







THE SMARTPHONE PANDEMIC Antoine de Bengy Puyvallée & Katerini T. Storeng

About the project

AIM To study the political and societal implications of the use of smartphone technologies and big data in public health authorities' responses to the Covid-19 pandemic

METHODS Document review and qualitative case studies conducted between 2020 and 2022 in Sierra Leone, Myanmar, Japan, Taiwan, the United Kingdom, and Norway TEAM Anthropologists, international relations scholars, and political philosophers from 7 countries

DIGITAL CONTACT TRACING

• Experimental solution developed at the start

• Joint Google-Apple exposure notification system developed

Download the app to "get back our everyday life and freedom"

- of the Covid-19 pandemic based on theoretical evidence of effectiveness from mathematical models
- Heated debate around privacy and digital surveillance issues
- using Bluetooth and decentralized storage integrated in government apps, with T&C dictated by the companies
- Effectiveness evaluations rarely integrated and limited evidence about its public health value as a complement to 'manual' contact tracing or its value for users – privacy safeguards prevent scrutiny of data





SMARTPHONE MOBILITY DATA

- Since 2010, telecom and tech companies have partnered with scientists to model the spread of diseases by using aggregated location data generated by mobile phones operators and apps
- Initially part 'Big Data for Social Good' Corporate Social Responsibility schemes in low-income countries facing epidemics
- Adopted in the first days of the Covid-19 pandemic in Norway and other rich countries and became an important tool for policy makers to have projections about the spread of the virus and measure the effectiveness of mobility restrictions



Modelling disease spread with big data - an historic overview

TAKE-AWAYS ABOUT SMARTPHONE-BASED TECHNOLOGIES IN THE PANDEMIC RESPONSE

#3 Market interests



#1 Experimentation

Adopted by public health authorities based on experimentation and limited theoretical evidence

Need for rigorous evaluation of effectiveness and discussion of political consequences #2 Partnerships



Ushered in new forms of partnerships between 'Big Tech' and telecoms corporations and public health authorities

> Need for transparency and regulation



e.g. for traffic control, public security and epidemic forecasting

Solidified the market dominance of Big Tech companies and normalized their role in the highly profitable health market

Need for scrutiny of privatesector incursion in healthcare and health data markets

Key references

"The Smartphone Pandemic: How Big Tech and public health authorities partner in the digital response to Covid-19" *Global Public Health*, 2021

"The Big Digital Contact Tracing Experiment" *Global Policy*, 2021

Global Health 2.0? Digital technologies, disruption, and power, *Global Health Watch 6*, 2022 Digital Technology and the Political Determinants of Health Inequities, *Global Policy* Special Issue, 2021