## Rational Sceptics: Contestations of Science and Conspiracy in the Czech Republic

#### Hynek Bečka

Max Planck Institute for Social Anthropology, Halle (Saale)

Abstract: Covid-sceptics in the Czech Republic relate strongly to the idea of universal science. They understand this universality as emerging through the participation of ordinary citizens in scientific knowledge-making. Rather than then belonging solely to the experts, science ought to be democratic and accessible. This article describes several ways in which Czech Covid-sceptics contest the boundaries of science and devise their own theories, observations and experiences as scientific. I describe how Covid-sceptics mobilize their embodied experience of the pandemic as evidence and intertwine this embodied knowledge with narratives of universal science. By relating to the notion of the rational, educated and self-informing citizen, they are able to enter into a relationship with science even despite the lack of formal expertise. Scientific universality becomes a point of contestation through which alternative knowledge is linked to the imaginaries of 'good science' and scientific authority. *[conspiracy theory; science scepticism; embodied empiricism; anti vaccine activism]* 

# Rational Sceptics: Contestations of Science and Conspiracy in the Czech Republic

I am sitting in a large wooden hall, in a circle with approximately a hundred other people of all ages. It is summer 2022, the pandemic in the Czech Republic is subdued for now, and the afternoon sun shines through a huge cathedral-like window that stretches over the western wall. Those who have come to this weekend workshop share an interest in alternative medicine and a sceptical perspective on the Covid-19 pandemic. They believe that modern science is corrupted and that many aspects of modern civilization are controlled by various shadowy forces. Everyone here remembers the pandemic as a time of biomedical oppression and refuses to listen to the 'fake experts' any longer.

Covid-sceptics from across the Czech Republic have gathered for this particular workshop on survivalism, self-sufficiency and sustainability in order to establish personal connections and to share knowledge and information. Currently, everyone is listening to a muscular young man named Michal who is presenting a petition against 5G networks in the Czech Republic. '5G networks are just another part of the plan, another step they are going to take after the whole Covid business', he explains, describing in detail how 5G transmissions influence biophotons, and how the holographic frequency of the broadcast information destroys human minds and bodies. According to Michal, much research has been done on this topic, and over two hundred and fifty scientists, some of them even Nobel Prize winners, all agree that 5G networks are dangerous and unhealthy. As he continues, his short lecture strays further and further from 5G and focuses more and more on the science informing his activism. He explains how modern research shows that various parasites can be killed with the light attuned to the right frequency, or how American genetics used light and energy waves to rejuvenate several women in their eighties to the point that their teeth grew back and they began to menstruate again. Michal tried some of these experiments himself, using copper wire and glass bottles in his cellar to measure the wavelengths produced by various electronic devices. After he finishes, people gather around him to sign the petition, chat with each other, and contribute their own observations and experiences. They don't need much convincing; they already know all about 5G. After all, they have done their research. Now the only thing which remains is for other people to realize what they have. 'They also didn't listen to Galileo when he taught that the Earth revolves around the Sun', commented one of the participants toward the end of the workshop: 'Well, we all know what the truth is. Now it's up to the others to start thinking logically as well.'

In this article, I follow Covid-sceptics in the Czech Republic, many of whom engage with claims and narratives that are usually labelled 'conspiracy theories'<sup>1</sup>, and I explore the ways in which they and their views are entangled with science. The material presented here is based on ethnographic research I conducted over two six-month periods from 2022 to 2023. I entered the field at a time when the conspiracy milieu (Harambam 2020) had been significantly reshaped by the Covid-19 pandemic. The notion that the pandemic was somehow 'fake' consolidated the scene and drew in many people who had not engaged with conspiracy theories or similar narratives before. People from various social backgrounds engaged in Covid-sceptical activism, both online and in physical space. Some of them share an identity and see themselves as constituting a loose but interrelated community of critical and rational thinkers, all of whom are on a shared quest to understand and uncover the truth.

<sup>1</sup> The term 'conspiracy theory' can be applied to multiple phenomena (from narratives about chemtrails to theories about a sinister cabal of lizard people who are controlling world governments behind the scenes) and analyzed in many possible ways. For a general overview of multiple possible approaches, see (Butter and Knight 2020). In this article, I follow an approach which assumes 'conspiracy theories' to be a form of knowledge that does not assume any inherent essential difference from other ways of knowing, and which foregrounds relations of political power to specific types of knowledge in the process of labelling certain theories and narratives as 'a conspiracy theory.' (Pelkmans and Machold 2011). In short, the difference between 'conspiracy theory' and 'theory' depends on the position of the actors in the given political context, rather than on concrete subjects or forms of such knowledge.

I had met some of my interlocutors during previous ethnographic work conducted for my master's thesis,<sup>2</sup> which focused on practices of alternative healing during the pandemic (Bečka 2021). During that time, I encountered people who tried to resist what they perceived as 'biomedical totalitarianism' and who were often labelled 'Coviddeniers', 'Luddites' or 'anti-science' (Hotez 2021; Miller 2020). But they rarely saw themselves as rejecting science entirely; rather, they considered themselves to be true experts, people who remained open to all possibilities, gathered data and conducted experiments. In my subsequent research, I sought out people who were active members of organizations that presented themselves as fighting against the hegemonic understanding of the pandemic and the biomedical response to it. These included groups resisting vaccination, lockdowns and mask-wearing, as well as five groups that could be characterized as 'conspiritual' (Ward and Voas 2011), which had broader goals beyond Covid-sceptical resistance alone. In total, I conducted 35 in-depth interviews during this period and engaged in participant observation during workshops, seminars, ceremonies and protests organized by my interlocutors. During these events, I introduced myself to the participants as a researcher and obtained verbal consent to my presence, except in situations when this was not logistically possible (for example, gatherings with a larger number of people), in which case I sought verbal consent from the organizers. I also followed the posts of my interlocutors on social media and engaged with the online content they recommended to me, or which was shared by the groups and organizations they were part of. All the names in the article are pseudonyms.

The organizations I engaged with were quite small, usually having only around a dozen stable members and a high turnover of others. However, many other similar organizations and groups that emerged during the pandemic exist in the Czech Republic.<sup>3</sup> Despite little political or organizational unity, and the often very fractured nature of Covid-sceptical activism, my interlocutors nevertheless express a feeling of shared identity. They frequent similar online spaces, engage with the same media and understand themselves as belonging to a group of specific people who saw the pandemic for what it was. These connections and networks still linger after the pandemic, and even as their members mobilize around different issues (the war in Ukraine, the New Green Deal), the Covid-19 pandemic still remains a foundational event which brought them together.

My interlocutors position themselves against what they perceive as the scientific 'mainstream', arguing that they are the true experts who are able to 'uncover the truth'. Such forms of scepticism and 'truth seeking' in times of epistemological uncertainty carry within themselves a risk of never-ending critique and an inability to provide answers beyond narratives of general doubt and suspicion (Pelkmans 2024). However,

<sup>2</sup> Which encompassed six-month fieldwork in the Czech Republic from September 2020 to February 2021.

<sup>3</sup> Unfortunately, there has not yet been any significant study on this topic, which would provide a more cohesive idea about the number of such groups and organizations.

Czech Covid-sceptics attempt to move further than that, and the idea that science can produce universal knowledge plays an important role in this process.

I argue that Covid-sceptics in the Czech Republic produce *alternative knowledge* and that they mobilize the notion of scientific universality to do so. Their criticism and distrust of science need to be understood within a larger discourse of what constitutes good and reliable scientific practice, since Covid-sceptics connect their political and activist projects to scientific knowledge and its authority. They understand themselves to be rational sceptics, whose suspicions are in some ways closer to what science should represent than the practice of scientists themselves. In their perspective, science helps them to find the truth they seek and lends support to their sceptical position, but they consider scientific findings relevant only if they are aligned with individual embodied experience and observation, and only if science remains accessible to criticism of informed and sceptical citizens like themselves.

I begin with setting Covid-sceptics and their relationship to so-called conspiracy theories within the larger context of scholarship. Covid-sceptics are active participants in the production of alternative knowledge and strategically claim the authority of science, similarly to other actors who do so in other related contexts. Drawing on the notion of embodied empiricism (Weston 2017), I describe how Covid-sceptics observe their own bodies and the bodies of other people around them during the Covid-19 pandemic, and how they relate them to scientific theories and biomedical understandings of Covid-19. In the moments when tests and diagnosis misalign with embodied experience, Covid-sceptics trust their own bodies more than the scientific authority, and they position their distrust as a rational and empirically sound choice. Through embodied empiricism, they not only attempt to produce evidence for their sceptical understanding of the pandemic, but also argue that the biomedical management of the pandemic has been harmful and oppressive.

I will follow this by elaborating on the type of expertise Covid-sceptics claim. They do not understand themselves as scientists per se, but rather as concerned and questioning citizens who are able to navigate between various sources of information and truth claims, some of which are disputed. By rejecting certain theories or narratives about the Covid-19 pandemic as unreliable, as 'too far out', or by labelling them as 'conspiracy theories', Covid-sceptics perform the role of sceptical and rational citizens who remain educated about matters that concern them, and they take an active role in creating the boundaries of knowledge they produce. Finally, I turn to the understanding of scientific universality as something that is reached through participation and democratization and argue that Covid-sceptics require science to be universal in the sense that it should be accessible and inclusive. Science is imagined as a practice that is potentially open to everyone. Through this discursive move, Covid-sceptics attempt to situate their claims and narratives as a natural part of the scientific endeavour to produce universal truth.

#### Producing Knowledge, Claiming Science

The phenomena labelled as 'conspiracy theories' have usually been interpreted as pathological (Hofstadter 1964) and dangerous (Popper 1966). Alternatively, they have been treated as a form of social critique of power or modernity (Fenster 1999; Aupers 2012; Knight 2000), that is, as a response to an epistemological crisis (Fassin 2021). Recently, some scholars have begun to approach 'conspiracy theories' as a form of alternative knowledge (Boullier, Kotras and Siles 2021), focusing on their production and on the self-understanding of the actors who create and disseminate them.

Alternative forms of knowledge, such as witchcraft or traditional medicine, have long been the subject of anthropological debates (Meiser 2017). Applying this concept to so-called conspiracy theories (Rabo 2020) makes it possible to step away from normative value judgments and situate them in a larger context of meaning-making, thus allowing us to better capture their multiplicity and variety. Harambam and Aupers (2017) stress the multiple and relational character of what they call the 'conspiracy milieu', which they suggest approaching as a set of relatively fluid networks within which so-called conspiracy theorists negotiate specific identities in relation to the knowledge they produce. More than being just passive consumers, their active engagement and participation give a tangible quality to alternative knowledge (Tripodi, Garcia, Marwick 2023).

People produce such alternative knowledge in multiple ways. For example, Tripodi (2018) shows how American conservatives use techniques of close reading that they have learnt through Bible study to navigate the media landscape. When they produce 'alternative facts, they confirm the information by adhering to scriptural inference by paying close attention to 'original texts' such as Trump's speeches, just as they would do when they read and study the Bible or the USA Constitution. Similarly, QAnon supporters participate in collective knowledge-making. They weave together different theories on chat boards to gradually build up a cohesive narrative with an established canon of 'verified sources' to which they refer when they do their research, rejecting and policing contradictory accounts as irrational or illogical (Marwick and Partin 2022).

When producing such alternative knowledge, Czech Covid-sceptics also relate to science, usually by taking a critical position towards what they describe as 'mainstream science' while at the same time strategically evoking scientific knowledge and authority. Dutch 'conspiracy theorists' position themselves as true scientists and claim that the limited perspectives of scientists and their entanglements with business interests<sup>4</sup> corrupt and distort scientific research (Harambam and Aupers 2015). The notions of revolutionary science and paradigm shifts (Kuhn 1970) become rhetorical figures which they use to lend support to their own theories and narratives. Similarly, Baker and Rojek (2020) describe the 'native expertise' of lifestyle gurus and influencers, who

<sup>4</sup> Production of scientific facts can indeed be influenced by the interests of corporations (Oreskes and Conway, 2010).

selectively work with scientific evidence, rejecting 'mainstream science' and presenting their own knowledge as more grounded and as supported by everyday experience. They take the position of sceptical individuals who are simply trying to figure out things by themselves, able to determine which scientific facts are real and which are not, seeing common sense and individual experience as a source of truth, a move which they share with other similar actors (Van Zoonen 2012).

Science remains a politically contested category (Harding 1991). The difference between 'good science' and its bad other, pseudoscience, can be understood as a product of boundary work (Gieryn 1983) which is never quite finished, and with uncertain and shifting limits (Harraway 1991). As multiple actors contest and construct boundaries of scientific knowledge, some claims, theories and practices are left out, while others come to be considered as knowledge and acquire a hegemonic position (Rathjen and Stähelin 2022). Such conflicts were prevalent during the pandemic (Drążkiewicz 2023), but they have a much longer history. Gordin (2021) situates 'pseudoscience' as a historical phenomenon that has long been part of political and social life, from phrenology and astrology to theories of water memory.5 Even though they are often framed and rhetorically positioned as a 'search for the truth', these endeavours cannot be always assumed to be entirely innocent. Attempts to stake out the position of a rational sceptic, standing against corrupted scientific elites (Mede and Schäfer 2020), must be understood within a larger political context, as should the struggle to push them outside the boundaries of 'proper' science. To claim the status of 'science' is not only to claim knowledge but power as well.

Covid-sceptics in the Czech Republic relate to science in distinctively similar ways as other actors who try to connect their alternative knowledge to scientific authority. They are critical of the 'scientific mainstream', engage in boundary work and notice when science becomes intertwined with the interest of states or corporations. They point out inconsistencies, question methodologies and present their own knowledge as more reliable and superior. This is done not only by discursive critiques of science, but also by embedding their knowledge in everyday embodied experience and appeals to common sense.

In vaccine hesitancy movements, intuition, experienced as embodied (and gendered) feeling, plays an important role (Baker and Walch 2022). People often combine their 'gut feelings' with discursive criticism of 'mainstream science' (Ten Kate, Koster, Van der Wall 2021). This attentive position towards one's body can also be aligned with the notion of good science. Kath Weston argues that scepticism rooted in bodily knowledge cannot be dismissed outright as ignorant or wrong (Weston 2017:108-115). Using one's body as evidence has long been an accepted method in the scientific community, and to some degree it still remains a valid practice. In the history of science, the very

<sup>5</sup> In the context of history of Western science and negotiations of its 'fringe', it might also be useful to point out developments in Western esotericism and its relationship to science (Hanegraaff 2012) and rationality (Hammer 2019).

bodies of scientists become an instrument through which knowledge is produced, and self-experimentation often plays a central role in imaginaries of scientific work, despite a gradual move from the use of the body as an instrument towards other techniques of knowledge production (Gal and Morris 2010). But the body still remains a site of compelling evidence, especially in the context of citizen science (Kimura 2016).<sup>6</sup> When Covid-sceptics challenge science as being too detached, mired in the complex and confusing network of technical experimentation, which they consider too vulnerable to the corruptive influence of states or corporations, their attention to embodied experience can be linked to this historical tradition of science. Weston shows that climate sceptics, who reject computer models and prediction and prefer to 'trust their bodies', in some manner continue this tradition.<sup>7</sup> In the following section, I turn to Czech Covid-sceptics who mobilize their embodied experience to produce evidence not only for their sceptical position towards the seriousness and danger of the virus itself, but also for the pandemic as an expression of state control and 'biomedical tyranny'.

#### If Covid is Real, Why Am I Not Dying?

I met Lucie during an excursion organized by a Covid-sceptical group she is part of. An energic woman in her fifties, she works as an education specialist, developing secondary school programs focused on environmentalism and ecology. She agreed to an interview, and we talked a couple days later in her office about her experience with Covid-sceptical activism. Originally, Lucie had quite a different view on the pandemic. In early 2020, she was very careful and considered the virus quite dangerous. She thoroughly washed her groceries, did her shopping in plastic gloves, always wore a mask outside and avoided physical contact with her elderly mother. But eventually she realized that about a month before the Covid-19 pandemic erupted in the Czech Republic, she had come down with a 'strange flu'. This was quite unusual for her, since she was almost never ill. 'I have almost never been sick - I grew up in the village, running outside all the time... I thought that this must have been Covid for sure,' she explained to me. She had heard about a medical study measuring levels of antibodies in the blood. Lucie went to have her blood taken and checked, but she learned that she had not had Covid after all. It must have been something else. 'That started to really mess with my head, and I started searching for more information.' Her disease had not been serious,

<sup>6</sup> Despite existing contestations around the possibility of participating in the production of scientific knowledge within citizen science, the criticism of 'mainstream science' by citizen scientists often differs from Covid-sceptics' claims. In general, citizen scientists are much more open to collaboration with scientific institutions, often seeking to extend its capabilities and power.

<sup>7</sup> However, Weston still maintains that embodied empiricism has its limits and that it can be used to argue and evidence different things, including the reality of climate change.

but certainly unusual to her; it had felt different. This strange discrepancy between Lucie's own bodily experience and the medical authority set her on her path toward an alternative perspective on the pandemic. She trusted her own body more than 'some cheap Chinese test kit', as she put it. Clearly, scientists did not know everything. She might as well try to figure things out herself.

It is not entirely unreasonable that to some this sort of embodied empiricism (Weston 2017) can be more convincing than reliance on computer models, imprecise tests and uncertain predictions. Like many others, Covid-sceptics ensure that their knowledge is reliable and trustworthy by paying attention to their bodies, but they also link this embodied knowledge with the notion of *good science* and claim that true knowledge can be gained only if it aligns with personal experiences and observations.

Many Covid-sceptics interpreted their own, usually mild experience of Covid infection as clear evidence that the disease was not so dangerous after all. Since the diagnosis was usually determined through testing, and the test kit could show a positive result even without the presence of clear symptoms, it was not unusual to find oneself in a situation where bodily state and test result disagreed. Covid-sceptics often mention that they or their family members felt completely well, but the test results were positive, or the other way around. When navigating such uncertainties, they turned to their bodies and considered them a more reliable source of knowledge than the anti-gen or PCR tests, or even more specialized examinations, as in Lucie's case.

But suffering and sick bodies still existed and demanded an explanation. At the gathering mentioned at the opening of this article, I run into Hermína, teacher, dance instructor and Covid-sceptical activist. During the pandemic, she offered legal support to parents who refused to test their children in school and agreed to meet me for an interview to share her experience. While we talked, she repeatedly touched on the issue of ailing bodies and confirmed that in 2020 everyone around her did get sick, but not from the virus. At that time of the year, the valley she lives in had been covered in thick fog for a couple of weeks. 'It must have been the arsenic clouds that they spread out of the planes. The arsenic gases have a similar consistency, and the symptoms of arsenic poisoning fit as well', she explained to me. Covid-sceptics often carefully watch the bodies of relatives and friends and note how their health and well-being changed during the pandemic, and they usually relate such changes to vaccination or the lack of it. Hermína claimed that her husband began to suffer from various health complications when he was vaccinated, and she compared her unvaccinated mother's Covid progression with her vaccinated brother. 'He had it much worse than my mum, but he still thinks that vaccination protected him. What can I do?'

For many Covid-sceptics, including Lucie or Hermína, illness (or the lack of it) was not the main bodily experience of the pandemic. Rather, the ubiquitous restrictions and hygiene practices such as mask-wearing became its defining aspect. The Covid-19 pandemic was multiple, and it could mean different things (Mol and Hardon 2020). From the perspective of Covid-sceptics, one's breath was much more threatened by the mask than by the virus; sometimes my interlocutors had literally felt suffocated by the biomedical regime.

'I just can't breathe in these muzzles', Viktor told me, an urban shaman enthusiast whom I met right at the onset of the pandemic and followed online for a while. He had gradually begun to engage in online activism, sharing informational videos and trying, as he described it, 'to educate people online.' During ongoing lockdowns, we met repeatedly in his home and discussed the recent pandemic developments over a cup of tea. For Viktor, wearing a mask was not only an unpleasant physical experience for him; it also represented oppression, control and dominance:

I saw a post where they showed pictures from Guantanamo, in the American base where they held terrorists, and this was one of the ways they tortured the prisoners – they gave them masks. The soldiers walked around with guns, and the prisoners wore masks. ... I can't even look at it. I have this unpleasant feeling, when I see someone wearing it, for example, on TV, I have to avert my eyes, I still can't stand it.

When Viktor had tried to rebel against this perceived injustice, he describes it as a strong bodily experience as well. He didn't usually wear a mask on public transport, and sometimes he was confronted by other passengers. 'Somebody asks you why you are not wearing a mask, and your heart starts to beat – bang bang bang, and you almost have a heart attack ... .' The feeling of control and oppression came to dominate his daily life. He linked his experience to scientific knowledge through the articles he read. 'I saw studies where they measured  $CO_2$  levels, and after ten breaths under the mask, the concertation of  $CO_2$  will suppress all imaginable norms!' His own body became undeniable evidence of such studies. Because Viktor *felt* the biomedical tyranny with his own body, he could not consider the science that denied these feelings sound. He simply knew that what experts said about mask-wearing – that it is a safe, reasonable and necessary hygiene practice – couldn't be right. Instead, he turned his attention to other sources of information.

I encountered a similar moment when a suffering body became an instrument through which a biomedical oppression often discussed by Covid-sceptics could be felt during a small workshop focused on spiritual growth and Slavic national political emancipation. Petra, one of the participants, recalled a tale of her own hospitalization during a collective discussion. As she was talking about what had happened, she became visibly frustrated and angry. She had done everything right, her immunity had been strong, she had avoided any negative thoughts and refused vaccination – but nevertheless she had almost died. She knew that Covid, if it even existed, was nothing to be afraid of and that the whole pandemic was overblown nonsense. And yet she had found herself in a hospital bed, struggling to breathe. Her lungs collapsed, and she suffered helplessly, surrounded by nurses and doctors. It had been a dangerous combination of overmedication, second-hand panic and poor care that had brought it so far, Petra claimed. Death and fear were all around her, and when one night she saw the woman next to her being put in the body bag, she decided that this had to end. 'I didn't wish to end up as toxic waste', she explained. She refused to take any medication, which was difficult to negotiate, but she eventually ran into a sympathetic doctor and was eventually allowed to remain in the hospital without taking any medication. She reported that her condition had improved rapidly from then on. She had survived, but only just.

Viktor and Petra relate their suffering bodies to the oppression and malpractice of biomedical authorities and stress the importance of their own agency and bodily autonomy, insisting that their own observations and bodily feelings are more authoritative than the opinions of experts. Embodied empiricism can be used to argue different things, and different interpretations of bodily experiences and states are always available. However, by relating such individual experiences and personal observations to the imaginaries of good and reliable science, Covid sceptics are able to scale them up beyond the constraints of the individual. Everyday moments of disgust, unpleasantness, anxiety, or illness are transformed into signs of biomedical conspiracy or tyranny. Embodied empiricism also offers an opportunity to experiment and to test alternative knowledge. By being attentive to their bodies and bodily feelings, Covid-sceptics can argue that some information or claims are more reliable than others. Embodied empiricism becomes a useful tool through which they make sense of pluralized media discourses.

#### **Responsible Citizens**

Covid-sceptics do not imagine themselves to be scientists but rather embrace the notion of rational scepticism, and of an educated and informed citizen who can use common sense, follow logic and navigate a modern media landscape that they see as frequently influenced by powerful actors with ulterior motives. To them, the ability to maintain this critical distance is not necessarily determined by education or expertise. Rather, it is a matter of choice, or concern (Latour 2004) – everyone should be able to think independently, take responsibility and figure out the truth for themselves.

This critical distance extends toward (some) contra-hegemonic claims which appear in the Covid-sceptical milieu as well. Covid-sceptics subscribe to the notion that we are living amidst an 'infodemic' (Bridgman 2021; Mourad 2020). They often express the view that current media are overflowing with disinformation and 'fake news,' but they remain confident in their ability to determine the difference between truth and falsehood, even if absolute certainty can never be reached. 'You can never really tell if it is right or wrong', explained Viktor when I asked him how he determined the reliability of his information.

One useful way of thinking is not to trust anything you read online. But the truth usually does not need too much energy. Truth just exists. But lies always need someone to defend them, push them on to you... But still, I approach everything sceptically. I don't trust everything I hear.

During a meeting of a group of Covid-sceptics who had recently begun to organize themselves into an activist cell, the discussion shifted to a Telegram channel managed by the leader of a rival organization, where various stories about global conspiracies, prepper tips and alternative medical advice were shared. Some people were uncertain about the information shared there, finding it 'too rough' and 'negative'. However, others argued that it still might be useful to keep oneself informed and consume such media despite these concerns.

'Well, I am not very active there', explained Pavel, a middle-aged IT specialist and one of the most active members of the group.

A lot of information there is not so great, some of that really is a conspiracy theory, really wild stuff. That's not very useful. But I still visit the channel, and some of the articles they share are interesting. You just must be able to determine what information is reliable and what is not.

Taking a sceptical position and refusing some theories or information as too fringe is one of the ways alternative expertise can be created. When Pavel rejects some of the content he encounters online as 'conspiracy theories', he participates in boundary work (Gieryn 1983) and positions himself as an expert, refusing the identity of 'conspiracy theorist' and assigning it instead to other actors in the field (Rakopoulos 2022). Pavel does not have the ambition to completely uncover all mechanisms and relationships beneath the 'fake pandemic', but he strategically chooses which topics and information are relevant to him, stressing the need to remain educated and informed. Viktor and Pavel, like many other Czech Covid-sceptics I met, echo the notion of a responsible individual who educates themselves about the state of the world, one's body and health, the political situation and current scientific developments. They stress that they are responsible for their well-being; they are not content with being passive listeners who follow expert advice, and they demand the right to participate in the production and management of knowledge that concerns them.

The notion of an active, information-seeking, self-governing subject who has a duty to remain informed and educated can also be related to neoliberalism (Trnka and Trundle 2017), or modernity. Andrew Barry (2001:4, 29) argues that in what he calls a technological society, information must not be ignored, and modern citizens are expected not only to understand but to actively engage with scientific research and technological advances in general. Barry shows that navigating online spaces in search of reliable information and engaging with citizen-organized networks and organizations which help to educate and inform is an integral practice of modern citizenship in Europe (Barry 2001:153). In this sense, Covid-sceptics could be described as an example of such modern technological citizens as well.

Calls for individual responsibility for one's health (and the health of one's children), as well as the active need to dig out the truth and resist harmful authorities (Big Pharma, oppressive government), are integral parts of the Covid-sceptical movement in the USA, where the specific local context of the race and civil rights movement also plays an important role (Baker, McLaughlin and Rojek 2023). Bernice Hausman (2005:174) shows how the discourse of biocitizenship resonates among vaccine-sceptical people in the USA and argues that 'anti-vax' sentiments are deeply intertwined with its sensibilities. Modern (bio)citizens are increasingly expected not only to keep themselves informed about the options and possibilities biomedicine (and science in general) offers to them, but also to classify and evaluate information from a position of critical distance. Covid-sceptics embody this mode of active, responsible citizenship – they keep themselves informed and educated, approach the information available to them as rational sceptics and develop their own expertise.

Such an attitude is applied to moral demands and judgments as well. Individual responsibility for and the management of one's health are linked to the very possibility of living a good and valuable life. Covid-sceptics often contrast 'the non-awakened' or 'sheeple' with this image of an informed and responsible individual. For example, as Viktor explained to me during one of our talks, he can't stand people who, as he says, 'passively watch television broadcasts and wait to be fed information by the authorities'. His parents are just like that, and they have a very different position on the Covid-19 pandemic than himself. Viktor thinks this is due to their lack of interest in learning and actively searching for information:

Maybe they occasionally read some newspapers or something, but mostly they just watch the news. And all the time. It's the only source of their information. They are just afraid all the time, don't leave the house, only go shopping for groceries, and feel that if they catch something, they will die. ... They live such shallow lives. ... Why are they even alive?

wonders Viktor.

Or take my mother-in-law, for example. She completely devastated her organism, and now the public healthcare which we all pay for will have to take care of it ... . And there are millions of people who live like that. It doesn't make sense ... .

This mode of sceptical, critical, rational and modern citizenship allows Covid-sceptics to approach science from a specific angle. As they contest biomedical expertise and frame their own experiences and rational subjectivity as more important, they de-centre experts and assume a position in which they are the ones who can determine what research or fact is logical, reliable, or not. They frame their doubts, suspicions and scepticism as crucial to the well-being of the whole society. The expertise which Covid-sceptics claim is different from the expertise of the scientists, but it is related to science and to the notion of a responsible, active and modern citizen. It also depends on the notion of science as a universally accessible knowledge-making practice in which rational and modern subjects can (and should) participate.

### Universalizing Through Participation

In the spring of 2022, I attended the launch of a book published by a small group of Czech Covid-sceptical activists.<sup>8</sup> The conference hall where the event was held was packed with over a hundred people. The book's co-authors, Covid-sceptics from various parts of the world, organized a small conference panel for the launch and presented lectures on several topics. One of the authors, a New Zealand YouTuber and medical specialist, could not attend, but she sent a short, pre-recorded video.

In her message, she described her gradual awakening during the pandemic, referenced all the research she had done, and touched upon the moments when it had finally all begun to make sense. 'I was blind to anything outside of germ theory', she explained: 'I had no idea about the corruption within the medical pharmaceutical complex, and I was oblivious to the nefarious globalist forces at play behind the scenes.' However, that soon changed when her YouTube followers began asking her questions: Do the masks work? What is the evidence for social distancing? She decided to do her own research so that she could educate others. Her curious and naturally sceptical followers, not trained medical experts by any means but ordinary people, posed questions which were difficult to answer in a satisfying way. Eventually, she ran into scientific evidence and theories which questioned established paradigms, and she finally developed a better idea of what the pandemic was really about. She questioned her original assumptions, opened her mind to new evidence and came to a new conclusion:

I decided that I could no longer take any scientific facts for granted. I would trace back research as far as I could follow it, even if I would have to read papers from 1800, so I was certain of its accuracy.

Similar narratives of gradual discovery and realization were present in all of the other lectures I heard that day. All of the co-authors presented their research as scientific while at the same time emphasizing that anyone in the audience could verify their claims. 'It is primarily the people themselves who need to take back the responsibility for their own health', explained one of the experts, a German journalist:

Most medical doctors just don't understand their own discipline. They fully believe in virology, microbiology, and so on. ... And this paradigm is comfortable to many because they don't have to take responsibility for their health and education.

<sup>8</sup> For reasons of anonymity, I do not include the name of the book, nor the additional information about the conference.

During the Q&A, the experiences and observations shared by audience members were acknowledged by the speakers as additional evidence. One woman shared a story of her grandfather, who, despite his tuberculosis diagnosis, lived with his family until his death. But nobody else was infected. Could this also cast some doubt on the relevance of the germ theory? Might there be another reason why people fall ill? Another participant recalled that she was vaccinated before travelling to the tropics and that the negative side effects almost killed her. 'It took years before I was fully recovered', she insisted. Similar stories and testimonies, including personal theories about the mechanisms behind 5G networks or chemtrails, were largely acknowledged by the panel of experts not only as confirmation of their Covid-sceptical stance (shared by the audience), but also of the ability of participants to take scientific matters into their own hands.

The overarching message was clear: anyone willing to dig deep enough and question established truths is able to claim the mantle of expert. Scientific truths should be potentially discoverable and verifiable by anyone, anywhere, and they should be based on logic, common sense and embodied observation. According to this perspective, the messy nature of scientific research (Law 2004) can be avoided, and universal truth can be reached. Such appeals have a long history. In the 19<sup>th</sup> century, when George Combe, a proponent of phrenology, began to be increasingly questioned and his methods were largely deemed 'unscientific', he summoned similar notions to his defence. 'Observe nature for yourselves and prove by your own repeated observations the truth or falsehood of phrenology', he advised his lay audience (Gieryn 1983).

Covid-sceptics localize the universality of science primarily in notions of accessibility, lay participation and individual observation and experimentation. The *universalizing* in which they participate depends on granting authority over boundaries of scientific knowledge to individuals, who are imagined as rational subjects able to observe the world as it truly is, by observing the Nature around them, being attentive to their bodies and remaining sceptical, yet open to all possibilities. As they 'do their research' – searching for information online, questioning established scientific research, or using their bodies as evidence of a global conspiracy behind the pandemic – their alternative knowledge is related to the production of universal truth.

In this understanding of scientific universality, science is not only open to lay participants; it *requires* their involvement in order to produce reliable and veritable knowledge. Such an imaginary of scientific universality has wider implications because it allows Covid-sceptics to position themselves not only as concerned citizens, but also as producers of knowledge, which, despite being labelled 'pseudoscience', can be framed as part of a scientific endeavour. It allows them to understand themselves as natural scientists, as the Galileos of this age. In her study of chemtrails narratives, Bakalaki (2016) notices the universalizing effect of the photographs people use as evidence. Always taken from a particular place, but pointing above the horizon into the same sky, the local difference disappears and chemtrails emerge as a universal object, threatening the whole Earth. Similarly, using the notion of scientific universality, Covid-sceptics are able to scale up their individual observations and experiences to argue that they point to a larger, hidden truth, reaching beyond the general notion of critique and suspicion (Pelkmans 2024).

### Conclusion

In this article, I treat Czech Covid-sceptics who engage with so-called 'conspiracy theories' as producers of alternative knowledge. Some of them understand themselves to be part of a community of rational sceptics who are searching for the truth behind the pandemic. I argue that, while doing so, they relate their alternative knowledge to imaginaries of good science. Covid-sceptics mobilize science and its universality to lend authority to their activism and political projects. The *universalizing* they participate in is done by framing science as an activity that is not bound by the authority of established experts. Rather, the mantle of 'doing science' can be claimed by anyone willing to 'question the paradigms' and 'search for the truth'.

Covid-sceptics turn to their own embodied experiences when they attempt to produce evidence for their claims that the pandemic was an expression of deeper oppression and tyranny. Using embodied empiricism (Weston 2017), they frame their observations not as mere intuitions or hunches, but as part of a sound, empirical, scientific practice of research. Covid-sceptics do not claim to hold the same expertise as scientists themselves. Rather, they adopt the position of responsible and informed subjects who have a right, indeed duty, to be informed and educated, and to resist expert opinions. Finding themselves in a media space in which no information can be fully trusted, they develop their own individual expertise, rejecting some claims and theories while turning to those which are aligned with their embodied experience. Their criticism of 'mainstream science' also contains an underlying argument: science should not be influenced and controlled by states or corporations, but should be the endeavour of rational sceptics, open to everyone.

However, while such calls could be interpreted as a desire to democratize science and make it more accessible, they always depend on who counts as 'everyone' and who is excluded. While Covid-sceptics demand to be included in the production of scientific knowledge, they also participate in boundary making (Gieryn 1983); they claim the mantle of science for themselves and portray others as either 'the corrupted elite' or 'sheeple' who blindly follow the authorities. Only some are allowed to participate in the production of universal knowledge, and boundaries around 'good' and 'bad' science are established anew.

Not all bodies count as reliable evidence to the Covid-sceptics. But who gets to establish this hierarchy of embodied experiences? Certain claims and theories made by some Covid-sceptics are rejected by others. How is the legitimacy of various actors, and of their knowledge, negotiated in this space? Rejecting others within the conspiracy milieu as 'conspiracy theorists' and casting oneself as a 'rational sceptic' might seem to align with the boundaries of particular groups. Nevertheless, these groups are in flux; their boundaries are often re-negotiated, and Covid-sceptics can mobilize around a variety of political identities. Rakopoulos (2022) argues that a conspiratorial milieu enables people to negotiate multiple political positions and suggests seeing 'conspiracy theories' as political projects. Seeing contestations of science among Covid-sceptics in the Czech Republic in the context of their political ambitions and struggles might be necessary to unpack questions of the legitimacy and authority of their alternative knowledge. However, further research is needed in order to explore such political ambitions in detail.

#### References

- Aupers, Stef 2012: 'Trust no One': Modernization, Paranoia and Conspiracy Culture. European Journal of Communication 27(1):22–34.
- Bakalaki, Alexandra 2016: Chemtrails, Crisis, and Loss in an Interconnected World. Visual Anthropology Review 32(1):12–23.
- Baker, Stephanie, and Chris Rojek 2020: Lifestyle Gurus: Constructing Authority and Influence Online. Cambridge: Polity Press.
- Baker, Stephanie, and Michael Walsh 2022: 'A Mother's Intuition: It's Real and We Have to Believe in It': How the Maternal is Used to Promote Vaccine Refusal on Instagram. *Information, Communication & Society* 26:1–18.
- Baker, Stephanie; Eugene McLaughlin, and Chris Rojek. 2023: Simple solutions to wicked problems: Cultivating true believers of anti-vaccine conspiracies during the COVID-19 pandemic. *European Journal of Cultural Studies 0(0)*. https://doi.org/10.1177/13675494231173536
- Barry, Andrew 2001: *Political Machines: Governing a Technological Society*. London: Bloomsbury Publishing.
- Bečka, Hynek 2021: Chronic Healers: Healing Self and Society in Pandemic Times. Master's thesis, Universität Leipzig.
- Boullier, Henri, Baptiste Kotras, and Ignacio Siles 2022: Uncertain Knowledge: Studying 'Truth' and 'Conspiracies' in the Digital Age. *RESET* 10. http://journals.openedition.org/reset/2750, accessed 23 July, 2024.
- Bridgman, A, E. Merkley, O. Zhilin, PJ. Loewen, T. Owen, and D. Ruths 2021: Infodemic Pathways: Evaluating the Role That Traditional and Social Media Play in Cross-National Information Transfer. *Frontiers in Political Science* 3:648646.
- Butter, Michael, and Peter Knight eds. 2020: *Routledge Handbook of Conspiracy Theories* London, Routledge.
- Drążkiewicz, Elżbieta 2023: Are You with Us or Against Us? Studying Conflicts Over Conspiracy Theories and Overcoming the Great Conspiratorial Divide. *Anthropology in Action* 30(1):12–23.
- Fassin, Didier 2021: Of Plots and Men: The Heuristics of Conspiracy Theories. *Current Anthropology* 62(2):128–137.
- Fenster, Mark 1999: Conspiracy theories: Secrecy and power in American culture. Minneapolis, University of Minnesota Press.
- Gal, Ofer, and Raz Chen-Morris 2010: Empiricism without the Senses: How the Instrument Replaced the Eye. In: T. Wolfe Charles, and Ofer Gal, eds., *The Body as Object and Instrument of Knowledge: Embodied Empiricism in Early Modern Science*. Pp. 121–48. London: Springer.

- Gordin, Michael 2021: On the Fringe: Where Science Meets Pseudoscience. Oxford: Oxford University Press.
- Gieryn, Thomas 1983: Boundary-Work and the Demarcation of Science from Non-Science: Strains and Interests in Professional Ideologies of Scientists. *American Sociological Review*, 48(6):781–795.
- Hammer, Olav 2019: Isn't Esotericism Irrational? In: Woulter Hanegraaff, Peter Foreshaw, and Marco Pasi eds., *Hermes Explains: Thirty Questions about Western Esotericism.* Pp. 137–144. Amsterdam, Amsterdam University Press.
- Hanegraaff, Wouter 2012: Esotericism and the Academy: Rejected Knowledge in Western Culture. Cambridge: Cambridge University Press.
- Harambam, Jaron 2020: Contemporary Conspiracy Culture: Truth and Knowledge in an Era of Epistemic Instability. Oxford: Routledge.
- Harambam, Jaron, and Stef Aupers. 2017: 'I Am Not a Conspiracy Theorist': Relational Identifications in the Dutch Conspiracy Milieu. *Cultural Sociology* 11(1):113–129.
- Harambam, Jason, and Aupers Stef 2015: Contesting Epistemic Authority: Conspiracy Theories on the Boundaries of Science. *Public Understanding of Science* 24(4):466–480.
- Haraway, Donna 1991: Simians, Cyborgs, and Women: The Reinvention of Nature. New York, NY: Routledge.
- Harding, Sarah 1991: Whose Science? Whose Knowledge? Thinking from Women's Lives. Ithaca: Cornell University Press.
- Hausman, Bernice 2019: Anti/Vax: Reframing the Vaccination Controversy. Ithaca, New York: Cornell University Press.
- Hofstadter, Richard 2008: The Paranoid Style in American Politics, and Other Essays. New York: Vintage Books.
- Hotez, Peter 2021: COVID-19 and The Rise of Anti-Science. Expert Review of Vaccines 20(3):227-229.
- Kimura, Aya Hirata 2016: Radiation Brain Moms and Citizen Scientists: The Gender Politics of Food Contamination after Fukushima. Durham: Duke University Press.
- Knight, Peter 2000: Conspiracy culture: From the Kennedy assassination to the X-Files. London: Routledge.
- Kuhn, Thomas 1970: The Structure of Scientific Revolutions. Chicago: University of Chicago Press.
- Latour, Bruno 2004: Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern. *Critical Inquiry* 30(2):225–248.
- Law, John 2004: After Method: Mess in Social Science Research. London: Routledge.
- Marwick, Alice, and William Clyde Partin 2022: Constructing alternative facts: Populist expertise and the QAnon conspiracy, New Media & Society 0(0). https://doi.org/10.1177/14614448221090201
- Mede, Niels, and Mike Schäfer 2020: Science-related populism: Conceptualizing populist demands toward science. *Public Understanding of Science* 29(5):473–491.
- Meiser, Anna 2017: Alternative Models of Knowledge as a Critique of Epistemic Power Structures Introduction. *Sociologus* 67(1):1–21.
- Mol, Annemarie, and Anita Hardon 2020: What COVID-19 May Teach Us About Interdisciplinarity. BMJ Global Health 5:e004375.
- Mourad, Azzam, Ali Srour, Haidar Harmanani, Cathia Jenainati, and Mohamad Arafeh 2020: Critical Impact of Social Networks Infodemic on Defeating Coronavirus COVID-19 Pandemic: Twitter-Based Study and Research Directions. *IEEE Transactions on Network and Service Management*, 17(4):2145–2155.
- Miller, Bruce 2020: Science Denial and COVID Conspiracy Theories: Potential Neurological Mechanisms and Possible Responses. JAMA 324(22):2255–2256.
- Oreskes, Naomi, and Erik M. Conway 2012: Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming. London: Bloomsbury.
- Pelkmans, Mathijs, and Machold Rhys 2011: Conspiracy Theories and Their Truth Trajectories. Focaal: Journal of Global and Historical Anthropology 59:66–80.

- Pelkmans, Mathjis 2024: Suspicion and Evidence: On the Complexities of Online Truth-Seeking in Times of Uncertainty. *Social Anthropology/Anthropologie Sociale* 0(0). https://doi.org/10.3167/ saas.2024.022002
- Popper, Karl 1966: The Open Society and Its Enemies. Princeton: Princeton University Press.
- Rabo, Annika 2020: Conspiracy Theory as Occult Cosmology in Anthropology. In: Michael Butter, and Peter Knight eds., *Routledge Handbook of Conspiracy Theories*. Pp. 81–93. London: Routledge.
- Rakopoulos, Theodoros 2022: Of Fascists and Dreamers: Conspiracy Theory and Anthropology. *Social Anthropology/Anthropologie Sociale* 30:45–62.
- Rathjen, Lukas, and J. Stähelin 2022: Towards a Negative History of Science: The Unknown, Errors, Ignorance and the 'Pseudosciences'. *Histories* 2:146–156.
- Ten Kate, J, W. D. Koster, and J. Van der Waal 2021: 'Following Your Gut' or 'Questioning the Scientific Evidence': Understanding Vaccine Scepticism among More-Educated Dutch Parents. *Journal of Health and Social Behavior* 62(1):85–99.
- Tripodi, Francesca 2018: Searching for Alternative Facts: Analyzing Scriptural Inference in Conservative News Practices. *New York: Data & Society Research Institute*. https://datasociety.net/wp-content/ uploads/2018/05/Data\_Society\_Searching-for-AlternativeFacts.pdf
- Tripodi, Francesca, Lauren Garcia, and Alice Marwick 2023: 'Do Your Own Research': Affordance Activation and Disinformation Spread. *Information, Communication & Society* 0(0). https://doi.org/ 10.1080/1369118X.2023.2245869.
- Trnka, Susanna, and Catherine Trundle eds. 2017: Competing Responsibilities: The Ethics and Politics of Contemporary Life. Durham: Duke University Press.
- Ward, Charlotte, and David Voas 2011: The Emergence of Conspirituality, Journal of Contemporary Religion 26(1):103–121.
- Weston, Kath 2017: Animate Planet: Making Visceral Sense of Living in a High-Tech Ecologically Damaged World. Durham, New York: Duke University Press.
- van Zoonen, Liesbet 2021: I-Pistemology: Changing Truth Claims in Popular and Political Culture. *European Journal of Communication* 27(1):56–67.