

Communicating Corona: How Science Can Harness New Media during a Pandemic

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Introduction

The COVID-19 pandemic has presented a major challenge to public health and the field of technical communication across the globe: how can medical experts quickly and effectively convey their highly specialized knowledge in ways that instruct, inform, and persuade non-specialists when infection rates are rising?

In Germany, two instances of German-language digital media—a podcast series titled *Das Coronavirus-Update* and the *YouTube* channel *maiLab*—demonstrate how scientists can quickly engage and inform audiences and thereby have a major impact on public health.

Background



Fig. 1: "Dr. Christian Drosten"

Dr. Mai Thi
Nguyen-Kim,
German chemist
and host of the
scientific *YouTube*channel *maiLab*.



Dr. Christian Drosten,

Institute of Virology

hospital and expert on

the NDR podcast Das

Coronavirus-Update.

at Berlin's Charité

Director of the

Fig. 2: "Dr. Mai Thi Nguyen-Kim"

Methods

I conducted a rhetorical analysis of digital texts, using trans-scientific genre theory (communication from scientists to non-scientists), to analyze the German attitude towards science communication via digital modes, and how scientists can harness digital media to effectively inform and instruct the public.

Results

During the first few weeks of the pandemic, as the first COVID-19 cases emerged in Germany, uncertainty and fear started to develop within the German public.

Das Coronavirus-Update with Dr. Christian Drosten was able to counteract these emotions by providing fast, factual, and honest information over the entire span of the pandemic, producing more than 80 episodes to date.

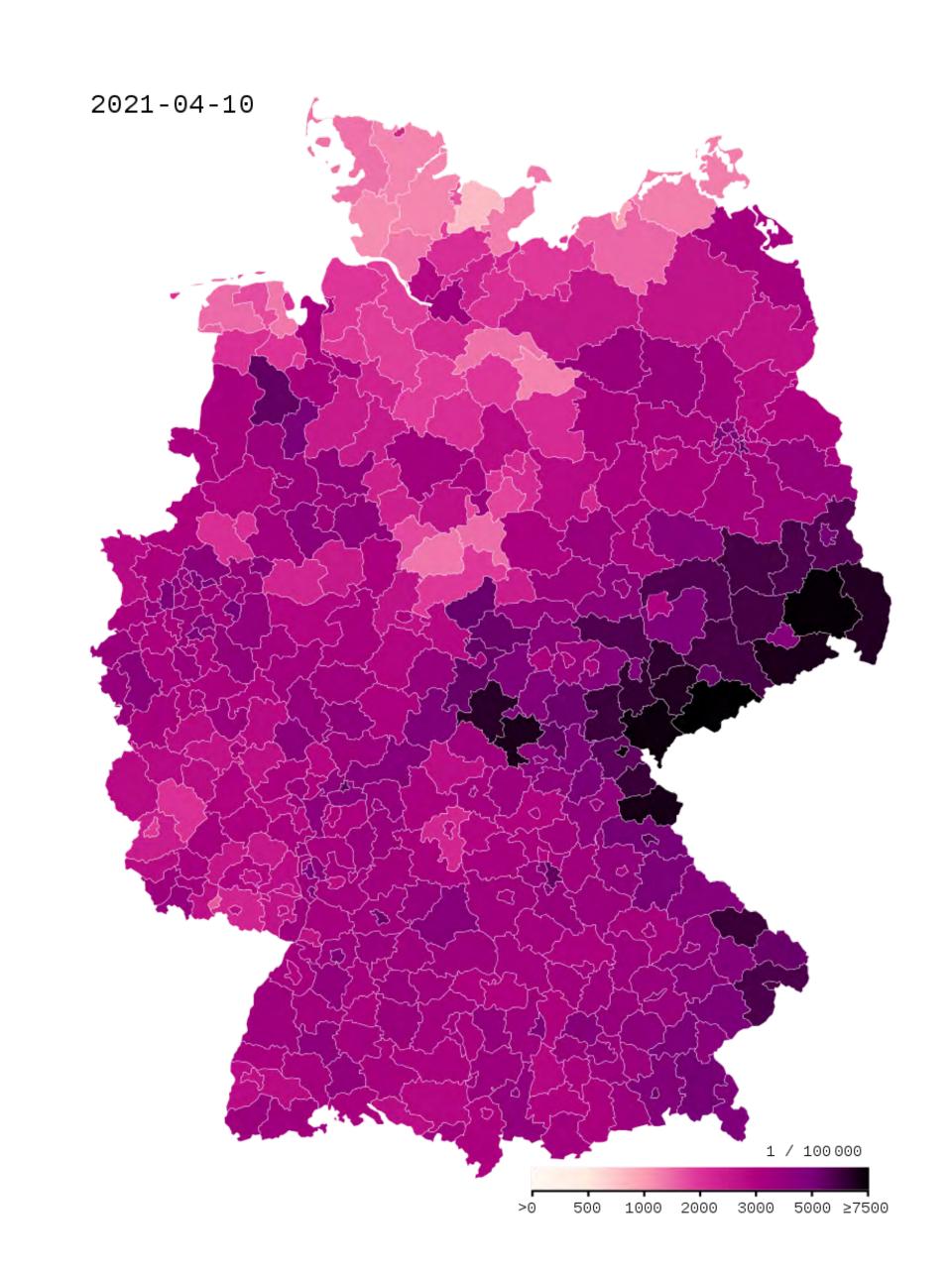


Fig. 3: "COVID map" showing cumulative positive COVID cases in Germany per 100k residents by district on 10 Apr 2021.

Podcast: Most frequently asked questions

- Transmission and prevention
- Symptoms and course of disease
- COVID-19 tests and immunity
- Case numbers and mortality rates
- Vaccines

Communication Techniques

- Credibility and authority: Dr. Drosten has the expertise to guide the public through the pandemic, creating a trusted relationship with the listeners
- Use of language: Use of simple language has the effect that listeners are able to actually understand complex scientific contexts
- Honesty: Experts offer honest opinions and prognoses concerning the pandemic, admitting when science does not have an answer yet and explaining why
- Accuracy: Though language was accessible to a non-expert audience, the podcast's research also guided health and science experts across Germany
- Efficiency: Creators have the flexibility to deliver daily updates with the newest information quickly, while the format itself allows for information to reach the listener accurately and unedited
- Audience: The audience's best interest and welfare is at the heart of these formats, making it an effective medium, especially during trying times such as this pandemic

Success

- *Das Coronavirus-Update* earned two Grimme Online Awards
- Over 60M podcast downloads
- Dr. Drosten and Dr. Nguyen-Kim both received the Order of Merit of the Federal Republic of Germany for their service in science communication
- maiLab's first video on COVID-19 is one of the most successful in German YouTube history

Discussion

Scientific information that concerns the public should be available to the broad public via trans-scientific communication, so that people can make informed decisions.

Conclusion

Digital media, such as podcasts and *YouTube* videos, offer a new take on science communication that allow for a broad audience to be reached and informed, thereby providing the German public with the necessary tools to make an informed decision during this pandemic.

What this podcast's success and popularity in Germany reveal is that Germans are curious about science, desire certainty, trust authority and industry experts, value community, and have a collective mindset about public health.

My recommendation moving forward would be that future science communicators in Germany prioritize these German values in digital communication of scientific information and expand upon the use of digital media.

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