$#*! scientists say: monitoring trust with content analysis

Petar Nurkić[1]

Abstract In addition to existing practices and norms within the institutions to which they belong, scientists form an epistemic community. The flow of information, the processes of belief formation, and the assumptions scientists are making determine the structure of an epistemic community. Members of such communities can be categorized as epistemic experts or epistemic agents. In exceptional circumstances, such as the crisis caused by the global pandemic, the existing organization, conventions, and rules within the epistemic community are disrupted. In times of crisis, ethnographic dimensions become as crucial as scientific knowledge. One of these dimensions is epistemic agents' trust in experts. Trust the epistemic agents have in experts may decrease in crisis situations and affect their roles within the epistemic community. We will propose some qualitative research methods that can be used to monitor experts' rhetorical attempts to reestablish their trustworthiness. For that purpose, we will use examples of epistemic experts' justifications when confronted with public questioning of their reliability. As a method of monitoring trust in epistemic experts and their attempts to re-establish their positions, we propose qualitative content analysis. Electronic media can be a good source for the analysis of public statements made by epistemic experts.

Keywords: epistemic communities, epistemic experts, crisis, trust in science, content analysis.

1. Introduction

This article focuses on the behavior of epistemic experts in crisis circumstances and a way to monitor their attempts to reestablish the trust of other epistemic agents. When we speak of

[1] Petar Nurkić
University of Belgrade, Faculty of Philosophy, Institute for philosophy
e-mail: petar.nurkic@f.bg.ac.rs

epistemic experts, we usually mean epistemic agents who possess expert knowledge or skills (Goldberg 2009). More broadly, where the particular context determines the need for a particular skill, epistemic expertise includes scientists, bankers, physicians, and policymakers. However, to achieve the goals of this paper, we will focus on physicians and scientists. Focusing on them will provide a clearer perspective on the relationship between trust in science and epistemic experts within the appropriate framework of epistemic communities.

To successfully monitor trust in science, we will examine the relationship between experts and other epistemic agents. Figure 1 shows how experts and other epistemic agents interact within epistemic communities. In our work, epistemic communities represent particular institutions of public importance that can influence and shape the opinions and actions of agents in crisis circumstances by gaining their trust. The way epistemic experts gain trust is closely related to establishing and strengthening their epistemic authority. Authority is a direct result of how epistemic experts linguistically defend their positions within the community during the times of crisis. Drawing on research from social psychology (Kruglanski 2009) and the ancient roots of effective language use to persuade and gain the trust of others (Garver 1994), we will single out four rhetorical strategies as the unit of our analysis[2].

Our goal is to present a suitable methodology that can be used to monitor and analyze the relationship between epistemic experts and other agents, as well as the rhetorical means through which epistemic experts reestablish their roles, justify their mistakes and try to strengthen their trustworthiness. We will focus on analyzing communication between the epistemic experts and the public and breaking it down into meaningful parts. We will identify rhetorical strategies experts use in public communication, with the goal of demonstrating the suitability of content analysis as a methodology for understanding the language means of establishing one's authority and maintaining the trust of epistemic agents. We will present illustrative examples of such rhetorical strategies and the usage of content analysis through which they can be identified.

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[2] On the types of rhetorical strategies, see more in Jarzabkowski and Sillince (2007), Riaz et al. (2016), and Radenović and Nurkić (2021).

Fig. 1 Interaction between epistemic experts and epistemic agents within an epistemic community

Epistemic network

Scientific institutions

- ● epistemic experts
- ● epistemic agents

→ expert-agent interaction
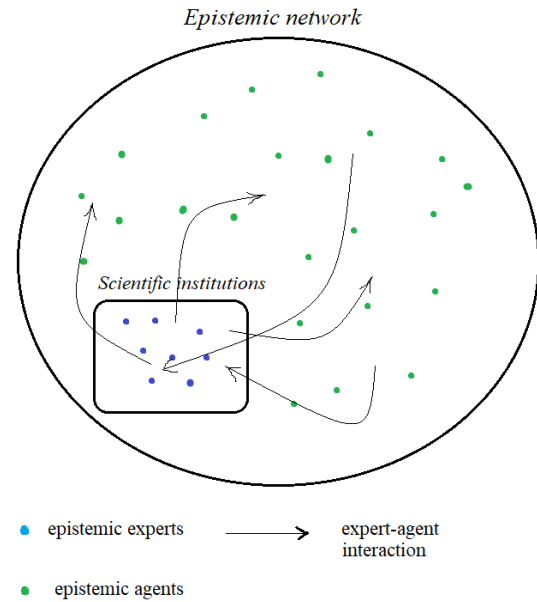
2. Theoretical background

In order to demonstrate how the method of qualitative analysis can serve to monitor trust, we must first establish the theoretical assumptions for the validity of such a methodology. Therefore, we will first describe what epistemic communities and epistemic experts are. We will then explain the relationship between epistemic authority and trust within the epistemic community. Finally, we will present the central part of the investigation, namely the use of rhetorical strategies to reinforce epistemic authority in order to gain the trust of other epistemic agents.

2.1 Epistemic communities and epistemic experts

Epistemic networks are an appropriate framework for understanding the relationships between epistemic agents. Epistemic communities consist of epistemic agents who exchange information, form beliefs, provide justifications for the truth of their beliefs, and form a network of information semantics (Zollman 2013). In what follows, we will refer to the epistemic community as an epistemic network, precisely because of the informational nature of the relationships between the agents within that community. The relationships within an epistemic network are determined by skills, trustworthiness, values, and rules given by a particular context (Zollman 2007). Based on

the communication between the aforementioned experts and agents, we can identify patterns and epistemic nodes (themes). The rhetorical claims we will discuss later constitute one such pattern.

Particularly important for our analysis is how the experts' answers to the other epistemic agents' questions turn out and how they match the sources of information. This correspondence determines the success of a particular rhetorical strategy in gaining the trust of others. Our interest, therefore, focuses on the answers that epistemic experts give in public appearances and the application of qualitative analysis to those answers.

2.2 Epistemic authority and trust

There is extensive research in social psychology dealing with epistemic authority (Kruglanski 2005, 2009). Although the primary goal of this paper is to illustrate how scientists, through their public statements, shape the trust that other epistemic agents have in them, epistemic authority is the first step in achieving this goal. Epistemic authority plays a unique role in unusual circumstances such as pandemics, financial and social crises, and environmental disasters. Trust is an important social factor that enables certain members of the epistemic community to interpret the circumstances that led to the crisis and to suggest possible solutions and strategies to overcome the crisis context. As we mentioned earlier, epistemic authority is based on how other agents perceive the expertise of experts. That means that authority, in return, provides the trust that other epistemic community members instill in their skills and knowledge. The expert's high authority enables more pronounced trust in her from other epistemic agents. That allows the expert the epistemic privilege to act as a source of information in future circumstances (Kruglanski et al. 2005) and influence how other epistemic agents in the network will consider that information reliable.

Our focus is on the epistemic authority of experts such as pulmonary specialists, virologists, and epidemiologists and its relationship to trust in their expertise during crises such as global pandemics. What makes an epistemic agent an expert are exceptional circumstances that require a certain amount of skills, abilities, and knowledge to prevent a catastrophe. In a pandemic, physicians and scientists are given the status of epistemic experts, although their expertise would not matter to economists in financial crisis circumstances. Just as economic experts are mere epistemic agents in a situation where medical decisions must be made, pulmonary physicians and

immunologists are only the members of an epistemic community who instill their trust in a financial expert during a recession.

2.3 Rhetorical strategy and internal organization of epistemic networks

In cases of broader domain crisis, the structure of epistemic networks becomes fluid and unstable. Previously established practices may become untenable and unprofitable for epistemic experts to defend them. In the lack of respirators, it is not possible to adhere to previously established practices; new measures must be taken to maintain the sustainability and stability of the medical health care system. On the other hand, reconfiguring the epistemic network due to new circumstances poses a threat to the preservation of experts and epistemic authority (Hoffman 1999). Experts are set before strict standards in a crisis, which leads experts to resort to rhetorical strategies due to structural inertia to preserve epistemic authority. These linguistic maneuvers ensure the preservation of their role in the epistemic network and the position that allows the expert to control the outcomes of the crisis circumstances.

The first thing that can be noticed in the expert's attempts to maintain the position of epistemic authority is the extent of self-attribution of expertise, i.e., frequent statements about the amount of knowledge and abilities that the self-praising expert possesses. The goal of such a rhetorical strategy is to get the other epistemic agents in the network to accept the expert's interpretation of the crisis circumstances offered by the expert mentioned above (Lesfrud and Meyer 2012). Our research examples focus on situations in which experts answered questions from other agents using rhetorical strategies to justify their epistemic authority. The experts' rhetorical utterances thus constitute our unit of analysis.

As we mentioned earlier, rhetoric has deep historical roots. For example, Aristotle describes how language can be used to persuade others (Garver 1994). Thus, rhetoric is the ability to persuade others using arguments that aim to advance the actors' interests (Scott 1967). Specifically, rhetorical strategies are an instrument for determining how other epistemic agents will perceive various social factors (Warnick 2000). The most apparent use of rhetorical strategies boils down to presenting specific actions as morally acceptable, necessary, mutually beneficial, and rational (Vaara et al. 2006). The same can be done in the opposite rhetorical direction by presenting the actions of other epistemic experts as unacceptable and irrational. Through rhetorical strategies,

experts gain support for their specific interpretation of the crisis context and the trust that others place in their attempts to shape the outcomes of the crisis. Previous research has shown that these strategies are highly cost-effective in epistemic terms and, by and large, allow experts to retain their authority and gain the trust of others (Creed et al. 2002; Hardy et al. 2000).

Our examples aim to will reveal how experts can maintain or regain their epistemic authority by, for example, imposing epistemic obligations on other agents, attributing responsibility, or convincing others of their epistemic legitimacy and an authentic interpretation of circumstances. Also, we want to show that content analysis can be used as a means to understand interactions and relationships within epistemic networks, that is, to analyze the dynamics of epistemic communities. Before moving on to the methodological part of our paper, we present a figure illustrating the assumptions of our theoretical framework. We will attempt to demonstrate these assumptions through the content analysis of sampled examples of epistemic experts' public statements.

Fig. 2 Relation between trust and epistemic experts' responses in crisis situations
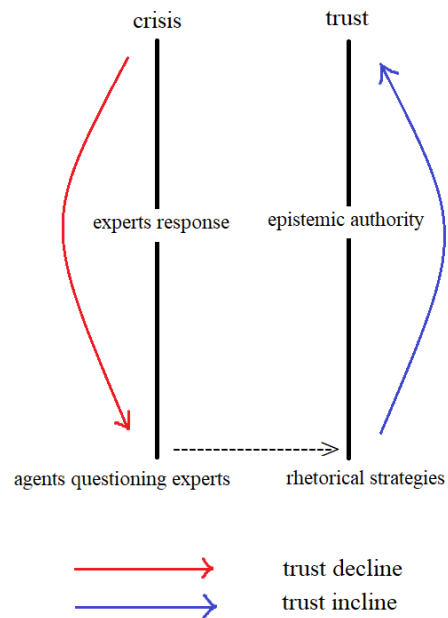
3. Methodology

First, we must emphasize that here provided examples of content analysis are illustratively oriented. We present examples of possible data, with the intention of providing further research

guidelines and introducing content analysis as a viable method for researching and understanding the dynamics of epistemic communities that can be utilized by philosophers. Our main goal is to show that content analysis can serve in further understanding and mapping the processes of information flow, belief formation, and trust through ecologically valid, real-life interactions between epistemic agents (experts and other members). For this purpose, we demonstrate content analysis methodology on examples of data as a way to illustrate the benefits of empirical, besides theoretical, research of epistemic properties.

We used a qualitative approach to content analysis to analyze the collected eight examples of epistemic experts' responses to public questioning of their statements and mistakes. As mentioned earlier, we have placed a particular focus on the rhetorical strategies contained in the public statements of epistemic experts. We were guided by existing research and similar analysis approaches (Brown et al. 2012; Erkama and Vaara, 2010; Riaz et al. 2016; Radenović and Nurkić, 2021). Crisis circumstances, such as the global pandemic, provide a unique opportunity to examine the dynamics of epistemic authority. These circumstances put scientists in a position of epistemic experts that guide governmental decisions and are subsequently responsible for both successful and unsuccessful outcomes. Furthermore, other epistemic agents have the opportunity to question those epistemic experts. This gives us valuable data for understanding the means experts thus use to justify and establish their authority, as well as the trust of epistemic agents, through content analysis of their interactions outside of the controlled, laboratory environment. Such situations present valuable opportunities to analyze ecologically valid data.

In order to monitor the role of trust in scientists during the crisis caused by the SARS-CoV-2 virus, we focused on eight central actors whose decisions directly influenced the shaping of public opinion of their epistemic communities from March 2020 to November 2021. As part of this analysis, we selected those events in which experts did not attempt to preserve existing practices and act from within the institutional framework of designated responsibilities, but instead resorted to rhetorical strategies to maintain authority and gain the trust of others. We selected eight events from various countries that focus on different experts. Table 1 provides an overview of selected epistemic experts, the institutions to which they belong, and the events that constitute their behavior which was questioned by the public. The roles and titles of these epistemic experts have provided them a position of authority from which they influence the perception of the public and can, subsequently, try to preserve their trust through rhetorical strategies.

Table 1 Epistemic experts, their areas of expertise, affiliations, and crisis events in which they participated

Epistemic experts	Area of expertise	Affiliation	Crisis events
Neil Ferguson	Epidemiology, immunology, mathematical modeling	Professor of Mathematical Biology & Head of Department of Infectious Disease Epidemiology at Imperial College London; Adviser at Scientific Advisory Group for Emergencies (SAGE)	Event 1
Catherine Calderwood	Obstetrics and gynecology	Former Chief Medical Officer of Scotland	Event 2
Darija Kisić Tepavčević	Epidemiology	Adviser at Serbia's Crisis Staff for the Suppression of Infectious Diseases COVID 19	Event 3
Anthony Fauci	Epidemiology, immunology	Director of the USA National Institute of Allergy and Infectious Diseases	Event 4
Michael Levitt	Biophysics	Professor of Structural Biology at Stanford University	Event 5
Roman Prymula	Epidemiology	Professor of Epidemiology at Charles University; former Minister of Health of the Czech Republic and the head of the government's Central Crisis Board	Event 6
Zlatibor Lončar	General surgery	Minister of Health of the Republic of Serbia	Event 7
Gordan Lauc	Biochemistry, molecular biology	Professor of Biochemistry and Molecular Biology at the University of Zagreb; member of Croatia's Government Scientific Council	Event 8

3.1 Key crisis events and defining a relevant data sampling framework

In order to define a set of relevant statements for content analysis, we first identified eight events that represent controversial moments in which the expertise and behavior of our epistemic experts are questioned. Then, the statements made by epistemic experts' during such examinations were observed and analyzed to classify them into appropriate rhetorical strategies that were used to strengthen their epistemic authority.

Event 1 On March 23, 2020, U.K. Prime Minister announced the first lockdown for all four U.K. nations as a protective measure against the spread of coronavirus throughout the country, and on March 25, the Coronavirus Act 2020 officially received Royal Assent. This Act officially

established the coronavirus lockdown and imposed it on the public. A month later, on May 5, Dr. Neil Ferguson, the lead epidemiologist and advisor to the U.K. government who had helped shape the coronavirus lockdown strategy, resigned from his advisory post after reporting that he had violated the lockdown measures during March and April.

Event 2 Under the same U.K. Coronavirus Act 2020, Scotland entered coronavirus lockdown on March 25, 2020. On April 5, 2020, Scotland's Chief Medical Officer, Catherine Calderwood, resigned from her government post after it was reported that she had violated the lockdown rules she had advocated in March.

Event 3 On October 13, 2020, journalists from the Balkan Investigative Reporting Network (BIRN) reported that Serbia's Crisis Staff provided the official numbers of deaths and cases of infection in Serbia for the Suppression of Infectious Diseases COVID -19 (i.e., Crisis Staff) were false. BIRN's reports explicitly referred to the statements and data provided by Dr. Darija Kisić Tepavčević, a member of the Crisis Staff, and Serbian Prime Minister Ana Brnabić. In response to these reports and the government's relaxation of protective epidemic measures during the pre-election period, 350 physicians published an open letter to the government of Serbia demanding the resignation of all members of the Crisis Staff and the appointment of a new Crisis Staff. At the press conference of the acting Crisis Staff, Dr. Darija Kisić Tepavčević responded to the open letter by questioning the expertise of the signatories.

Event 4 At a hearing of the Senate Health, Education, Labor, and Pensions Committee on November 4, 2021, Dr. Anthony Fauci, director of the U.S. National Institute of Allergy and Infectious Diseases, refuted the claims that the National Institute of Health funded the acquisition of operational research at the Institute of Virology in Wuhan prior to the pandemic COVID -19. U.S. Senators Ted Cruz and Rand Paul subsequently accused Dr. Fauci of lying to Congress and urged the U.S. Attorney General to appoint a special investigation into Dr. Fauci's statements. In a November 29 interview with CNN News, Dr. Fauci responded to the senators' allegations.

Event 5 Dr. Michael Levitt, a professor of structural biology at Stanford and a Nobel laureate, spoke out publicly during the coronavirus outbreak, making public his erroneous predictions about the virus' spread patterns and outcomes of the pandemic in several countries. On July 25, 2020, he published his prediction that the coronavirus outbreak in the United States would be over by the end of August of that year and that the total number of deaths would be less than 170000. He later commented on several of his flawed coronavirus predictions. Many epidemiologists and fellow

academics have publicly criticized Prof. Levitt's actions as irresponsible and misleading to the public and not in accordance with the academic community.

Event 6 On October 21, 2020, the Czech newspaper Blesk published the reports of Dr. Prymula, epidemiologist and Acting Minister of Health of the Czech Republic, on coronavirus violations. Dr. Prymula was subsequently relieved of his duties as Minister of Health but remained in an advisory position with the Czech Prime Minister. Four months later, on February 19, 2021, Dr. Prymula was photographed attending a soccer game despite regulations on social gatherings due to the coronavirus outbreak. Following public criticism, Dr. Prymula was also relieved of his advisory post to the prime minister. In an interview with Czech television, Dr. Prymula stated that it was his own decision to leave the position of government advisor.

Event 7 In July 2020, a French international news agency (franc. Agence France-Presse, AFP) published a hospital report on the death of a patient at the Zemun Clinical Center, Serbia, due to a lack of space in the hospital's respiratory center. At the July 23 government Crisis Staff press conference, the Serbian prime minister and health minister answered reporters' questions about the lack of respirators and the subsequent death published in the AFP report.

Event 8 On February 22, 2021, Gordan Lauc, Professor of Biochemistry and Molecular Biology at the University of Zagreb, announced the preliminary results of the first phase of his study, "Assessment of the serological response of the population of the city of Zagreb to contact with SARS-CoV-2" for the Croatian evening newspaper. He stated that the peak of the coronavirus pandemic in Croatia is over, as more than a third of the Croatian population has recovered from the virus. In March 2021, Ivan Štagljar, professor of molecular genetics and biochemistry at the University of Toronto, whose team has developed a new antigen test for coronavirus, commented on Lauc's study for Nova Croatian News T.V. Prof. Štagljar stated that Lauc's study contained incorrect information and did not comply with scientific methodology. On the same day, Prof. Lauc responded to these comments.

3.2 Data sampling procedure

Epistemic experts' public statements regarding described events were collected from electronic media sources. These experts' statements were made in response to public questioning of their behavior and can be seen in Table 2 We collected eight expert statements from electronic media

using a fake news tracker, browser news.Google, and factcheck.org. The eight events and corresponding experts' statements were collected from the following media sources: *The Guardian*, *BBC*, *Independent*, *021*, *UnHerd*, *IndexHR*, *Newsbeezer,* and *Radio Slobodna Evropa*. These eight statements were chosen as they represent illustrative examples for the content analysis of rhetorical strategies.

3.3 Results

Previous research on different crisis circumstances distinguishes internal and external rhetorical strategies that experts use to straighten their authority (Brown et al., 2012; Erkama and Vaara, 2010; Riaz et al., 2016). In accordance with Riaz et al. (2016), we have illustrated four rhetorical strategies that can be found in experts' justifications and are comparable with the strategies other authors find (Brown et al., 2012; Erkama and Vaara, 2010). Table 2 consists of four representative examples of each of the rhetorical strategies distinguished by Riaz et al. (2016), while the remaining four statements were used in the text below to further describe the aim of each strategy.

Table 2 Rhetorical strategies and their representative examples

Rhetorical strategies	Representative examples
Internally directed strategy 1: Rationalization	"I accept I made an error of judgment and took the wrong course of action. I have therefore stepped back from my involvement in Sage. I acted in the belief that I was immune, having tested positive for coronavirus, and completely isolated myself for almost two weeks after developing symptoms. I deeply regret any undermining of the clear messages around the continued need for social distancing to control this devastating epidemic. The government guidance is unequivocal and is there to protect all of us." Neil Ferguson, epidemiologist, UK government adviser at Scientific Advisory Group for Emergencies (Sage) (Stewart 2020)
Internally directed strategy 2: Emphasizing normative responsibilities	"The First Minister and I have had a further conversation this evening and we have agreed that the justifiable focus on my behavior risks becoming a distraction from the hugely important

	job that government and the medical profession has to do in getting the country through this coronavirus pandemic. Having worked so hard on the government's response, that is the last thing I want. The most important thing to me now and over the next few very difficult months is that people across Scotland know what they need to do to reduce the spread of this virus and that means they must have complete trust in those who give them advice. It is with a heavy heart that I resign as Chief Medical Officer." Catherine Calderwood, consultant obstetrician and gynecologist, Scotland's Chief Medical Officer ("Scotland's chief medical officer resigns over lockdown trips" 2020)
Externally directed strategy 1: Disproving the expertise of other epistemic experts	"What should be known is that there are 33,000 doctors in the Republic of Serbia. Colleagues who signed a certain statement, I assume that they understand and have competencies when it comes to infectious diseases, although there are no immunologists, epidemiologists, or infectiologists among them. I assume that they have competencies when they gave themselves the right to criticize," Darija Kisić Tepavčević, epidemiologist, Serbia's adviser at Crisis Staff for the Suppression of Infectious Diseases COVID 19 ("Kisić Tepavčević dovela u pitanje kompetentnost 350 lekara" 2020)
Externally directed strategy 2: Doubting the motives of other epistemic experts	"I'm just going to do my job and I'm going to be saving lives and they're going to be lying. Anybody who's looking at this carefully realizes that there's a distinct anti-science flavor to this. If they get up and criticize science, nobody's going to know what they're talking about. But if they get up and really aim their bullets at Tony Fauci, people could recognize there's a person there... it is easy to criticize, but they are really criticizing science because I represent science. That's dangerous. To me, that's more dangerous than the slings and the arrows that get thrown at me. And if you damage science, you are doing something very detrimental to society." Anthony Fauci, epidemiologist, director of the US National Institute of Allergy and Infectious Diseases (Sarkar 2021)

Rationalization of provided guarantees

Rationalization represents an internally oriented rhetorical strategy in which epistemic experts justify their behavior through rationalization of their mistakes (Riaz et al. 2016). For example:

> The prediction has turned out less well than I had hoped... There are about 55,000 deaths in the U.S. every week, and right now there are about 5,000 more. So I think the prediction turned out less well than I had hoped, but it served as a milestone and clarified what we mean by 'over'. It made it clear how important it is to look at excess deaths and the prediction when it's over. My mistake was that I should have given a range instead of a number. Michael Levitt, a structural biologist and winner of the 2013 Nobel Prize in Chemistry (Sayers 2020)

In this way, Prof. Levitt strengthened his epistemic authority and reinforced his role in the network that provided him with the trust of others in the further privilege of interpreting crisis circumstances and shaping crisis outcomes. By emphasizing their knowledge and skills, experts have the opportunity to explain the means used to achieve their goals and to justify why such a link between goals and means was rational (Brown et al. 2012). By rationalizing one's errors without clearly categorizing them as such, experts minimize the effects of those errors. Levitt's case shows that emphasizing the justification of one's errors, rather than confronting the error itself, contributes to strengthening the authority of the epistemic expert.

Emphasizing normative responsibilities

This is the second type of internally oriented strategy where experts emphasize their responsibilities towards other network experts and other epistemic agents (Riaz et al. 2016). For example:

> I wanted to promote professional opinions, but I became something of a symbol for both parties and I do not want to polarize this society further, so I decided to leave. Roman Prymula, epidemiologist. ("Prymula: There was a reason to attend soccer" 2021)

Experts' responsibilities are normative, meaning that they express concern for other epistemic agents by referring to existing norms and rules that they have adhered to and thus contributed as much as possible to the interests of others (Riaz et al., 2016). When Prymula emphasizes his normative responsibility to uniting the society (e.g. not polarizing the society), he expresses a personal and emotional level of responsibility that obligates him to act toward such a goal. In this

way, he emphasized the normative responsibility of the epistemic experts who belong to his institution. In this way, expressed responsibility to adhere to some norm, rather than recognizing one's errors, serves as a defense and a justification of one's behavior without explaining said behavior. Through normative responsibility references that do not serve the recognition and explanation of the errors at hand, experts can rhetorically avoid the responsibility for those errors and subsequently strengthen their authority and trustworthiness.

Challenging the expertise of others

In contrast to the previous two rhetorical strategies, which internally aim to reinforce authority and conversely gain trust by making statements about one's abilities, knowledge, or norms, epistemic experts also use external rhetorical strategies. These external forms of rhetoric allow epistemic experts to consolidate their epistemic authority by challenging other experts. This challenge of expertise has two aspects: it can be aimed at challenging (1) the level of skills and knowledge of others (usually the ones that question said expert) or (2) the motives of other experts (Riaz et al. 2016).

In the rhetoric that utilizes challenging the expertise of others, experts focus on the failures or the expertise levels of other experts, instead of their own errors, thereby influencing the level of trust that other epistemic agents place in other experts and, consequently, them (Warnick 2000). This rhetorical strategy can also be used to question the expertise of other epistemic agents that challenge the expert on some basis and can thereby render the „challenger" as inadequate to even challenge the expert. For example:

> You should get a degree in medicine to talk about this. The point is that the man was on a noninvasive ventilator, he had a saturation of 96, and he had been for 4 days – it would be a crime to intubate a patient with a saturation like that. Why would you not put someone on a ventilator when you have 34 unused at this point? Just in case there is any doubt, there is monitoring, there is always something that controls the first thing that is done - concede to us that we know a little bit more than you do. You do not understand the documents, but you are not in the medical field, I understand that, but you would have to go to medical school. Zlatibor Lončar, physician, Minister of Health of Serbia ("Niko nije umro zato što je čekao na respirator" 2020).

By highlighting the non-medical background of the journalist who questions him, dr Lončar places his own position above the position of the other epistemic agent, rather than answering the

question at hand. With this strategy, epistemic experts allow themself not to answer questions posed by epistemic agents who do not possess the same level of expertise.

Doubts about the motives of others

This is the second type of externally oriented rhetorical strategy where epistemic experts challenge the authority of other experts or epistemic agents by doubting the motivation behind any questioning they may have (Riaz et al. 2016). We can take the following example:

> When someone excuses falsehoods and insults others for no reason on television, one has to ask why they do it. The first possibility to consider is a hidden interest. In this case, it is probably patent application 63 / 121,689 for a serological test for coronaviruses, in which a certain I.S. is listed as an inventor. When someone on a government salary and with the help of public funds makes a discovery that he personally files as an inventor, it is not hard to understand that he would not like the pandemic to end. Of course, it would be much better for this hypothetical person if we were all locked in basements and the pandemic continued for years, with a portion of the proceeds from each test sold going to his personal account ... to call for the introduction of a completely unnecessary austerity measures and unreasonable panic in a situation where it was clear that the pandemic was coming to an end ... Such a person certainly cannot understand that there are people who have accomplished enough to afford to work for the common good in a crisis situation without any hidden motives or interests ... That's probably completely inconceivable to him. Gordan Lauc, professor of biochemistry and molecular biology at the College of Zagreb, ("Lauc odgovorio Štagljaru" 2021)

In this way, the expert who disputes the benevolence of others' common-sense motives reinforces the trust that other epistemic agents have in him (Radenović and Nurkić 2021). In this way, dr Lauc questions the motives of another expert that have criticized him without providing a direct answer to the criticism itself. This rhetorical strategy aims to re-establish the trust that others have in the expert that uses it and to preserve their epistemic authority.

What is distinctive about these externally-oriented rhetorical strategies is the lack of a denial of responsibility that can be noticed in internally-oriented strategies. In addition to tacitly acknowledging responsibility for controversial actions, epistemic experts simultaneously emphasize the responsibility of other experts for their failures and focus critically on others to reinforce their authority and maintain the trust placed in them by other agents in the epistemic network.

4. Discussion

In this paper, we have considered the issue of trust in science and the relationship between experts and epistemic agents in an epistemic community using the content analysis method. To examine the concept of trust, we first had to establish a link between trust and epistemic authority. A qualitative approach to communication between scientists, that is, epistemic experts, and other agents has proven extremely useful in monitoring trust in crises, especially in the analysis of the crisis caused by the SARS-CoV-2 virus, where the existing rules and norms in the epistemic network of epidemiologists, pulmonologists and virologists become unsustainable and require reconfiguration.

We applied the conceptual framework of rhetorical strategies to the sampled statements for the media given by scientists and physicians from March 2020 to November 2021. Epistemic authority is widely considered in the field of social psychology, while rhetorical strategies as a conceptual framework were used in the qualitative analysis of financial and institutional crises (Brown et al., 2012; Erkama and Vaara, 2010), but also concerning global pandemics (Radenović and Nurkić 2021). However, this combination of methodology and conceptual framework has not been exclusively applied to epistemic networks in crisis situations, especially as a way to monitor and understand the dynamic between scientists and other epistemic agents. We have singled out two basic categories of rhetorical strategies: (a) those that focus on the interior of the epistemic network; and (b) those directed offline. Self-emphasis and self-attribution of abilities and skills are intrinsic features of rhetorical strategies. In internally directed strategies one either rationalizes their own behavior and errors or emphasizes the normative dimensions of the responsibility they take on within the epistemic network, rather than directly responding to the errors themselves. In externally oriented strategies, experts are focused on other experts or agents rather than on themselves. They either challenge the epistemic authority and expertise of others or their motivation.

When unable to invoke previously established rules and norms within an epistemic network, experts can resort to rhetorical strategies to preserve their position and the influence of authority. Thus, crisis situations, because they entail the unsustainability of previously established practices, present a good basis for examining the dynamic within an epistemic community. Specifically, the relationship between experts and other epistemic agents. Qualitative content analysis can be utilized for these purposes. The usage of language in establishing one's position and consolidating the trust of others within an epistemic community is a suitable subject for the content analysis

method that philosophers can use to further their understanding of the epistemic properties of such communities. Figure 3 presents a diagram containing the division of rhetorical strategies that can be found in such cases.

Fig. 3 Internal and external rhetorical strategies
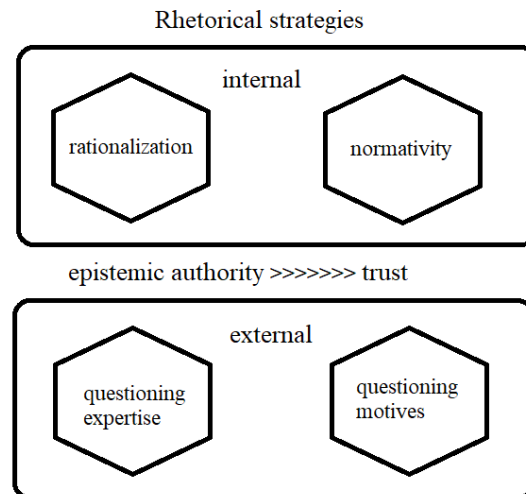
We applied content analysis to a limited number of representative examples of experts' statements in situations in which they were challenged by the public. However, we believe that these situations represent suitable frameworks for further investigation of epistemic expert-agent dynamics that can shed light on a variety of rhetorical means experts use to re-establish their positions within an epistemic community.

5. Literature

Brnabić: Niko nije umro zato što je čekao na respirator. 2020. Radio Slobodna Evropa, July 23. https://www.slobodnaevropa.org/a/30743472.html

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