

WWW.JDSR.IO ISSN: 2003-1998

VOL. 5, NO. 3, 2023, 140–170

LIGHT AT THE END OF THE TUNNEL? THE STAGING OF EXPERTISE DURING THE COVID-19 VACCINATION CAMPAIGN

Robert Prettner^a, Hedwig te Molder^a, Maarten A. Hajer^b and Rens Vliegenthart^c

ABSTRACT

In this paper, we compare the governmental and public framings of expertise in the Dutch Covid-19 vaccination campaign in the period between January 1st and April 30th, 2021. Specifically, we collected all statements regarding vaccination on three interrelated stages: (1) the official press conferences; (2) Twitter, for responses to government policies; and (3) political motions that were put forward by Members of Parliament in the days following the press conferences. We combine an interactional framing approach with a discursive psychological perspective to get insights into how framings between stages modify, contest, or build upon each other. We argue that the press conferences show a persistent technocratic framing, in the sense that a direct line between science and policy is assumed and promoted. Unlike the first period of the COVID-19 crisis in 2020, experts are not often quoted initially, but key political actors themselves act as responsible for the message that there is light at the end of the tunnel, if only citizens will get vaccinated. Once the AstraZeneca vaccine comes under fire, however, experts are again held accountable for the policy message. Throughout, governmental policies are disputed on Twitter and in Parliament, albeit in different ways, by making hidden moralities relevant, such as the government's assumed complacency, rigidity, and inability to explain policies with the available evidence.

Keywords: COVID-19 vaccination; expertise; interactional framing; Twitter; press conferences; parliamentary motions.

^a Vrije Universiteit Amsterdam, The Netherlands

^b Utrecht University, The Netherlands

^c Wageningen University & Research, The Netherlands

1 INTRODUCTION

After two years of the COVID-19 pandemic, governments and scientific institutions around the world are now in possession of vast amounts of data about COVID infection rates, hospitalizations, fatalities or vaccination rates. Researchers and policymakers are increasingly interested to compare these data across countries and time, to determine conditions that may help nations to be better prepared for future outbreaks of disease (Crosby et al., 2020; Bollyky et al., 2022). As it turned out, the current scientific understanding of the epidemiology of infectious disease appears unfit to explain observed infection and fatality rates of COVID-19 (ibid.). The countries believed to be most prepared for a pandemic failed to meet that expectation (World Health WHO, 2021). Nor could a country's resilience be predicted based on a higher Global Health Security Index (Abbey et al., 2020).

Trust in the government has been repeatedly identified as a mediating variable between governmental disease-prevention strategies and compliant behaviour of citizens. This link has been established for Ebola outbreaks (Morse et al., 2016; Blair et al., 2017), the H1N1 influenza pandemic (Gilles et al., 2011; Prati et al., 2011; van der Weerd et al., 2011) and recently for the COVID-19 pandemic (Bargain & Aminjonov, 2020; Han et al., 2021; Shanka & Menebo, 2022). It is therefore argued that governments should invest in their ability to communicate and engage with the public as a trusted actor, in order to be better prepared for future public health crises (Bollyky et al., 2022; KNAW, 2022). In this article, we focus specifically on how the staging of expertise as the basis of governmental decision-making affects the publicly perceived trustworthiness of governmental actors in the Netherlands during the rollout of the COVID-19 vaccination campaign.

A general characteristic of contemporary governance, is its reliance on technical expertise (Fischer, 1990) and the science-for-policy model as a source for authoritativeness (Hajer, 2009). The model is built on the assumption that scientific experts can and have to speak 'truth to power', i.e., the political leadership (Wildavsky, 1979). Characteristically, this is done by creating stable institutions like national health or food safety authorities or environmental assessment agencies to inform policy interventions and thus allow politics to make decisions based on available knowledge and assessments of uncertainty (Hajer, 2009). It is precisely this assumed function of assessing knowledge and uncertainties that makes it attractive for political actors and the media to place science and scientists at the forefront of the decision-making process in times of crisis, literally and figuratively (van Dooren & Noordegraaf, 2020).

In a prior investigation about governmental and public framing of expertise during the first half of 2020 (Prettner et al., 2021), we found that in the Netherlands the governmental staging of expertise followed a technocratic model of governance (cf. Fischer, 1990). In particular, the Dutch prime minister and health minister repeatedly pointed to the uncertainty and technical complexity of the situation to demonstrate that their measures depended on the input of epidemiologists, virologists, and doctors. In this way, political actors presented policy as derived directly and value-free from the underlying science. The very suggestion that 'science had spoken' made the government vulnerable to public challenges on Twitter about the government's lack of competence, consistency, integrity or accountability (Prettner et al., 2021). As these challenges are closely related to dimensions of trust in government (risk) communication (for an overview, see Liu & Mehta, 2021), we argue that adopting a technocratic model of governance in times of crisis can have negative effects on the perceived trustworthiness of government. This is particularly true in the context of an open society in which citizens and citizen groups can quickly rise to a level of proto-professionalisation (De Swaan, 1988) and have easy access to counter-evidence that suggests, at the very least, that science is not as settled as portrayed in government pronouncements.

The Netherlands provides us with a case of a country with a very well institutionalised interface between science and policy. In the domain of public health, the government can call upon the work of the National Institute for Public Health and the Environment (RIVM), and the standing Health Council (Gezondheidsraad) which brings together eminent medical experts including medical ethicists. By law, both institutions carry out their work independently from the Ministry of Health, Welfare and Sport (VWS). At the start of the COVID-19 pandemic the RIVM initiated a specific COVID related 'Outbreak Management Team' (OMT) bringing together a group of experts to act as a knowledge hub and to provide (policy) advice at short notice. Even though the experts operated on a personal title to ensure their independence, their exact role in formulating policies and potential conflicts of interest were frequently questioned and discussed (for an overview of key events, see OVV, 2022). Moreover, it is important to note the wrestling with an emerging populist right wing in the Dutch political scene. While the right of centre Liberal Party VVD has been in office since 2010, it is in a constant struggle to fend off the critique of several rival parties to its right. The COVID pandemic provided those parties with ample opportunity to suggest VVD prime minister Mark Rutte was out of touch with the feelings and interests of the Dutch people (cf. Oudenampsen, 2013).

In this article, we zoom in on press conferences as the official staging of politics and expertise in the Netherlands. We investigate the dominant

framing of the COVID-19 vaccination campaign at press conferences and how it is then subsequently challenged or endorsed in parliamentary motions and on the social media forum Twitter. The purpose of this study is to evaluate if and how the technocratic model is reproduced one year after the beginning of the pandemic, and to understand the impact of governmental framing on public trust, based on the hidden moralities that are put forward or are being contested in parliamentary motions and on Twitter. To this end, we analyse statements collected from press conferences, Tweets, and parliamentary motions from two perspectives. First, we use a statistical topic model, in which indicative words that frequently occur in the same context are clustered into overarching topics. Second, we contextualize these topics by subjecting them to an interactional framing analysis. Our analytical emphasis is directed at how parliamentary motions and Tweets respond to the framing of the press conferences. This approach, inspired by a discursive psychological perspective (Edwards & Potter, 2005; Wiggins, 2017), allows us to understand what is made relevant from press conference statements and for what purposes, consciously or not, by the recipients themselves.

2 THE HIDDEN MORALITIES OF FRAMING EXPERTISE

On the surface, disputes over COVID-19 policy revolve around questions that would typically fall under the jurisdiction of science, such as "to what extent do face masks prevent the spread of the virus in public spaces?" When scientific knowledge is at stake, however, so are underlying moral concerns (Jasanoff, 2004; Shapin, 2007; Jasanoff & Simmet, 2017). On the one hand, this can be inferred from the fact that simply succeeding in correcting pieces of misinformation does not usually lead individuals to change their opinions about a given controversy (e.g. Nyhan et al., 2014; Nyhan & Reifler, 2015). On the other hand, lay people offer evidence-based arguments and refer to scientific expertise in a very similar way as experts do, suggesting that the real cause for disagreement does not lie in facts alone (te Molder, 2014; Versteeg & te Molder, 2018). Moralities involve (often contested) conceptions of what constitutes 'good' people, such as what it means to be a credible expert, what constitutes 'good' relationships, for example between governments and their citizens, or what constitutes a 'good' life (Swierstra et al., 2009; cf. Hochschild, 2016). As Swierstra et al. (2009) point out, moralities exist in the practical routines of everyday life. They are so ingrained and taken for granted that they are hardly articulated or reflected upon. We only practise 'ethics' when we question these moral routines (Swierstra & Rip, 2007). Some of these moralities cut across disputes, such as when a layman's identity is equated in practice with someone who has access only to values and emotions, rather than facts,

effectively denying him access to public debate (te Molder, 2012). Other moralities may be more topic specific, such as not wanting to blindly rely on governments and science, as an example of good parenting in the vaccine debates (Reich, 2016; Prettner et al., 2023).

Therefore, our analysis of parliamentary motions and Tweets focuses on what kind of activity a particular message performs in its interactional context, i.e., making an accusation or offering praise, and to what moralities it consciously or not orients in doing so (Edwards & Potter, 2005). Rather than the analyst determining the truth value of an utterance, or what it does in terms of action, such an approach illuminates how interlocutors ensure that something comes across as (un)truthful, and how they themselves treat each other's utterances (cf. Demasi, 2020). To exactly understand what is at stake in COVID-19 policies, both for governments and citizens, it is essential to expose the routinely hidden moralities in debates about these policies.

3 METHODS

We rely on a mixed method strategy to capture similarities and differences in (transcribed) statements made publicly in press conferences, Twitter and parliamentary motions. First, we use topic models to take stock of the broad themes that are being discussed and their relative presence during our research period. Second, we provide a qualitative framing analysis of the collected statements and quantitatively determined topics.

3.1 Topic modelling

To assess the broad themes that were being discussed, we relied on a general computer assisted content analysis. More specifically, we employ a Latent Dirichlet Allocation (LDA) model in STATA, using the module ldagibbs (Schwarz, 2018). For all three sets of documents, we pre-processed the data by removing capital letters and punctuation. Words shorter than five characters were removed, as they are likely to contain little substantial meaning. We have chosen to keep the number of topics (k) limited and equal across different platforms as we are interested in a broad overview. LDA modelling relies on a bag-of-words approach. Each word in the dataset receives a score on each of those topics – indicating the level to which degree the word is indicative of that topic. Based on those word scores, each unit of analysis (statement, Tweet, or motion) gets assigned a topic score. High scores indicate the unit has strong resemblance with that topic. Per unit, scores add up to one, making it possible to assess the relative presence of each topic. Based on the word scores and an evaluation of the units that score high on each topic, we assign labels/descriptions for each topic. Results are consequently aggregated to a monthly level to demonstrate the

over-time changes of focus on each of the platforms. A topic model provides insights into the broader themes that are discussed and serve as a means to gain first insights into the nature of communication on the different stages. In the next section, we describe how we complement the topic models with a more in-depth discursive analysis.

3.2 Framing

A core tenet of framing theory is the realization that any given issue or situation can be represented in a variety of ways, especially with regard to defining what the particular problem is, how to evaluate causal and moral implications or what actions are necessary to address the problem (Entman, 1993). This concept can be further classified into two, methodologically distinct approaches: Frames as cognitive representations and frames as interactional co-construction (Dewulf et al., 2009). We rely on the latter understanding of framing, in which the framing of events and issues among press conferences, motions and Tweets is a dynamic process and "[f]rames are part of a collective struggle over meaning that takes place through a multiplicity of media and interpersonal communication" (Vliegenthart & van Zoonen, 2011, p. 112). Research suggests that the broader context of political debate will influence which types of framing will propagate in public debate and which will not (Snow & Corrigall-Brown, 2005; Vliegenthart & van Zoonen, 2011). We therefore regard the COVID-19 press conferences as the official stage for the governmental framing process; we regard parliamentary motions and Tweets as reactions to the official governmental framing.

We use Discursive Psychology (Edwards & Potter, 1992) to further flesh out this interactional framing approach and be able to identify the hidden moralities. Discursive Psychology is built upon the recognition that alternative descriptions of the same event can have vastly different implications for discursively managed ascriptions of psychological states, such as motive, intent, emotion or cognition (Edwards, 1997; te Molder & Potter, 2005). Therefore, alternative formulations become a tool for participants to perform various social actions, such as accusing or complimenting someone. Central to determining which actions are performed, and which moralities are thereby made relevant, is the so-called *proof procedure*, in which the analysis of what a turn at talk is doing is based on how it is responded to in the next speaker's turn (Sacks et al., 1974), in this case how Tweets and parliamentary motions respond to the statements in press conferences.

3.3 Data collection

3.3.1 Press conferences

We collected data in period between January 1st and April 30th 2021. All official press conferences, both the ones that were specially devoted to COVID-19, as well as the regular press conferences following the meeting of the Cabinet meeting on Fridays, were considered. These press conferences (n=13) were accessible in transcribed from on a governmental website. In the next step, we collected all statements that referred to vaccination or any of the colloquial names for specific COVID vaccines available at the time^d. This yielded a total of 286 statements, made by Prime Minister Mark Rutte (n=66), Minister of Health Hugo de Jonge (n=162) and questions posed by journalists (n=58).

3.3.2 Twitter

To assess the reactions in public debates, we collected all Tweets that were sent on the day of each of the 13 press conferences or the day after, focused on vaccination and referred explicitly to the press conference. While Twitter users are not representative for the Dutch population at large, a considerable amount of Dutch citizens use it (20% according to Hoekstra et al., 2022) and it is considered a key platform for political discussion in the Netherlands. It is frequently used by politicians and journalists as a source of information and means to directly interact with citizens (Kruikemeier, 2014). In particular during COVID-19, it has been a key place for fierce debate on political responses to the pandemic (van Dijck & Alinejad, 2020) and provides the opportunity to investigate immediate responses to press conferences and other relevant events. However, we should be cautious about generalising our findings from Twitter to the wider population.

While this procedure cannot establish any direct link between particular Tweets and a particular statement from press conferences (unless apparent from the content), it does allow us to sample Tweets that were designed to be recognized as reaction to the press conferences. We collected these Tweets using the software Coosto, which keeps an archive of all Dutch language Tweets. Retweets and replies were considered as well, amounting to a total of 6,329 statements. For the qualitative analysis, Tweets were prioritized and selected based on two criteria: 1) How well their content

^d Dutch keyword search: *vaccin* OR *prik* OR Astra* OR Pfizer* OR Moderna* OR Ianssen*

^e We used the same keywords as for the press conferences, but included the search operator "AND persconferentie"

corresponded to the statistical topic models and 2) how broadly their content was shared on the platform during the sampling period.

3.3.3 Parliamentary motions

To analyse reactions from a dedicated political setting, we collected all parliamentary motions submitted in the period from January 1st to April 30th, 2021. They can be submitted during or after parliamentary debates by any Member of Parliament and often provide a 'call to action' to the government and they are tabled for a vote. A total of 32 motions, the vast majority filed by opposition parties (n=20), a combination of opposition and government parties (n=6) or jointly (n=6).

4 ANALYSIS

We present our findings according to the three stages we have examined: press conferences, Twitter and parliamentary motions. For each stage, two kinds of analysis were conducted. First, the topic modelling provides an overview of the kinds of topics that were predominantly discussed over time and help guide the subsequent qualitative analyses. Second, we look at framing in press conferences and the uptake of that framing on Twitter and in parliamentary motions, focusing on the hidden moralities they make relevant. An overview of the results can be found in table 1. All statements, Tweets and motions were translated from Dutch to English. Understandability of the message was prioritized above literal translation.

Table 1. An overview of topics, frames, and hidden moralities

	Topics	Frames
Press	Efficiency of the campaign	Vaccination leads to a brighter future (4.2.1)
conferences	Future perspective	Settling controversies with evidence (4.2.2)
	Experts' role in	
	controversies	
		Hidden moralities
Twitter	Future perspective	Learn from your mistakes (4.4.1)
	Efficiency of the campaign	Your use of evidence is opportunistic (4.4.2)
	Experts' role in	
	controversies	
Motions	Efficiency of the campaign	Expert advice can be made to fit (4.6.1)
	Priority of target groups	Resolving uncertainty with freedom of choice
	Freedom of choice	(4.6.2)

4.1 Press conferences: Topics

Table 2 provides an overview of the topics that were being discussed in press conferences. It demonstrates the vaccination statements made in each conference had a focus on the efficiency of the vaccination campaign, the role of experts and expert institutions in resolving controversies and the proclaimed certainty that vaccines will lead to a better future if enough people would get their shot.

If we look at the overtime comparison (Figure 1), we find that in January press conferences mainly focused on the efficiency of the vaccination campaign or more precisely the lack thereof. The February/March press conferences deliver a generally more positive message, emphasizing the clear perspective that the vaccination campaign offers for the foreseeable future. Finally, in April, reports about rare but severe side-effects of certain vaccines pile up, shifting the attention to the role of experts in resolving difficulties in political decision-making.

Table 2. Identified topics in press conferences

	label	indicative words
topic1	efficiency of the vaccination campaign	vaccinations, weeks, stock, Europe, second, percent
topic2	experts' role in resolving controversies	health council, AstraZeneca, risk, advice, Janssen, basis
topic3	proclaimed certainty of the future perspective	people, vaccinated, vaccinate, millions, protection, protected

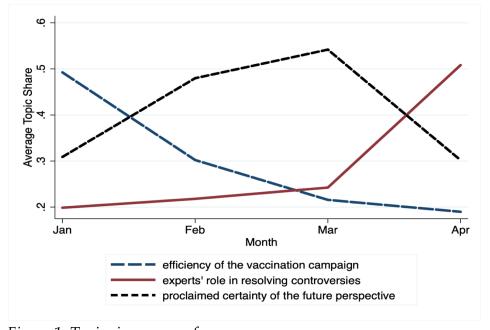


Figure 1. Topics in press conferences

4.2 Press conferences: Frames

4.2.1 Vaccination is the self-evident way to a brighter future

On January 6th, 2021, the Dutch COVID-19 vaccination campaign started as one of the last in Europe. During the following 4 months, the future perspective that vaccination offers was a consistently discussed topic in press conferences. Reoccurring instances of this theme include uses of the metaphor 'light at the end of the tunnel' (Prime Minister on January 12th: With the start of vaccination there is light at the end of the tunnel, but we are not there today or tomorrow), hopes of a nice summer (Minister of Health on February 23rd: But as things are looking right now, a lot of people are vaccinated in the summer, it can really become a nice summer) and heading back to 'normal life' (Prime Minister on March 8th: If we live up to the expectation that at the beginning of the summer everyone who wants will be vaccinated at least once, then that is the moment when we can finally make big steps towards normal life). In the early stages of the campaign, forecasts for the future, such as a return to normalcy within a few months, barely indicated any uncertainty.

The only condition that the Prime Minister and Minister of Health put forward as limiting factor at that time, was the pace with which the vaccines could be administered. This, in turn, was portrayed as completely dependent on the speed of vaccine production and the timeliness of their delivery, thereby externalizing the responsibility of a successful vaccination campaign (Minister of Health on January 12th: Regarding the pace with which we can vaccinate, we are dependent on the delivery of vaccines; Minister of Health on January 20th: I sometimes hear the suggestion: why don't the people at the GGDf vaccinate 24 hours a day? Yes then you need something to vaccinate with). This is a noticeable contrast to the sentiment of press conferences just 9 months prior, in which uncertainty was a prominent excuse for governmental (in)action (Prettner et al., 2021). The long-awaited antidote to all uncertainty seemed to have been found with the dawn of the vaccination campaign.

In January 2021, together with the start of the vaccination campaign, COVID infection rates rose to an unprecedented level. As a result, a nationwide curfew came into effect on January 23rd, the most restrictive measure that the Dutch government implemented to date. In addition, reports of delayed vaccine deliveries accumulated and the Dutch vaccination campaign was still lagging behind other European countries. These developments lead to a peak in the 'efficiency of the vaccination campaign' topic in press conferences. First and foremost, the government was accused of being too rigid in their vaccination strategy and hoarding an unnecessarily large stockpile of vaccines (Journalist on January 22nd:

^f Municipal Health Service

Mister Rutte, you say: we are up to speed with the vaccinations, but if you look at the numbers, that is actually not right. We have about 130.000 vaccines put into arms, and we have a stockpile of more than half a million). The reason put forward for keeping a reserve this big was that people who have had their first shot should be guaranteed to get their second shot three weeks after. Opponents of this strategy argued that a larger number of people receiving a first dose of the vaccine sooner would be more beneficial given the circumstances.

To resolve this controversy, political actors occasionally fell back on institutionalized expertise as a resource for decision making (Minister of Health on January 20th: *So, we stay within the bounds of which also the EMA gave their approval. Of which also the CBG^g approves. Of which also the Council of Health and the OMT advice, because it is a balancing act in the end*). However, such expert references have become an exception in the early months of 2021 compared to the spring 2020 press conferences, where references to experts and expertise abounded (Prettner et al., 2021).

In the February and March peaks of the 'proclaimed certainty of the future perspective' topic, the predominant pattern is the omission of references to scientific sources, which presents statements as self-evidently factual. The Minister of Health repeatedly presented messages in unmistakably scientific terms as his own (Minister of Health on February 23rd: But the big unknown is the extent to which vaccination also prevents transmission. Big unknown is the extent to which the mutations accelerate in response to us pushing on the virus, just through escape-mutations. So that mutations will accelerate. And in turn, to what extent these mutations are susceptible to the vaccines we have). In this phase, the positive outlook for the near future was regularly juxtaposed with the extent to which vaccines prevent the spread of the virus (as opposed to how well they prevent the development of symptoms) and the percentage of vaccination acceptance among the population (Minister of Health on March 23rd: Because we would prefer of course to just pick a date in time to say: guys, then the lockdown is over, then our actual life starts again. But you cannot really say this at this moment. Even though we know approximately when we will have the groups vaccinated. Starting from a 80, 80 percent vaccination acceptance, you cannot really say. Because the extent of transmission prevention is really just not known at this *moment*). A high vaccination uptake rate was thus presented as sole remedy for the unknown effect that vaccines have on the spread of the virus. The responsibility of realizing the positive outlook for the future is thereby transferred to citizens themselves and is supposed to act as an incentive to overcome vaccine hesitancy.

^g Medicines Evaluation Board

4.2.2 To settle controversies, we rely on experts and evidence

On March 14th, usage of the AstraZeneca vaccine was suspended for two weeks due to some reports that the vaccine could be linked to rare but severe cases of blood cloths. During the following press conference, this issue was not so much treated as problematic because of the side-effect itself, but because of what the suspension meant for the growing stockpile of vaccines and the pace at which the population could be vaccinated (Minister of Health on March 23rd: *But what do you see now with AstraZeneca?* We pushed the pause button, out of precaution, because of the signals especially from Norway and Denmark. And that means that no shots went out but that in the meantime a new stock came in). This emphasis changed dramatically when concerns arose that Johnson & Johnson's vaccine could cause the same form of rare blood clots and another suspension came in early April for AstraZeneca's vaccine. The focus on vaccines as antidote against uncertainty shifted to a framing of uncertainty as an inherent feature of science-informed policymaking in times of crisis (Minister of Health on April 13th: On which date we can let go of measures is no certainty and thus also no promise. For that the virus is much too unpredictable and the course of the future too dependent of all sorts of uncertainties. From the speed with which vaccines are delivered, for example, from unexpected side-effects and thus changes in the choice which vaccine is suitable for which target group, from the occurrence of new virus mutations and how well our vaccines protect against them and also how well we succeed in adhering to the measures, keep adhering to them).

With these uncertainties, the government had increasing difficulty to communicate their decisions as a matter of course and soon fell back on expert advice as the source of their behaviour. For instance, the decision to only use the AstraZeneca vaccine for citizens older than 59 years albeit the EMA judged it to be safe enough for the whole population, was presented as based on a risk-benefit analysis of the Dutch Health Council (Minister of Health on April 13th: The core of the advice of the Health Council is very clear. Namely: above sixty it is safe, it is effective, it is also necessary above sixty to reduce the risks of Corona as much as possible). At the same time, the same procedure did not apply to the Johnson & Johnson vaccine, because there was reportedly insufficient data on the basis of which the Health Council could make a different ruling from the EMA (Minister of Health on April 20th: Because there are insufficient additional data on basis of which the Health Council could come to a target-group advice. At present, nothing is known other than the 8 cases from the U.S., based on 7 million shots. So, the Health Council cannot come to another verdict than what the EMA is presenting now).

4.3 Twitter: Topics

The online debate on Twitter shows in terms of topics a high similarity to the press conferences – probably not surprisingly so, as we selected Tweets that explicitly referred to the press conferences. We again see the efficiency of the vaccination campaign, the role of experts and expert institutions in resolving controversies and the proclaimed certainty that vaccines will lead to a better future, as central themes (table 3).

Table 3. Identified topics on Twitter

	label	indicative words
topic1	efficiency of the vaccination campaign	#donewithrutte, #hugodejongecantdoanything, problem, deliveries, slower, EU-countries
topic2	proclaimed certainty of the future perspective	the vaccinated, contagious, light, nonsense, vaccination passport, elections2021
topic3	experts' role in resolving controversies	vaccination strategy, corona measures, why, question, AstraZeneca

The vocabulary differs considerably from that in the press conferences. There is a clear negative attitude towards the government and the measures, as becomes apparent in the hashtags #donewithrutte or #hugodejongecantdoanythingh, and words such as "nonsense". Also here, we see considerable over-time variation, although the experts' role in resolving controversies dominates the Twitter debate. The efficiency issue gains prominence later than in the press conferences, and the future prospect discussion is moderately present throughout the research period (Figure 2).

h in Dutch: #klaarmetrutte/ #hugodejongekanniks

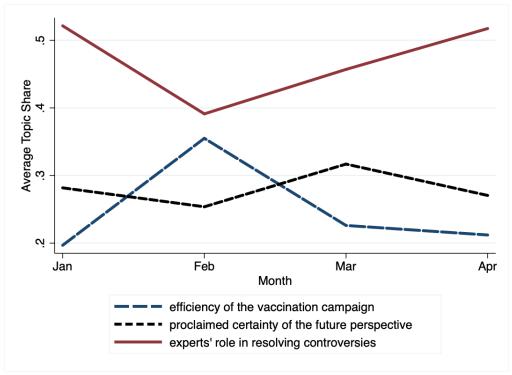


Figure 2. Topics on Twitter

4.4 Twitter: Hidden moralities

4.4.1 Learn from your mistakes instead of externalizing responsibility

The governmental framing of circumstances that are beyond their control, first and foremost the vaccine deliveries, was heavily contested on Twitter. A main resource for doing so, was the comparison of the Dutch vaccination campaign with ones of other European countries (Tweet 1). Since the Netherlands were lagging behind despite other countries receiving vaccines from "the same barrel", referring to the European joint procurement of COVID vaccines (OVV, 2022), there must be something wrong with the provided explanation for the slow progress. It is further pointed out that minister De Jonge has a vested interest in people accepting this decoy reason, implying that the actual reason will reflect poorly on himself or the governing parties.

Tweet 1

February 2nd: That NL jabs more slowly than other EU countries has nothing to do with the disappointing deliveries. They all receive vaccines from the same barrel. What De Jonge is doing here is linking one problem to another, hoping that you will feel and accept a non-existent connection

Already early on, the announcement of new or extended COVID measures were presented in the light of continuing failure to bring the vaccination program up to speed (Tweets 2 & 3). An initial reading of these messages suggests an alleged cause-and-effect relationship between an inefficient vaccination campaign and restrictions of public life. As an additional aspect, these Tweets treat the unresourceful use of time and vaccines as trouble in the making, *just as prior mistakes* have led to the *current issues* regarding the extension of the lockdown and the curfew. Thus, when the governmental framing increasingly emphasised the positive outlook for the future, Tweeters remained focussed on current problems and how they casted doubt on the governments' vision.

Tweet 2

January 20th: I find the curfew of the cabinet contradictory with the #vaccination policy and #vaccination strategy. You have to seize every moment of the day / evening / night to vaccinate on a large scale #OMT #ggd #rivm #vaccination #Rutte #hugodejonge #COVID19 #rgetal #press conference

Tweet 3

January 12th: At tonight's #press conference an extension of the #lockdown will be probably announced. Meanwhile, hundreds of thousands of unused #vaccines are in the warehouses, it may be an idea that #hugodejonge is finally speeding up a bit! #curfew #Vaccination #corona

Critique for the governmental framing of a bright future fell into two categories. First and most straightforward, the presuppositions of that perspective were questioned. For example, it was argued that there was still considerable uncertainty regarding the effects of vaccines on disease transmission, as compared to how well they could prevent infection for the individual (Tweet 4). The "what next?" at the end of the message is designed to emphasise the lack of alternatives to vaccination and simultaneously renders this single-solution focus as insufficient or even negligent. Where the government portrayed themselves hopeful that most people would get vaccinated - perhaps strategically so - Tweeters identified another presupposition (Tweet 5). Yet again, the exclusive focus on vaccination as the way out of the pandemic was called out as problematic.

Tweet 4

January 12th: "With the vaccine, there is light at the end of the tunnel" says @minpres Nonsense; Pfizer themselves say that they do not know whether vaccinated people are still contagious. And if so, which is likely if infected vaccinated people also get symptoms, what next? #press conference #persco

Tweet 5

March 9th: Feedback about the #press conference is seeping in...it seems that the outlined "perspective" is getting less and less appealing, why? I think this is because one premise in the narrative is wrong, namely that everyone will be vaccinated #vaccination

Second, the continuing emphasis on the importance of vaccination acceptance for the future ahead was met with suspicion. Mostly, it was taken as a strategy to shift the attention towards public duties in the future and away from political accountability in the present (Tweets 6 & 7).

Tweet 6

March 23rd: Anyway. According to Rutte/De Jonge, everything therefore depends on the delivery of vaccines and the behavior of citizens. Didn't hear anything relevant about their own share and responsibility in this - especially pressure to increase the vaccination rate, and now for real, and guarantees for this (use military personnel!)

Tweet 7

March 23rd: It is not our own behavior that determines how quickly we can ease the restrictions, @MinPres Rutte: faster vaccination determines how quickly we can terminate them. The irritations about the lack of a progressive #vaccination policy in our country are now also rising among docile citizens. #Press conference

Others however, portrayed the governmental reliance on vaccination not as a way to distract from current issues of governance but rather as fuelled by corporate greed (Tweet 8). The "new normal" referred to in this Tweet contrasts with the governmental vision of "going back to normal" and suggests that whatever society is headed for, it is not the re-establishing of known order. Importantly, regular citizens will not be the beneficiaries of this change, but rather corporations of pharmaceutical industries.

Tweet 8

March 23rd: A third dose of vaccine, then annual 'boosters' and then the corona vaccination will become part of the 'new normal'. Oh yes, the price will go up. And Big Pharma is doing this for the good of the people! #Pfizer #vaccination passport #press conference

To summarize, there was widespread agreement that it is the government's responsibility to restore normal life and that the focus on vaccination as the only solution is negligent or even a distraction from governmental wrongdoings. Thus, it can be argued that the perspective of a vaccinated population was clearly discussed differently on Twitter compared to the

press conferences on at least three accounts. First, governmental actors presented the topic strictly separate from other issues such as the efficiency of the vaccination campaign or restrictive measures to halt the outbreak, while the tweeting audience often made connections and saw interdependencies between these topics. Second, Tweeters were not simply following the governmental vision, but were rather questioning the desirability thereof, who truly benefits from it and if the unspoken presuppositions held up to scrutiny. Third, the obviousness with which vaccination was portrayed as the way out of the pandemic was contested, as was the scientific justification for that statement. This last point will be advanced further in the next section.

4.4.2 Confronting the government with opportunistic use of evidence

Just as the government omitted, and later used, references to expertise to communicate their decisions as obvious and inevitable, Tweeters referred to experts to challenge that obviousness and inevitability. Whether intentional or not, this topicalized a possible arbitrariness about when the government decides to explicitly follow advice of which experts. This was done by 1) contrasting a governmental course of action with expert advice (Tweets 9 & 10), 2) pointing to a lack of expert advice for governmental action (Tweets 11 & 12) or 3) portraying different experts/expert institutions as disagreeing on the same issue (Tweet 13). In Tweets 9 and 10, two physicians with regular media appearances are referenced and presented as dissenting voices to the governments' plans regarding the vaccination campaign. Specifically, these plans relate to discontinuing the AstraZeneca vaccine for citizens younger than 60 (Tweet 9) and easing lockdown measures before the vulnerable population has had a chance to get vaccinated (Tweet 10). Since medical experts did not seem to support these plans, Tweeters wondered on what basis these decisions had been made.

Tweet 9

April 13th: Why is @hugodejonge not listening to Ernst?? He also says: JAB, JAB, JAB, JAB (for anyone who wants to)!!! Smoking 500x higher risk, the pill 40x higher risk... and so on. VOLUNTARY JAB JAB JAB #beau #press conference

Tweet 10

April 14th: Hearing on the radio that Gommers is not agreeing with Rutte; first vaccinate 60+ and then ease restrictions. Is it an idea that these gentlemen speak before we get another press conference? Then we'll get out with 1 standpoint for the first time since corona. #relief

Another way to highlight inconsistent use of expertise was to draw attention to decisions that had been communicated without explicit reference to expert advice (Tweets 11 & 12). The absence of scientific or expert arguments in support of political decisions becomes especially noticeable in an environment otherwise saturated with such references.

Tweet 11

January 20th: Playing with the booster injection of the #PfizerBioNTech vaccine. Not after 3 weeks the second shot, but only after 6 weeks. Really unwise. Political stunt work while there is no scientific proof yet that this is possible. Very unwise. #press conference #curfew @EMA_News @ECDC_EU

Tweet 12

February 23rd: I wish everyone more freedom, but could the press ask lots of questions tonight on what basis the restrictions are being relaxed now? Is this also the OMT advice? And something to do with vaccination pace/overview, planning and the testing society. Because why is this possible given the current circumstances #press conference

Finally, Tweeters presented the disagreement between two expert institutions as undermining the notion that expertise can establish the self-evidence of governmental action authoritatively. With regards to the question of how far apart the first and second dose of the vaccine should be scheduled, it became clear that two important institutions, the WHO, and the EMA, diverged in their initial assessments (Tweet 13). In this case, the WHO guideline to administer the second dose of vaccine 6 weeks after the first was presented as provisional and dependent on external circumstances.

Tweet 13

February 2nd: 3 or 6 weeks between the 2nd vaccination. First @hugodejonge says WHO advice says yes 6 weeks is possible, EMA says no 3 weeks. 15 min. Later @hugodejonge says we are still awaiting final advice from WHO #press conference

Utterances like these demonstrate that it is not always a viable option for a government to follow *the* expert advice. They rather must choose *which* expert advice is relevant to one's current decisions. Following this logic, the next question is how to explain the prioritization of one expert above the other. Consequentially, speculations about hidden and often insidious motives were once again abundant on Twitter. For instance, Tweet 14 features suspicion and distrust regarding the on-the-record purpose of vaccination, but no explicit conclusions are drawn. In Tweet 15, geopolitical interests are presented to trump public health considerations

regarding the procurement of non-Western COVID-19 vaccines. Finally, governmental misjudgement and personal failure were suspected to hide behind the selective use of expertise to justify policy decisions (Tweet 16).

Tweet 14

March 8th: #press conference @MinVWS Could it be that vaccination actually provokes new mutations in certain circumstances in some countries? Why did science previously teach us that an epidemic leads to natural immunity, and now they say that vaccination is the only solution?

Tweet 15

February 2nd: The chance that the EU institution EMA will approve the Sputnik vaccine is, of course, small. Because Russia. 'Russian Sputnik vaccine appears effective, experts call for EU use' | via @NOS #vaccination #vaccination strategy #press conference

Tweet 16

April 13th: Ohhh so it's just bullshit that 60-stop from astra zeneca. De Jonge just wants to use it first for people over 60 because his policy was a mess and it doesn't work out for him. #Press conference

The Tweets presented in this section depict the government's use of expertise as selective and inconsistent. Importantly, this is not the same as accusing the government of censoring heterodox opinions (e.g. Harambam, this volume). Instead, it casts doubt on the framing of certain decision to be self-evidently backed by experts, through posing follow-up questions that imply opportunistic use of expertise: Why listen to this expert and not the other? Why do you cite experts at this particular point in time but not in other contexts? So, while the governmental framing separated political judgment from public health decisions, the tweeting public questioned whether such a distinction was meaningful or even possible.

4.5 Motions: Topics

Finally, the topics in the motions are somewhat different. Table 4 demonstrates that the efficiency of the vaccination campaign is a reoccurring topic here as well. However, parliamentary motions tend to focus more on two other topics, namely the question of citizens' freedom to choose which vaccine they would like to receive and the prioritized vaccination of specific groups in the population (e.g., people over the age of 60, or healthcare professionals). Figure 3 shows the over-time changes in attention. The prioritized vaccination of specific target groups is initially the

main concern, but freedom of choice takes over and is dominant in March and April.

Table 4. Identified topics in motions

	Label	indicative words
topic1	priority of target groups	risk, first, serious, COVID-19, healthcare professionals, interest
topic2	efficiency of the vaccination campaign	second, corona vaccination, faster, European, stock, countries, Netherlands
topic3	freedom of choice	freedom of choice, acceptance, maximize, available, offer, choose

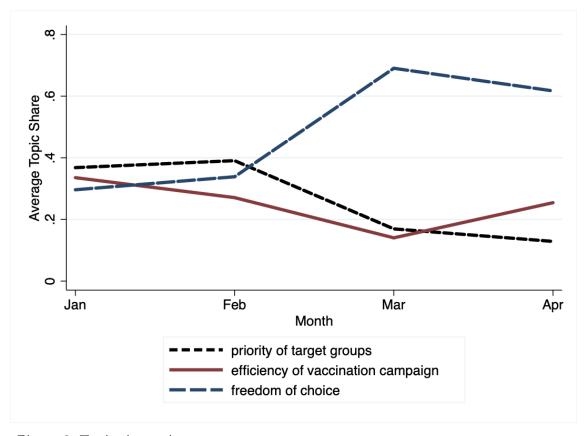


Figure 3. Topics in motions

4.6 Motions: Hidden moralities

4.6.1 Expert recommendations can be made to fit our plans for faster vaccinations

Synchronous to the topics discussed in press conferences, motions were dominated by the question of how to speed up the vaccination campaign. Members of the opposition were quick to point out that reducing the stockpile of vaccines would help increase the pace of vaccination (Wilders, January 13th: considering that hundreds of thousands of vaccines have not been used; the Cabinet requests to use all available vaccines in the next week).

Members of Parliament were explicitly rejecting the notion that the government is completely dependent upon vaccine deliveries and pointed out that the Netherlands is lagging behind other European countries with administering vaccines (Jetten, March 13th & Jetten Bergkamp, March 24th: noting that, based on the ECDC, the Netherlands has administered less stock of corona vaccines than other European countries; noting that there is a realistic expectation that vaccine deliveries will increase rather than decrease; noting that a first corona vaccination can already provide health benefits because it offers a certain degree of protection against severe symptoms and death; considering faster vaccination of hundreds of thousands of people can help to reduce the pressure on healthcare; The Parliament requests to administer the current stock of corona vaccines more quickly, taking into account all the recommendations of the Health Council).

By emphasising what could be gained by speeding up the vaccination campaign (reducing symptoms, hospitalizations and deaths), these motions are formulated noticeably more urgent compared to motions from January. In the last sentence, it is mentioned that speeding up vaccination should be in line with the Health Council's recommendations. This side-note refers to the initial guideline of waiting no longer than three weeks after the first shot until the second dose is administered. The guideline originated from the vaccine manufacturers and was later supported by the EMA to guarantee maximal effectiveness of the vaccination. What becomes visible in the motions put forward in March, is that Members of Parliament orient to this expert recommendation as flexible, should there be good enough reasons to make it so. The following example illustrates the operation of this reasoning in its most salient form (Bergkamp Wilders, March 24th: noting that COVID infections and hospitalizations are currently increasing; noting that recent British research shows that a first shot prevents 80% of hospital admissions; considering other countries already have a strategy to delay a second shot; considering that the delay of a second shot may increase the risk of new virus variants; In view of these developments, the government requests to again request an urgent advice from the

Health Council about the delay of a second shot and to explicitly discuss the effect of reducing hospital admissions more quickly).

The motion first presents various arguments, including references to research about a greatly decreased risk of hospitalization after the first dose and other countries' approaches favouring a delayed second shot. It concludes by requesting "urgent advice" regarding the delay of the second COVID shot from the Health Council and thereby effectively rendering it the only obstacle in the way of a whole variety of favourable outcomes.

4.6.2 Resolving uncertainty with freedom of choice

After several weeks of back and forth regarding the usage of the AstraZeneca vaccine, a final verdict was announced on the 8th of April: because its side-effects (which were rare already) occurred mostly in people younger than 60, it would only be offered to citizens older than 59 in the future. In response, multiple Members of Parliament issued motions that called for freedom of choice regarding the vaccine. Despite the striking similarity of these motions in terms of principle, they covered opposite sides of the argument. On the one hand, it was argued that elderly citizens had lost confidence in the vaccine and should therefore be free to choose another vaccine if they wanted to (Kuzu Stoffer, April 15th: noting that four in ten people older than 60 do not like the AstraZeneca vaccine; noting that Denmark has now completely discontinued the AstraZeneca vaccine and has suspended the administration of the Janssen vaccine; considering that the acceptance to vaccinate can be increased once citizens can choose for themselves which vaccine they receive; the government requests to give citizens freedom of choice about which vaccine they want to receive whenever that is possible; Wilders van Haga, April 22nd: The government requests to give people older than the age of 60 who do not want to be vaccinated with the AstraZeneca vaccine another vaccine).

On the other hand, Members of Parliament claimed that most people younger than 60 felt that the benefits of AstraZeneca outweighed the risks (Ploumen, April 15th: considering that for many people under the age of 60, including those in fragile health, the risks of a serious corona infection outweigh the risks of serious side effects, and a first shot protects them; considering that vaccination contributes not only to the protection of individuals, but also to the protection of society as a whole; The government requests to make it possible for vulnerable people under the age of 60 to benefit from vaccination with AstraZeneca vaccines in consultation with their GP if they fall outside the vaccination strategy or are leftover at the end of the day). Provided that these individuals are capable to make an informed choice, it should be possible for them to opt for the AstraZeneca vaccine (Paternotte, April 15th: noting that the Health Council has advised not to vaccinate anyone under the age of 60 with the AstraZeneca vaccine,

but that for most people in this group the benefits of this vaccine do outweigh the disadvantages; considering that there is a chance that such advice could also apply to other vaccines in the future and that people, when well informed, can make their own choice whether they still want to be vaccinated with these vaccines).

Ultimately, both approaches appeared to be designed to cushion the negative impact of the AstraZeneca commotion on vaccine acceptance: The first invited older citizens who now rejected AstraZeneca to be vaccinated with another vaccine. The second allowed younger advocates of vaccination to get early injections of a vaccine that had become abundant because it had recently been allocated to a much smaller target population.

5 DISCUSSION AND CONCLUSION

In the above we analysed how the government used scientific expertise in its effort to govern the COVID crisis in the first half of 2021. We first analysed the government framing of experts and expertise during official press conferences and then examined how their framings were responded to in Parliament (motions) and on social media (Twitter). It is important to reiterate that the responses on Twitter come from a distinct group of involved and opiniated citizens and cannot be considered a 'simple reflection' of the broader range of sentiments present in society. However, the motions in Parliament address largely the same moralities as the reactions on Twitter, indicating that the relevance of our findings on Twitter extend beyond the social media platform (see also KNAW, 2022; OVV, 2022).

At the beginning of the pandemic in early 2020, the government relied on the choices of a supposedly homogeneous group of experts (i.e. virologists) to guide policymaking (Figure 4, a). Nearly a year later, government communication no longer actively exposes the scientific basis of policymaking, as if the scientific evidence coincides seamlessly with the basis of public health policy, and thus with the choices of key political actors. (Figure 4, b). Political actors thereby portrayed themselves as the 'principal' rather than as the 'animator' of the message (Goffman, 1981). This suggested that the science behind the technology could be considered as settled, i.e., as nothing to worry or argue about. In addition, it rejected any suggestion that vaccination and vaccination coverage might not be the (perfect) solution (for example, what if vaccinated citizens could still transmit the disease?), even if these suggestions came from scientific circles. This stated self-evident basis of policymaking—so self-evident that public accountability was not necessary — changed radically when the safety of the AstraZeneca vaccine came into question. The government quickly fell back on revealing expert advice as the source of their actions, making flexible (or: selective) use of the various available sources (Figure 4, c). For example, the decision to use the AstraZeneca vaccine only for citizens over the age of 59, although the EMA found it safe enough for the entire population, was presented as based on a risk-benefit analysis by the Dutch Health Council.

Based on our analysis of responses to the governmental framing, we argue that it was not so much the policies per se that were challenged, but the hidden moralities entwined with these measures, as viewed through the eyes of Tweeters and MPs. As with the onset of the coronavirus crisis in 2020 (Prettner et al., 2021), the government was accused again of being completely complacent about their own policies, while shifting the responsibility to citizens to end the crisis. Moreover, while the evidence of the measures themselves was regularly disputed, the underlying technocratic logic was ultimately not: they were the wrong facts, or the wrong experts, but not the idea of 'science for policy' or 'speaking truth to power' (Wildavsky, 1979) per se. In the parliamentary motions in particular, the scientific underpinning of the policy was portrayed as something in which one could be flexible, i.e., which one could 'bend' according to the circumstances. This pragmatic attitude was also reflected in the emphasis that MPs placed on freedom of choice in vaccination after the AstraZeneca commotion: freedom of choice is fine as long as it increases the total vaccination coverage.

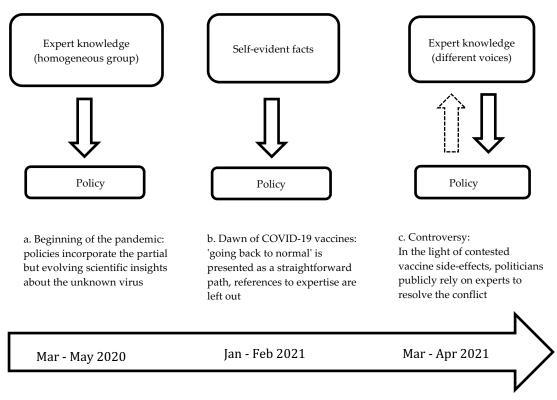


Figure 4. Relationship between scientific expertise and policy making over time, as presented by key political actors.

Thus, we see a continuity of the *dominant technocratic logic*, underlining and assuming the direct line between the available scientific evidence and the direction of policymaking, yet with a notable difference in the way by which the government enlisted the science. Where in the previous period we found that 'Listen to the expert' was the predominant government message (Prettner et al., 2021), in 2021 we see a shift towards 'We've got the technology' (read: vaccine), where citizens are told to take responsibility to get vaccinated, or their bright future may not come true. As a result, the government failed to clarify (and publicly take responsibility for) the *inherent trade-offs between science and politics*, both by openly justifying their policies as merely science-based when AstraZeneca became controversial, *and* by omitting the scientific basis for vaccination at the start of the vaccination campaign. That suggests a logic of interaction in which the government relies on institutionalised science for their input and relates to society only to communicate their decisions.

A key postulate in the literature on authority of governance is that it depends on the quality of the communication (Hajer, 2009). We note that the Dutch government has chosen to communicate according to a framing strategy that was very much fixed, to the detriment of an alternative strategy, based on dialogue. Dialogue, in contrast to debate, explores routinely hidden moralities, i.e., that what people deem important, in relationships, in life, as a person - and brings them to the surface for discussion (cf. Durnová, 2019; van Burgsteden & te Molder, 2022; van Burgsteden et al., 2022a, 2022b). Whereas debate can be useful in that it provides an overview of the different existing positions, the focus on defending one's own position hinders people's attempts to better understand and overcome their differences. In the case of dialogue, the government would have acknowledged people's concerns or critical comments by explaining their chosen course of action in light of a pro-active, public consideration of routinely hidden moralities, thereby transforming them into explicit values that can be weighed by broader publics.

In a series of studies, van Burgsteden (2022) found that for the citizens themselves, dialogue was treated as dialogue only when *differences were articulated*, at the expense of moving the conversation forward, and visibly in the service of better understanding. This means dialogue is not so much easy as difficult, and because moralities are brought to the surface and turned into values to be discussed, it can sometimes be harsh and ugly. The studies also showed, however, that dialogic moments were possible even in debates and information sessions, i.e., contexts that were not explicitly organized to engage in dialogue (ibid.). In this sense, dialogue is not so much a practical activity as a listening exercise. The key to listening in the first place is transparency about the underlying morality of

policymaking, that is, how decisions were arrived at, balancing one concern, interest, or uncertainty against another, including in terms of the scientific evidence relied on, so that it can be reflected on collectively. This attitude should be visible in all public expressions by governments, from press conferences to deliberations in parliament. Instead of focusing only on discrete and thus visible (stakeholder) participation and citizens' councils, our study encourages governments to enhance the learning capacity of government itself, by opening itself up to discussing usually hidden moralities, so that it can respond quickly to changing coalitions of citizens at unforeseen or difficult to foresee moments. Such moments of dialogue are crucial for citizens, who need a listening ear more than the few moments in the year when the government explicitly invites them to a 'proper' dialogue.

We conclude by returning to the question of governmental trustworthiness in times of crisis. As discussed, the Dutch government made significant changes to their framing of expertise, noticeably between 2020 and 2021 (Figure 4), but the results of these changes on public trust were questionable at best (Schmeets & Exel, 2022). In this article, we have argued that to demonstrate trustworthiness as governmental actors, a shift from a technocratic model to one of dialogue is necessary, reaching beyond the critical group of citizens found on Twitter or in Parliament. In the dialogue model, fundamental dimensions of trust such as integrity, competence, consistency or accountability (for an overview, see Liu & Mehta, 2021) are openly discussed and continuously evaluated. In the absence of dialogue, these hidden moralities are treated as redundant or even taboo to talk about. While Harambam (this volume) suggests that the exclusive focus on vaccination as a solution to the pandemic created distrust, we argue that the lack of transparency on exactly what considerations led to this one-solution approach was treated as unreliable. It is only when the hidden morality of public debate is brought to the fore that assessments of and changes to government behaviour in times of crisis can become meaningful to its critics. This can be a first step towards a more trusting relationship between government and citizens.

REFERENCES

Abbey, E. J., Khalifa, B. A., Oduwole, M. O., Ayeh, S. K., Nudotor, R. D., Salia, E. L., Lasisi, O., Bennett, S., Yusuf, H. E., & Agwu, A. L. (2020). The Global Health Security Index is not predictive of coronavirus pandemic responses among Organization for Economic Cooperation and Development countries. PLoS One, 15(10), e0239398-e0239398.

- Bargain, O., & Aminjonov, U. (2020). Trust and compliance to public health policies in times of COVID-19. Journal of Public Economics, 192, 104316.
- Blair, R. A., Morse, B. S., & Tsai, L. L. (2017). Public health and public trust: Survey evidence from the Ebola Virus Disease epidemic in Liberia. Social Science & Medicine, 172, 89-97.
- Bollyky, T. J., Hulland, E. N., Barber, R. M., Collins, J. K., Kiernan, S., Moses, M., Pigott, D. M., Reiner Jr, R. C., Sorensen, R. J., & Abbafati, C. (2022). Pandemic preparedness and COVID-19: an exploratory analysis of infection and fatality rates, and contextual factors associated with preparedness in 177 countries, from Jan 1, 2020, to Sept 30, 2021. The Lancet, 399(10334), 1489-1512.
- Crosby, S., Dieleman, J., Kiernan, S., & Bollyky, T. (2020). All bets are off for measuring pandemic preparedness. Retrieved from https://www.thinkglobalhealth.org/article/all-bets-are-measuring-pandemic-preparedness.
- De Swaan, A. (1988). In care of the state: health care, education and welfare in Europe and the USA in the modern era. Oxford: Oxford University Press.
- Demasi, M. A. (2020). Post truth politics and discursive psychology. Social and Personality Psychology Compass, 14(9), e12556.
- Dewulf, A., Gray, B., Putnam, L., Lewicki, R., Aarts, N., Bouwen, R., & van Woerkum, C. (2009). Disentangling approaches to framing in conflict and negotiation research: A meta-paradigmatic perspective. Human Relations, 62(2), 155-193.
- Durnová, A. (2019). Understanding emotions in post-factual politics: negotiating truth. Cheltenham: Edward Elgar Publishing.
- Edwards, D. (1997). Discourse and cognition. London: Sage.
- Edwards, D., & Potter, J. (1992). Discursive psychology. London: Sage.
- Edwards, D., & Potter, J. (2005). Discursive psychology, mental states and descriptions. In H. te Molder & J. Potter (Eds.), Conversation and cognition (pp. 241 260). Cambridge: Cambridge University Press.
- Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. Journal of Communication, 43(4), 51-58.
- Fischer, F. (1990). Technocracy and the Politics of Expertise. London: Sage.
- Gilles, I., Bangerter, A., Clémence, A., Green, E. G., Krings, F., Staerklé, C., & Wagner-Egger, P. (2011). Trust in medical organizations predicts pandemic (H1N1) 2009 vaccination behavior and perceived efficacy of protection measures in the Swiss public. European Journal of Epidemiology, 26(3), 203-210.
- Goffman, E. (1981). Forms of talk. Pennsylvania: University of Pennsylvania Press.

- Hajer, M. A. (2009). Authoritative governance: Policy making in the age of mediatization. Oxford: Oxford University Press.
- Han, Q., Zheng, B., Cristea, M., Agostini, M., Bélanger, J. J., Gützkow, B., Kreienkamp, J., Leander, N. P., & Collaboration, P. (2021). Trust in government regarding COVID-19 and its associations with preventive health behaviour and prosocial behaviour during the pandemic: a cross-sectional and longitudinal study. Psychological Medicine, 53(1), 149-159.
- Harambam, J. (this volume). Distrusting Consensus: How a Uniform Corona Pandemic Narrative Fostered Suspicion and Conspiracy Theories. Journal of Digital Social Research.
- Hochschild, A. (2016). Strangers in Their Own Land: Anger and Mourning on the American Right. New York: New Press.
- Hoekstra, H., Jonker, T., & van der Veer, N. (2022). Nationale Social Media Onderzoek 2022. Retrieved from https://www.newcom.nl/social-media-onderzoek-2022/.
- Jasanoff, S. (2004). States of knowledge. Abingdon, UK: Taylor & Francis.
- Jasanoff, S., & Simmet, H. R. (2017). No funeral bells: Public reason in a 'post-truth' age. Social Studies of Science, 47(5), 751-770.
- KNAW. (2022). The pandemic academic. How COVID-19 has impacted the research community. Retrieved from https://storage.knaw.nl/2022-07/Advies-The-pandemic-academic-20220705-def.pdf.
- Kruikemeier, S. (2014). How political candidates use Twitter and the impact on votes. Computers in Human Behavior, 34, 131-139.
- Liu, B. F., & Mehta, A. M. (2021). From the periphery and toward a centralized model for trust in government risk and disaster communication. Journal of Risk Research, 24(7), 853-869.
- Morse, B., Grépin, K. A., Blair, R. A., & Tsai, L. (2016). Patterns of demand for non-Ebola health services during and after the Ebola outbreak: panel survey evidence from Monrovia, Liberia. BMJ Global Health, 1(1), 1-8.
- Nyhan, B., & Reifler, J. (2015). Does correcting myths about the flu vaccine work? An experimental evaluation of the effects of corrective information. Vaccine, 33(3), 459-464.
- Nyhan, B., Reifler, J., Richey, S., & Freed, G. L. (2014). Effective messages in vaccine promotion: a randomized trial. Pediatrics, 133(4), e835-842.
- Oudenampsen, M. (2013). Explaining the Swing to the Right: the Dutch Debate on the Rise of Right-wing Populism. In R. Wodak, N. M. Khosravi, & B. Mral (Eds.), Right-wing populism in Europe (pp. 191-208). London: Bloomsbury Academic.

- OVV (2022). Aanpak coronacrisis Deel 2: september 2020 juli 2021. Retrieved from https://www.onderzoeksraad.nl/nl/aanpak-coronacrisis-deel2.
- Prati, G., Pietrantoni, L., & Zani, B. (2011). Compliance with recommendations for pandemic influenza H1N1 2009: the role of trust and personal beliefs. Health Education Research, 26(5), 761-769.
- Prettner, R., te Molder, H., Hajer, M. A., & Vliegenthart, R. (2021). Staging Expertise in Times of COVID-19: An Analysis of the Science-Policy-Society Interface in the Dutch" Intelligent Lockdown". Frontiers in Communication, 6, 1-12.
- Prettner, R., te Molder, H., & Humă, B. (2023). How a 'good parent' decides whether to have their child vaccinated. Demonstrating independence and deliberation in Dutch consultations on childhood vaccination [Manuscript submitted for publication]. Department of Language, Literature and Communication. Vrije Universiteit Amsterdam.
- Reich, J. A. (2016). Calling the shots. New York: New York University Press.
- Sacks, H., Schegloff, E. A., & Jefferson, G. (1974). A Simplest Systematics for the Organization of Turn-Taking for Conversation. Language, 4(4 Part 1), 696-735.
- Schmeets, H., & Exel, J. (2022). Vertrouwen in medemens en instituties voor en tijdens de pandemie. Retrieved from https://www.cbs.nl/nl-nl/longread/statistische-trends/2022/vertrouwen-in-medemens-en-instituties-voor-en-tijdens-de-pandemie.
- Schwarz, C. (2018). Idagibbs: A command for topic modeling in Stata using latent Dirichlet allocation. The Stata Journal, 18(1), 101-117.
- Shanka, M. S., & Menebo, M. M. (2022). When and How Trust in Government Leads to Compliance with COVID-19 Precautionary Measures. Journal of Business Research, 139, 1275-1283.
- Shapin, S. (2007). Expertise, common sense, and the Atkins diet. In J. Porter & P. W. B. Phillips (Eds.), Public science in liberal democracy (pp. 174-193). Toronto: University of Toronto Press.
- Snow, D. A., & Corrigall-Brown, C. (2005). Falling on deaf ears:
 Confronting the prospect of nonresonant frames. In D. Croteau, W. Hoynes, & C. Ryan (Eds.), Rhyming hope and history: Activists, academics, and social movement scholarship (pp. 222 238).
 Minneapolis: University of Minnesota Press.
- Swierstra, T., & Rip, A. (2007). Nano-ethics as NEST-ethics: patterns of moral argumentation about new and emerging science and technology. Nanoethics, 1(1), 3-20.
- Swierstra, T., Stemerding, D., & Boenink, M. (2009). Exploring Techno-Moral Change: The Case Of The Obesitypill. In P. Sollie & M. Duwell

- (Eds.), Evaluating New Technologies (pp. 119-138). Dordrecht: Springer.
- te Molder, H. (2012). Discourse communities as catalysts for science and technology communication. In L. J. Phillips, A. Carvalho, & J. Doyle (Eds.), Citizen Voices: Performing Public Participation in Science and Environment Communication (pp. 97-118). Intellect/The University of Chicago Press.
- te Molder, H. (2014, August 28). The Hidden Moralities of Science and Technology. Communicating Science and Technology in the Life Science Context [Inaugural Lecture]. Wageningen University. Available at https://www.wur.nl/nl/nieuws/wetenschappelijke-kennis-is-niet-het-monopolie-van-wetenschappers.htm
- te Molder, H., & Potter, J. (Eds.) (2005). Conversation and cognition. Cambridge: Cambridge University Press.
- van Burgsteden, L., & te Molder, H. (2022). Shelving Issues: Patrolling the Boundaries of Democratic Discussion in Public Meetings. Journal of Language and Social Psychology, 41(6), 685-715.
- van Burgsteden, L., te Molder, H., & Raymond, G. (2022a). Going against the interactional tide: The accomplishment of dialogic moments from a conversation analytic perspective. Discourse Studies, 24(4), 471-490.
- van Burgsteden, L., te Molder, H., & Raymond, G. (2022b). The turn-byturn unfolding of "dialogue": Examining participants' orientations to moments of transformative engagement. Language & Communication, 82, 64-81.
- van Burgsteden, L. M. (2022). From debate to dialogue: A conversation analysis of public meetings on the health effects of livestock farming in the Netherlands. (PhD-Thesis), Vrije Universiteit Amsterdam, Amsterdam.
- van der Weerd, W., Timmermans, D. R., Beaujean, D. J., Oudhoff, J., & van Steenbergen, J. E. (2011). Monitoring the level of government trust, risk perception and intention of the general public to adopt protective measures during the influenza A (H1N1) pandemic in the Netherlands. BMC public health, 11(1), 1-12.
- van Dijck, J., & Alinejad, D. (2020). Social media and trust in scientific expertise: Debating the Covid-19 pandemic in the Netherlands. Social Media+ Society, 6(4), 1-11.
- van Dooren, W., & Noordegraaf, M. (2020). Staging science: Authoritativeness and fragility of models and measurement in the COVID - 19 crisis. Public Administration Review, 80(4), 610-615.
- Versteeg, W., & te Molder, H. (2018). 'You must know what you mean when you say that': the morality of knowledge claims about ADHD in radio phone ins. Sociology of Health & Illness, 40(4), 718-734.

- Vliegenthart, R., & van Zoonen, L. (2011). Power to the frame: Bringing sociology back to frame analysis. European Journal of Communication, 26(2), 101-115.
- WHO (2021). COVID-19: make it the last pandemic. Retrieved from https://theindependentpanel.org/wp-content/uploads/2021/05/COVID-19-Make-it-the-Last-Pandemic_final.pdf.
- Wiggins, S. (2017). Discursive psychology: Theory, method and applications. London: Sage.
- Wildavsky, A. B. (1979). Speaking Truth to Power: The Art and Craft of Policy Analysis. New Brunswick: Transaction Publishers.