvard Chan C-CHANGE. Harvard T.H. Chan School of Public Health. Retrieved April 30, 2021. <https://www.hsph.harvard.edu/c-change/subtopics/coronavirus-and-climate-change/>

Capstick, S. B., & Pidgeon, N. F. (2014). What is Climate Change Scepticism? Examination of the Concept Using a Mixed Methods Study of the UK Public. *Global Environmental Change*, 24, 389–401. <https://doi.org/10.1016/j.gloenvcha.2013.08.012>

Coman, I. A., Elsheikh, D., Gregor, M., Lilleker, D., & Novelli, E. (2021). Introduction: Political Communication, Governance and Rhetoric in Times of Crisis. In D. Lilleker, I. A. Coman, M. Gregor, & E. Novelli (eds.), *Political Communication and COVID-19: Governance and Rhetoric in Times of Crisis* (pp. 1–15). London, New York: Routledge.

Čermák, D., & Patočková, V. (2020). Individual Determinants of Climate Change Scepticism in the Czech Republic. *Sociológia*, 52(6), 578–598. <https://doi.org/10.31577/sociologia.2020.52.6.24>

Dick, B. (2005). *Grounded Theory: A Thumbnail Sketch*. Resource Papers in Action Research. <http://www.aryl.com.au/resources/grounded.html>

EClinical Medicine. (2021). Editorial: Climate Change and COVID-19: Global Challenges and Opportunities. *EClinical Medicine*, 31, 100738. <https://doi.org/10.1016/j.eclim.2021.100738>

Eibl, O., & Gregor, M. (2021). The Czech Republic: Self-proclaimed Role-Models. In D. Lilleker, I. A. Coman, M. Gregor, & E. Novelli (eds.), *Political Communication and COVID-19: Governance and Rhetoric in Times of Crisis* (pp. 259–268). London, New York: Routledge. <https://doi.org/10.4324/9781003120254-25>

Evropská komise (European Commission). (n.d.a). *Plán na podporu oživení Evropy*. Evropská komise. Retrieved April 30, 2021. https://ec.europa.eu/info/strategy/recovery-plan-europe_cs

Evropská komise (European Commission). (n.d.b). *Zelená dohoda pro Evropu. Snaha stát se prvním klimaticky neutrálním kontinentem*. Evropská komise. Retrieved April 30, 2021. https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_cs

Fuchs, C. (2021). *Communicating COVID-19: Everyday Life, Digital Capitalism, and Conspiracy Theories in Pandemic Times*. Bingley (UK): Emerald Group Publishing. <https://doi.org/10.1108/9781801177207>

Greenberg, J., Knight, G., & Westersund, E. (2011). Spinning Climate Change: Corporate and NGO Public Relations Strategies in Canada and the United States. *International Communication Gazette*, 73(1–2), 65–82. <https://doi.org/10.1177/1748048510386742>

Grougiou, V., Dedoulis, E., & Leventis, S. (2016). Corporate Social Responsibility Reporting and Organizational Stigma: The Case of 'Sin' Industries. *Journal of Business Research*, 69(2), 905–914. <https://doi.org/10.1016/j.jbusres.2015.06.041>

Hay, C. (2007). *Why We Hate Politics*. Cambridge: Polity Press.

Hoggan, J., & Littlemore, R. (2009). *Climate Cover-up: The Crusade to Deny Global Warming*. Vancouver: Greystone Books.

Joshi, M., Caceres, J., Ko, S., Epps, S. M., & Bartter, T. (2021). Unprecedented: The Toxic Synergism of Covid-19 and Climate Change. *Current Opinion in Pulmonary Medicine*, 27(2), 66–72. <https://doi.org/10.1097/MCP.0000000000000756>

Khanijahani, A., & Tomassoni, L. (2021). Socioeconomic and Racial Segregation and COVID-19: Concentrated Disadvantage and Black Concentration in Association with COVID-19 Deaths in the USA. *Journal of Racial and Ethnic Health Disparities*. <https://doi.org/10.1007/s40615-021-00965-1>

Lal, P., Alavalapati, J., & Mercer, D. E. (2011). Socioeconomic Impacts of Climate Change on Rural Communities in the United States. In R. J. Alig (ed.), *Effects of Climate Change on Natural Resources and Communities: A Compendium of Briefing papers. Gen. Tech. Rep. PNWGTR-837* (pp. 73–118). Portland, OR: US Department of Agriculture, Forest Service, Pacific Northwest Research Station. https://www.srs.fs.usda.gov/pubs/ja/2011/ja_2011_lal_001.pdf

Mann, M. E. (2021). *The New Climate War: The Fight to Take Back Our Planet*. New York: Hachette Group.

Markard, J., & Rosenbloom, D. (2020). A Tale of Two Crises: COVID-19 and Climate. *Sustainability: Science, Practice and Policy*, 16(1), 53–60.
<https://doi.org/10.1080/15487733.2020.1765679>

Michaels, D. (2008). *Doubt Is Their Product: How Industry's Assault on Science Threatens Your Health*. Oxford University Press.

Moser, S. C. (2010). Communicating Climate Change: History, Challenges, Process and Future Directions. *Wiley Interdisciplinary Reviews: Climate Change*, 1(1), 31–53.
<https://doi.org/10.1002/wcc.11>

McKie, R. (2018). *Rebranding the Climate Change Counter Movement through a Criminological and Political Economic Lens*. [Ph.D. thesis, Northumbria University].
<https://nrl.northumbria.ac.uk/id/eprint/33466/>

Naicker, P. R. (2011). The Impact of Climate Change and Other Factors on Zoonotic Diseases. *Archives of Clinical Microbiology*, 2(2:4), 1–6. <https://doi.org/10.3823/226>

NASA. (2021). *2020 Tied for Warmest Year on Record, NASA Analysis Shows*. NASA Global Climate Change. Retrieved April 30, 2021.
<https://climate.nasa.gov/news/3061/2020-tied-for-warmest-year-on-record-nasa-analysis-shows/>

Oreskes, N., & Conway, E. M. (2010). *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*. New York: Bloomsbury Press.

Pomíkálek, J. (2011). *jusText* [Software]. LINDAT/CLARIN digital library at the Institute of Formal and Applied Linguistics (ÚFAL), Faculty of Mathematics and Physics, Charles University. <http://hdl.handle.net/11858/00-097C-0000-000D-F696-9>

Sharman, A. (2014). Mapping the Climate Sceptical Blogosphere. *Global Environmental Change*, 26, 159–170. <https://doi.org/10.1016/j.gloenvcha.2014.03.003>

Smith J. A., & Osborn, M. (2003). Interpretative Phenomenological Analysis. In J. A. Smith (ed.), *Qualitative Psychology: A Practical Guide to Research Methods* (pp. 25–52). London: Sage Publications Ltd.

Sykes, G. M., & Matza, D. (1957). Techniques of Neutralization: A Theory of Delinquency. *American Sociological Review*, 22(6), 664–670. <https://doi.org/10.2307/2089195>

Šimandl, V., & Dobiáš, V. (2021). Analýza dat při tvorbě zakotvené teorie pomocí software atlas.ti. *Paidagogos*, 22(1), 131–156.
<http://www.paidagogos.net/issues/2021/1/article.php?id=8>

USGCRP. (2018). *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II*. Washington DC: U.S. Global Change Research Program.
<https://doi.org/10.7930/NCA4.2018>.

Van Aelst, P., Toth, F., Castro, L., Štětka, V., Vreeese, C. de, Aalberg, T. ... Theocharis, Y. (2021). Does a Crisis Change News Habits? A Comparative Study of the Effects of COVID-19 on News Media Use in 17 European Countries. *Digital Journalism*, 9(9), 1208–1238. <https://doi.org/10.1080/21670811.2021.1943481>

Vidomus, P. (2013). Česká klimaskepse. Úvod do studia. *Sociální studia*, 10(1), 95–127.
<https://doi.org/10.5817/SOC2013-1-95>

WMO. (2021). *State of the Global Climate 2020* (WMO-No. 1264). World Meteorological Organisation.
https://library.wmo.int/index.php?lvl=notice_display&id=21880#.YKPF0qEzW71

Wu, T. (2021). The Socioeconomic and Environmental Drivers of the COVID-19 Pandemic: A Review. *Ambio*, 50, 822–833. <https://doi.org/10.1007/s13280-020-01497-4>

Zang, S. M., Benjenk, I., Breakey, S., Pusey-Reid, E., & Nicholas, P. K. (2021). The Intersection of Climate Change with the Era of COVID-19. *Public Health Nursing*, 38(2), 321–335. <https://doi.org/10.1111/phn.12866>