2 Translating Knowledge, Establishing Trust

The role of social media in communicating the COVID-19 pandemic in the Netherlands

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Introduction

At a time of crisis, social media are a double-edged sword in health communication. They can be weaponized as conduits for misinformation and for undermining institutional and professional trust (Llewellyn 2020); at the same time, they can be utilized as valuable tools for public engagement and information distribution. Watching the corona pandemic unfold in 2020, we noticed how the epidemiology of the disease is intricately entwined with the epistemology of health communication and the practices of spreading reliable information (Bjørkdahl and Carlsen 2019). The higher stakes in this contested process prompt our two research questions central to this article: How are social media dynamics deployed to both undermine *and* enhance public trust in scientific expertise during a health crisis? And what does this mean for health communication as an intricate process of information exchange, public debate and knowledge translation?

To answer these questions, we first reflect in the second section on the notions of 'transmission' versus 'translation' in the process of health communication (Yang 2020). We will use these notions to discuss how, over the past few decades, science communication has shifted from an *institutional* model towards a *networked* model (Botsman 2017). Foregrounding the notion of communication as 'translation' we argue that in recent processes of health communication, social media have emerged as propellers of networked information flows rather than as instruments of top-down information transmission.

In the third and fourth sections, we use these two models of health communication to examine the role of social media in the public

debate involving scientists (experts), government (policy-makers), mass media (journalists) and citizens (non-experts) during the first four months after the COVID-19 outbreak in the Netherlands. Analysing this public exchange in two stages, we hypothesize that the networked model of science communication *transforms*, rather than replaces, the institutional model by adapting the logic and dynamics of social media to enhance institutional authority. We conclude by reflecting on what this transformation means for communication professionals trying to navigate between retaining institutional trust and adapting to divergent information flows in a volatile media landscape.

From an institutional to a networked model of health communication

For the past half century, science communication in Western-European societies has predominantly relied on a conventional model, characterized by linear flows of information between professional actors acting as gatekeeping forces. We trust science and scientists as institutions of knowledge-making; government and its (elected) officials as institutions of policy-making; and media and journalists as institutions of public sense-making. All three institutions are aimed at constructing common knowledge, common ground and common sense. The institutional model is grounded in shared assumptions on *whom* to trust, *what* to trust and *how* trust gets *built* (Oreskes 2019).

In theory, the institutional model of science communication assumes linear vectors 'transmitting' information from experts to non-experts: scientists provide governments with relevant information so they can make informed decisions, while policy-makers inform news media and the public about the rationale behind their decisions, fostering democratic, open debates (Figure 2.1). In practice, such a model has never manifested in its pure form; scientific knowledge-making and evidence-informed policy-making, rather than being linear transmissions of knowledge, have always been part of a dynamic process in which expert voices—framed by scientific, governmental and media institutions—get interwoven with non-expert voices in the struggle for public consent (Weingart and Joubert 2019; Schäfer 2016; Van Dijck 1995).

The institutional 'transmission' model has also prevailed in health communication, enhancing the ideal of institutional filters and gatekeepers as pillars of public trust. More recently, communication scholars have introduced the notion of 'translation' as a more relevant concept for public information exchange, emphasizing the need for
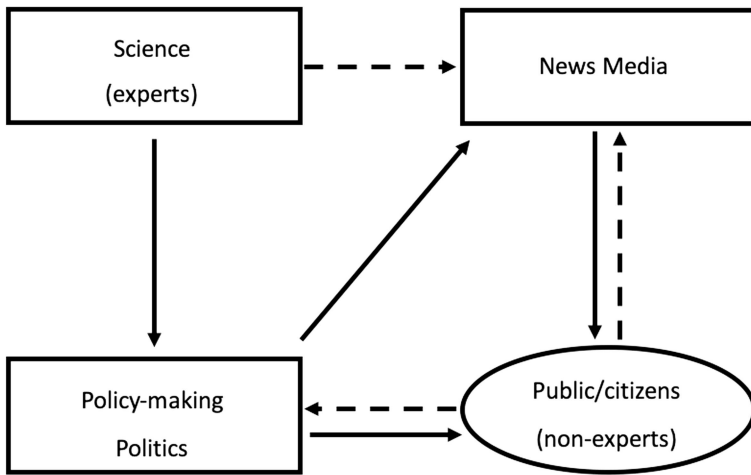
Figure 2.1 The institutional-transmission model of science communication.

new tropes in a rapidly changing media landscape. American media scholar Guobin Yang described the notion of translation as

> an ongoing conversation of learning, listening, and revision. It is dialogic and self-reflexive. Communicators often want to inform and enlighten others; translators must be prepared for self-enlightenment.
>
> (Yang 2020: 189)

The concept of translation regards communication no longer as a hierarchical and linear but as a dialogic and adaptive process. The concept of translation cannot be seen apart from the emergence of social media technologies gaining a central position in public communication in recent decades. According to Oxford economist Rachel Botsman, social media have allegedly 'turned trust on its head'; information that used to flow 'upwards to referees and regulators, to authorities and experts, to watchdogs and gatekeepers, is now flowing horizontally, in some instances to our fellow human beings and, in other cases, to programs and bots' (Botsman 2017: 8).

In contrast to the institutional-transmission model, we present the networked-translation model of health communication—a model that incorporates social media as a centrifugal force, changing the dynamics of information exchange conceptually from 'transmission' to 'translation'.

Experts and institutionally embedded health professionals no longer have a monopoly on informing politicians and mass media, as social media platforms afford every citizen and non-expert a communication channel. Non-expert voices gain clout through messages and videos they post, but also through the automated likes, shares, re-tweets and recommendations pushed by platforms; 'friends' and non-experts seem to be qualified to communicate information on par with institutions or experts. Slow-growing consensus based in fact-finding missions and processed through logical argument seems no longer the exclusive basis for 'evidence-informed' policy which in turn feeds mass media and the public debate. Rather, non-expert emotions, experience, sentiments, feelings and trends are distributed through social media and are processed algorithmically, affecting the information cycle in real time. The networked-translation model relies less on a one-to-many style of communication deploying text, context and logic to convince recipients, and more on a many-to-many style of communication that utilizes opinions, visuals, memes and short clips to mobilize crowds. As political economist William Davies (2018: 6) observes, 'information moves like a virus through a [social] network in far more erratic ways'. The circular vectors of information flows have been illustrated in Figure 2.2.
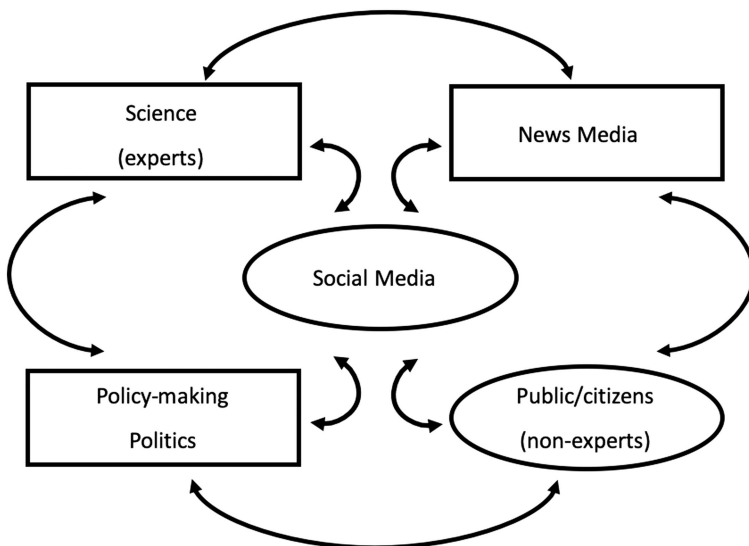

Figure 2.2 The networked-translation model of science communication.

This networked-translation model of science communication should be considered part of a wider transformation, where epistemic trust is at the heart of a socio-technical and a political power shift. In the twenty-first century, open democratic societies appear to be moving away from institutional-professional forms of trust towards networked-algorithmic forms of trust (Crawford 2019). The first is predicated on human-made rules of gate-keeping power governed by publicly accountable institutions and professionals, while the second one hinges on algorithmic filtering and is governed by proprietary business models, the dynamics of which are based on opaque rules (Van Dijck et al. 2018). And while the first model is informed mainly by concepts of top-down linear information transmission, the second one incorporates circular and dialogic communication modes. The convergence of these two models in a public debate prompts the question: How can social media be deployed to both undermine and enhance public trust in expertise during a health crisis?

A number of scholars have voiced their growing concerns about social media platforms undermining public trust, particularly with regards to the rise of disinformation and polarization. For instance, American communication theorist Zeynep Tufekçi (2019: n.p.) argues that 'the internet is increasingly a low-trust society—one where an assumption of pervasive fraud is simply built into the way many things function'. The shift away from the institutional model towards the networked model, according to Swedish media scholar Peter Dahlgren (2018), has led to a corrosion of trust that visibly affects *all* independent institutions entrusted with the anchoring of Western democratic values: science and health institutions, government agencies and news organizations. The question whether social media fuel institutional distrust or whether institutional distrust weaponizes social media has been at the core of scholars' concerns about fake news and disinformation years before the COVID-19 outbreak (Bradshaw and Howard 2018; Lazer et al. 2018; Benkler et al. 2018).

However, the idea of social media as agents of disinformation tends to obscure the underlying complexity involved in processes of knowledge-making, policy-making and sense-making. Particularly at the time of a health crisis, such as the COVID-19 pandemic, online platforms and social media can be regarded simultaneously as *levers of trust and distrust* in public debates. On the one hand, the proliferation of unfiltered voices through social media may cause a breakdown of trust in expert voices, officials and mainstream institutions, because 'the differentiation between individuals who are qualified to provide accurate information online and so-called armchair epidemiologists is

increasingly difficult' (Limaye et al. 2020: E278). On the other hand, social media platforms give citizens a voice, providing a counterweight 'to the felt lack of fit between experience and what we are offered by the official organs, and a corollary lack of trust in them' (Crawford 2019: 92). Citizens and non-experts may rightly claim their place next to expert voices in the public debate, if only to promote the transparency and accountability of policy-making (Song and Lee 2015). Australian scholar Anthony Pym studied how social media helped facilitate communication between the state government, scientists and multilingual communities; he argues that understanding distrust among various cultural groups is essential if government officials want to finetune information about the COVID-19 measures for diverse recipients (Pym 2020).

Each of the two models represents a distinct perspective on how health information is communicated and each model follows a different pattern of distributing information (transmission versus translation). And yet, it would be misleading to argue that the two models are antithetical or mutually exclusive; it would also be a mistake to argue that the second model has replaced or is replacing the first, resulting in the deterioration of institutional trust per se. Instead, we hypothesize in this article that the two models operate concurrently and are mutually transforming one another. While social media platforms can be deployed to undermine public trust in institutions and expert knowledge, they are also used by authorities and communication experts to reach a widespread audience in order to retain trust. The concept of translation may help us understand how the latter can adjust their practices to do so.

Against the more general backdrop of this transforming media landscape, we now want to turn to a specific case of health communication by analysing the public debate that evolved in the Netherlands right after the COVID-19 outbreak, between 1 March and 30 June 2020.[1] We analysed this public debate in two phases. The first stage of this process, described in the following section, was characterized by the 'emergency response' to the hasty lockdown—a highly volatile period when controlling the health narrative was crucial (Weible 2020; Garrett 2020). While social media proliferated as conduits for misinformation and conspiracy theories about the virus, they also served as useful gateways to scientific information (Hagen et al. 2018). The second stage of the debate, analysed in the fourth section, shifted attention from the medical emergency response to the broader concern about a 'smart exit strategy' from the lockdown. Looking for new strategies, policy-makers started to engage with citizens and

non-experts in the design of a post-corona society; by adapting networking and crowdsourcing tactics, they strategically tried to retain institutional trust and legitimacy. Analysing this two-tiered debate, we try to show how social media dynamics are deployed in various ways to both undermine *and* enhance public trust in expertise during a health crisis.

The 'crisis response' stage

The government's decision to impose a lockdown on the country in response to the threat of an unknown virus, which had blown over from China and northern Italy before hitting the Netherlands in early March of 2020, was unprecedented. The first stage of this response was characterized by high volatility and uncertainty—a period when evidence-informed policy-making almost coincided with public sense-making, due to the intense time pressure under which these communication processes evolved. The most poignant concerns raised during this phase were: Is the government doing enough or overreacting? How were drastic measures communicated: were they 'transmitted' hierarchically to mass audiences or was health information gradually 'translated' to specific target groups and communities and adjusted accordingly?

When the first of the corona patients started to fill the hospital beds, the Prime Minister staged a press conference on 12 March that triggered intense reactions of anxiety and insecurity (Rijksoverheid.nl 2020). A sweeping package of containment measures was announced, including working from home for all non-essential professionals, no more crowd events and social distancing, but no complete enforced lockdown. Later that week, stricter measures were announced by ministers of health Bruno Bruins and Hugo de Jonge. On 15 March, Mark Rutte addressed the nation in a live speech—a first in history attracting 7 million viewers—in which he laid out three possible scenarios to fight the pandemic: (1) controlled spread, to avoid the overwhelming of the health system; (2) complete lockdown; and (3) uncontrolled spread. The government's choice for the first scenario, Rutte said, was based on scientific evidence informing this policy to reduce the number of deaths and minimize socio-economic impact while building up herd immunity: 'I don't expect people just trust their Prime Minister, but they have every reason to trust the experts'. In the days after the televised address, according to one poll, public trust in the government climbed to 73%, up from 45% (NPO1, 17 March, 2020).

At this first stage, the government highlighted rational explanation and reliance on trusted health experts—perfectly in line with the institutional model of health communication. News organizations (TV and print) followed suit by featuring mostly health specialists in their news reports on the measures. The debate about whether the government was overreacting or underestimating the pandemic happened mostly in the opinion sections of newspapers, talk shows and on social media platforms. Critical questions were raised concerning the effectiveness of herd immunity. Due to the international nature of the crisis and the global flows of online information, the difference between the Dutch response and measures taken by other governments sharply entered the debate, pressing policy-makers to clarify in the mainstream media and in Parliament that herd immunity was never meant to be a 'goal' in itself but a welcome 'side-effect' of the controlled spread policy. In both cases, policy adjustments were prompted by counter-voices arguing that the government was not doing enough to stop the pandemic. At times of emergency management, policy-makers who are still used to one-directional dissemination of information were now exposed to 'vast amounts of information originating from the public' (Simon et al. 2015: 616), which they had to handle with care. Clearly, the government preferred 'imperfect policy-making' approved by public consent over 'perfect policy-making' causing public resistance and disapproval.

The emergency response also included strong initial warnings against untrustworthy information coming from unidentified sources, mostly through social media. Unsurprisingly, a barrage of misinformation and fake news had flooded individuals' Facebook news feeds, YouTube channels and Twitter feeds. The World Health Organization (WHO) quickly coined the term 'infodemic' to point at the 'overabundance of information—some accurate and some not—that makes it hard for people to find trustworthy sources and reliable guidance when they need it' (Wiederhold 2020: 1). False stories quickly went viral; for instance, advice falsely attributed to Stanford University stated that taking a few sips of warm water every 15 minutes was adequate prevention against infection. More dangerous were the numerous recommendations to drink pure alcohol, use a specific toothpaste, or drink bleach water. And downright rampant were the conspiracy theories that linked the spread of the coronavirus to the ultrafast wireless technology known as 5G. In less than two months, the Dutch police reported more than 25 incidents of vandalized telecom infrastructure, all connected to corona-related activists.

National and European governments quickly launched coordinated efforts to fight the infodemic (EU vs DiSiNFO 2020). Although social media platforms were not the exclusive distributors of misinformation—popular newspapers in the Netherlands also published sensational stories—the pressure to act responsibly as mediators of public information weighed heavily on their shoulders. After years of disputing social media platforms' inability to algorithmically filter out fake news and misinformation, on 17 March, a collaboration among the most popular social media platforms (Facebook, Instagram, Twitter, YouTube, Reddit and LinkedIn) announced global measures to curb the threat (NU.nl, 17 March, 2020). First, Facebook and YouTube started to collaborate with the WHO, the Rijksinstituut voor Volksgezondheid en Milieu (RIVM, the Dutch Institute for Public Health) and the Dutch government by linking users to official information as well as to specially produced video clips. Second, Facebook and Twitter put up concerted efforts to block false stories of 'miracle cures' and downgrade dubious conspiracy theories in their recommendations. YouTube promised to remove all videos suggesting a relation between 5G wireless technology and the coronavirus. More remarkably, the Dutch government actively fought misinformation using various online strategies. In early April, they started to hire vloggers and popular YouTube influencers, such as YouTuber Rutger Vink ('Furtjuh', 720,000 followers), to promote the coronavirus measures (RTL Nieuws, 2 April, 2020). Later, this strategy backfired when some of these influencers turned their back on health authorities' messages and started to support dubious anti-government groups. In more than one respect, government officials learned from this experience that information is not received the same by different communities and that communicative strategies require constant translation and readjustment.

Legacy media unequivocally pointed to social media networks as perpetrators of the infodemic, while strategically reclaiming their institutional authority as trusted channels. During the first two weeks of the outbreak, Dutch national television broadcast two prime-time television shows titled 'Corona: Facts and Fables' (NOS, 13 March, 2020). The format featured an anchor reading out loud questions sent by viewers and posted on social media; they were answered by medical experts, including RIVM Director Jaap van Dissel, and by national and local policy-makers, such as Minister of Medical Care, Bruno Bruins. Mainstream news media almost unanimously conformed to the crisis response frame, showing how the system got stretched to its limits while experts explained the urgency of the

situation. Daily statistics and predictive models dominated the headlines of legacy news media. A majority of news reports between mid-March and mid-April assumed the narrative frame of a 'race against the clock' where the robustness of medical institutions was at risk. Visuals showing ICUs filled with medical equipment, nurses and doctors were alternated with images of coffins and improvised mortuaries from Italy, underscoring predictions of the dire straits the Dutch health system would face if it collapsed.

Interestingly, the images that circulated through social media, while equally urgent, were different in nature. Social media networks appeared the preferred means of medical staff and patients to communicate their feelings and observations; they helped 'experiential witnesses' to act as embedded citizen-journalists and cool-headed reporters from the battle field. For patients in isolation, receiving social media messages and clips from their family and friends provided great comfort, and their self-recorded video messages from the ICU frequently went viral. For medical staff working in the frontlines of corona care—an area off limits to journalists—social media clips helped mediate their emotional narratives about death and suffering. Several doctors and nurses became instant celebrities on YouTube and Facebook, even to the point where 'established' influencers promoted these professionals' self-recorded clips on their channels. Social media also served as 'weapons of mass appreciation' when users rallied support for healthcare workers by staging, recording and distributing spontaneous public applause sessions. This communication style propelled by social media turned out to be immensely popular, leading the public news channel to quickly launch a new daily programme called 'Frontberichten' ('Messages from the front') (NPO2, 20 March, 2020). Its format was a simple 15-minute concatenation of video clips self-recorded by nurses, doctors, ambulance staff and by patients hospitalized in various parts of the country. The programme resembled a televised Facebook news feed—an instance of legacy media borrowing the 'live streaming' strategy preferred by social media.

In sum, the institutional model of health communication clearly reigned the emergency response phase. Expert voices were in the lead; the government sought the exclusive advice of medical and scientific experts; evidence-informed policy-making got distributed by mass media. However, policy-makers and news media effectively countered and co-opted non-expert attacks by deploying its own social media dynamics, thus amplifying their own authority. And even if social media was disturbingly weaponized to sow distrust and propel misinformation, the institutions of government and mass media also

adopted the strengths of social media—its distribution power, logic and style—to enhance their authority and gain the public's trust. In other words, the two models of health communication turned out to be less distinct as they appear. Social media appeared as instruments of transmission *and translation*, requiring constant interaction and adjustment between health experts, government officials, mass media and citizens. The power of the networked model as a tool for the constant readjustment of health information became even more poignant when the initial emergency response evolved into the next stage of the public debate: the smart exit strategy.

The 'smart exit strategy' stage

A month after the government imposed a self-described 'intelligent lockdown', the call for a 'smart opening up' started to put pressure on policy-makers who got caught between medical experts recommending to flatten the infection curve and economic experts urging to curb the budget deficit. With the pandemic and the public debate entering this new stage, the monopoly of medical experts on informing policy-makers was increasingly disputed: Who counts as an expert, what counts as proper advice and how should institutional authorities weigh information voiced by a variety of experts and multiple non-experts? Social media took on an increasingly pertinent role in the circulation of knowledge and information during this next stage of the public debate, focusing on developing smart exit strategies.

In early April of 2020, the disputation between those who support a prolonged lockdown and those who favour a less strict regime moved to the centre of public debate. Public policy-making is normally directed by a cost-benefit analysis: achieving maximum societal benefit for the least cost. But at the height of the corona crisis, the public debate pushed a novel twist: How many deaths are we prepared to accept at what economic cost? Popular talk show host Jort Kelder—neither a medical professional nor an economic expert—allegedly voiced the concerns of entrepreneurs and business people when raising the question: How much money do we spend to save the lives of elderly and patients with underlying conditions—including obesity and smoking— whose deaths are immanent anyway (NPO1, 4 April, 2020)? The interview clip went viral and a storm erupted on Twitter, where both sides navigated public opinion. Policy-makers weathered the storm of sentiments by reclaiming institutional authority, asking why self-respecting media invited 'non-expert celebrities' to air uninformed and contested perspectives.

Gradually, government officials became aware of the need to involve nonmedical experts, professionals and non-experts from civil society to shape future exit strategies. In an attempt to open up the small circle of expertise to broader input, Minister of Economic Affairs Eric Wiebes put himself at the helm of an effort to develop the 'one-and-a-half-metre society'—a model for opening up businesses and public life while abiding by the stringent measures for social distancing. Entrepreneurs had started to complain that the economy was now in the 'intensive care' while governmental policy-making continued to be dictated by the 'medical establishment'. Wiebes had to carefully weigh his 'smart opening up' strategy against the still reigning medical emergency response narrative. He asked institutions, including schools, sports clubs and public transport to help engineer solutions to rekindle economic activity; he also invited restaurants, office workers and shop owners to creatively balance off paced customer traffic with economic viability. Individuals and small business enthusiastically sent in their solutions, such as turning underused hotel rooms into office space, while artists and designers offered their help to transform existing spaces.

When Prime Minister Rutte announced, on 21 April, that the smart lockdown had to be prolonged for another month, arguing that the complex practicalities of the one-and-a-half-metre society did not yet align with epidemiologists' recommendations, his announcement was met with resignation and disbelief. Despite the government's attempts to crowdsource technical, medical, economic and social solutions, a mounting choir of critical voices complained that public policy-making was still exclusively primed by an 'expertocracy' of medical authorities. Various commentators started to call for a reassessment of government measures, based on more and broader expert-input; they required more transparency from the government in opening up their arguments for policy choices (NRC Handelsblad, 27 April 2020; NPO2, 25 April, 2020). In order to retain trust, policy-makers felt the heat to gauge public sentiment against scientific rationale, and to weigh experts' limited judgment against strong public appeals to weigh counter-arguments and communal emotions.

Two such appeals evolved in May and June. The first concerned media celebrity and opinion poll strategist Maurice de Hond, who launched a public dispute with the RIVM. He reasoned that the proven possibility of airborne (aerosol) transmission as one of the modes of transmission of COVID-19 was cause to dismiss the government's social distancing measure on scientific grounds. Later in

July, the second stage of the pandemics claim was seconded by a group of mostly nonmedical scientists proposing 'emerging evidence' of airborne spread to the WHO, urging the global body to update its guidance on how COVID-19 passes between people. The second group calling into question the government's preferred exit strategy was a grassroots movement called 'Viruswaanzin' ('Virus idiocy'); it was organized by self-proclaimed non-expert Willem Engel whose effort to annul the government's corona policy gained clout through Facebook, YouTube and Twitter. After his video clip went viral, over 500,000 Dutch citizens signed a petition protesting the prolonged enforcement of social distancing measures in all public places. The protesters took their case to court, where the judge dismissed their claim that the government had no legitimate grounds for its one-and-a-half-metre policy and should therefore disband it (Volkskrant, 25 June, 2020). Although different in scope and result, both public appeals called upon ordinary citizens to dispute 'scientific evidence' as the ground for the government's legitimacy to enforce unpopular policies. Both groups framed their struggles as battles for transparency and democracy, deploying the power of social media to enforce checks and balances on government policies.

During the second stage of the pandemic, we saw many more instances of nonexpert voices thrusting forward their claims to provide 'alternative' scientific evidence through social media channels—claims that were subsequently discussed by legacy news media. Scientists and policy-makers were repeatedly challenged to adjust their information strategies; their attempts to appropriate social media logic and dynamics were not always successful and sometimes even backfired. But along the way, they managed to adapt their strategies by translating information to various target groups and through different channels, allowing more types of arguments and rendering the debate between officials and citizens more dialogic. Although the attacks on institutions and institutional expertise never led to a serious decline of trust in their legitimacy in the Netherlands, there is a notable difference between the 'crisis response' stage and the 'smart exit' phase of the public debate involving COVID-19 related health information; we will reflect on this in the last section.

Conclusion

So what does the Dutch public debate on COVID-19 response teach us about health communication as an intricate process of information exchange, public debate and knowledge translation? We can take away

at least three important points from our analysis of the two-tiered debate: (1) Social media are deployed to both undermine and enhance public trust in scientific expertise during a health crisis; (2) the networked-translation model of health communication has transformed rather than replaced the institutional-transmission model; and (3) institutional actors engaged in this process need to develop distinct communication strategies at the various stages of a public debate. Since health crises like this corona pandemic are likely to have significant impact on institutional processes of communication in the future, we want to reflect on each of these three insights.

First, it is crucial to acknowledge that social media are indeed two-sided swords of health communication. They facilitate the rampant distribution of misinformation about COVID-19 at the same time and by the same means as they can help officials to spread accurate information about the disease. The strategy of institutions to adopt social media platforms to fight misinformation and to collaborate with platform owners to counter the infodemic, while inevitable, is not without risks. Hiring YouTube influencers to spread government rules about social distancing and other preventive measures may work well one day; the next day, the same influencers may propagate messages that defy the official one, because they are paid by another interested party to do so. It is important to keep in mind that social media platforms are commercial environments serving the marketplace of ideas rather than the common good (Van Dijck et al. 2018; Napoli 2019).

Second, it may be comforting to conclude from the above analysis that the public's trust is still firmly anchored in the expert knowledge of professionals and embedded in authoritative contexts. However, the increasing pressure from social media platforms assuming a central position in the networked distribution of information marks a significant transformation of the institutional model by increasingly including elements of translation. Unsurprisingly, social media platforms are heavily invested in gaining a position of institutional authority themselves. In the midst of the corona crisis, only 21% of all Dutch users trusted social media as reliable news sources, compared to 63% who trust news organizations, even though users receive more than 50% of their news through social media channels (NU.nl, 12 May, 2020). Scientists, policy-makers and professional journalists have come to rely on social media networks to receive and send information, because these platforms allow access to the public debate in various direct ways. For public institutions to become dependent on major online channels, whose technological

features and business models are squarely at odds with their own institutional processes, they need to exercise constant scrutiny and keen awareness of the risks and benefits involved in borrowing social media tactics, mechanics and style. Therefore, professional health communicators need to be constantly aware of the affordances of various social media platforms, as well as the differences between user communities.

Third, looking at the two stages of the public debate in the period following the COVID-19 outbreak, we have noticed that the process of health communication during the 'crisis response' phase was different from the 'smart exit' phase, requiring different strategies from institutions in general and from policy-makers in particular. Although there is a fair amount of relevant research about health communication strategies during a time of crisis (Chon and Park 2021; Oh et al. 2020), research on the phase following the emergency is rather scarce. During the 'crisis response' stage, the public debate roughly followed the linear vectors of information projected in the institutional model, assigning authority to scientific experts and government voices. The second phase, however, reflected the capricious flows of the networked model, allowing more space to non-experts and citizens, whose voices, amplified by social media, gained traction in unexpected and inexplicable ways, hence requiring more 'translational skills' from policy-makers and professional communicators. Obviously, they have to learn how to navigate complex new information environments at various stages of the debate; they have to engage with divergent kinds of stakeholders and understand the power of social media as a centrifugal force in communication processes (Duffy 2018).

Looking at the COVID-19 public debate in the Netherlands, we can conclude from our analysis that non-expert voices expressed through social media channels have substantial impact on the translation of health information and the steering of the public debate, particularly when the immediate crisis response yields to a less urgent phase. The transformed nature of health science communication process unmistakably impacts the public's trust in institutions. More comparative and empirical research is needed to investigate how various models of science communication contribute to long-term trust in science and policy-making (Schäfer 2016). Indeed, for scientists, policy-makers and journalists to navigate and control the new reality propelled by a networked-translation model of health communication, it is important to understand how they can refurbish institutional trust to shape information flows in this constantly changing media landscape.

Acknowledgements

Note

1 We collected and analysed official policy documents on government sites (Rijksoverheid.nl), ministry's press conferences, articles from mass media outlets such as television (NOS Nieuws; talkshows from NPO1, NPO2 and NPO3; special COVID-19-related programming on public broadcasting channels and RTL Nieuws) and newspapers and sites (NRC Handelsblad, Volkskrant; NU.nl). Media sources appear in a seperate list below.

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