UNIVERSITY OF AMSTERDAM

UvA-DARE (Digital Academic Repository)

Data Cudgel or how to Generate Corona-Compliance in Israel

Gekker, A.; Ben-David, A.

Publication date
2021
Document Version
Final published version
Published in
COVID-19 from the Margins

License
CC BY-NC-SA

Link to publication

Citation for published version (APA):
Gekker, A., & Ben-David, A. (2021). Data Cudgel or how to Generate Corona-Compliance in Israel. In S. Milan, E. Treré, & S. Masiero (Eds.), *COVID-19 from the Margins: Pandemic Invisibilities, Policies and Resistance in the Datafied Society* (pp. 149-152). (Theory on Demand; Vol. 40). Institute of Network Cultures. https://networkcultures.org/blog/publication/covid-19-from-the-margins-pandemic-invisibilities-policies-and-resistance-in-the-datafied-society/

General rights
It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations
If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: https://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, P.O. Box 19185, 1000 GD Amsterdam, The Netherlands. You will be contacted as soon as possible.

UvA-DARE is a service provided by the library of the University of Amsterdam (https://dare.uva.nl)

Download date:16 Sept 2026

COVID-19 FROM THE MARGINS

PANDEMIC INVISIBILITIES, POLICIES AND RESISTANCE IN THE DATAFIED SOCIETY

Theory on Demand #40
COVID-19 from the Margins.
Pandemic Invisibilities, Policies and Resistance in the Datafied Society

Editors: Stefania Milan, Emiliano Treré and Silvia Masiero
Cover design: Katja van Stiphout
Design and E-Pub development: Tommaso Campagna, Evelien van Nieuwenhoven
Printer: Tuijtel, Hardinxveld-Giessendam

Published by the Institute of Network Cultures, Amsterdam, 2021
ISBN PaperBack: 978-94-92302-72-4
ISBN E-Pub: 978-9492302-73-1

Contact
Institute of Network Cultures
Phone: +3120 5951865
Email: info@networkcultures.org
Web: http://www.networkcultures.org

Download this publication freely at: networkcultures.org/publications

This project has received funding from the European Research Council (ERC), under the European Union's Horizon 2020 research and innovation program (grant agreement No.639379-DATACTIVE; (https://data-activism.net)

This publication is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-SA 4.0)

carbon neutral print production
NL-001-JMAGTBU
www.natureOffice.com

In memoriam

Mario Scapin (1923-2019),
partigiano e maestro

Sergio Roncallo-Dow (1979-2020),
investigador

and all those who fought from and for the margins

"*Sometimes when I'm alone I wonder aloud*
If you're watching over me
Some place far abound"

(Cemetery Gates, Pantera)

PRAISE FOR THE BOOK

It is already apparent that the COVID-19 crisis is hitting marginalised and disadvantaged communities and populations especially hard. This groundbreaking book trains the spotlight on these social groups, speaking not simply for or about them, but allowing them a voice. The authors offer valuable insights into how data activism can generate new ways of fighting back and achieving visibility.
Deborah Lupton, SHARP Professor, Leader, the Vitalities Lab Centre for Social Research in Health and Social Policy Research Centre UNSW Node Leader, ARC Centre of Excellence for Automated Decision-Making + Society, University of New South Wales, Sydney (Australia)

In the age of Big Data, it is becoming clear that the emerging algorithmic rationalities that increasingly dominate much of who we are and what we do continue to be embedded in colonialist onto-epistemic structures that classify, maim, re-victimize, and make invisible whole populations, groups and regions. The fact that who counts and what's counted counts is thus truer than ever before. From migrants and refugees to slum dwellers, from LGBTQ+ persons and women affected by domestic violence to marginal communities in the North and the wretched in the Global Souths, COVID-19 from the Margins caringly and thoughtfully demonstrates why the multiplicity we call "the poor" is more than ever at the receiving end of the worst effects of globalized, patriarchal/colonial racist capitalism. But they are not passive victims, for their everyday forms of activism and re-existence, including their daily tweaking of the digital for purposes of community, care, and survival, has incredible insights about design and digital justice that this book takes to heart as we strive to undo the lethal effects of "the first pandemic of the datafied society."
Arturo Escobar, Professor of Anthropology Emeritus, University of North Carolina, Chapel Hill (US) & Adjunct Professor, PhD Program in Design and Creation, Universidad de Caldas, Manizales (Colombia)

So many lives, so many deaths: this significant work is a spectacular experiment, bringing widely differing perspectives to bear on the complex, difficult and novel issues presented by a pandemic that is transforming our world. Brilliantly experimental in design and execution, this moving work casts beams of light into the complex, tragic and global phenomenon that is COVID-19.
Monroe Price, Senior Associate, Centre for Socio-Legal Studies, University of Oxford (UK)

I whole-heartedly endorse this timely and important book which aims to give voice to silenced groups during the current global COVID-19 crisis. This book adopts an inclusive approach by gathering hitherto untold stories from marginalised communities across the world about how the current pandemic interacts with the complex cycles of poverty and inequality within which they are embedded. The book is indeed a welcome antidote to the dominant narrative of managing the pandemic by counting, measuring and quantifying the costs incurred to mainstream economic activity. The narratives from the field collated by the authors are not merely 'stories' but can contribute precious knowledge and policy stimulus to correct the gross negligence of societies to address inequalities that exist in wealth, income and power across the world and accentuated further as a result of COVID-19.

Shirin Madon, Associate Professor of Information Communication Technologies and Socio-Economic Development, London School of Economics and Political Science (UK)

A timely, thought-provoking intervention that anyone interested in digital narratives from the COVID-19 era, particularly those emerging from the Global South, should surely pay attention to. Through this volume, Stefania Milan, Silvia Masiero and Emiliano Treré have once again demonstrated why they remain recognized, to-go-to experts on all things digital.

Bruce Mutsvairo, Professor of Journalism, Auburn University (US) & Visiting Professor at the University of Free State in South Africa

This important book gives us what mainstream media sources too often have failed to offer: insights into how those in the global South have experienced the COVID crisis and its aftermath. Shared in their own words and languages, the book explores the effects of datafied pandemic policies on everyday life, highlighting inequities of the present as well as the alternative epistemological and cultural resources that communities have leveraged while imagining a more equitable future.

Lynn Schofield Clark, Professor and Chair, University of Denver and President, Association of Internet Researchers

ACKNOWLEDGEMENTS

This book is brought to you by the *Big Data from the South Research Initiative (BigDataSur)*, which was tasked with decolonizing how we understand datafication and surveillance. Launched by Stefania Milan and Emiliano Treré in 2017 in Cartagena de Indias (Colombia), BigDataSur has brought together researchers, practitioners, and activists to critically explore the intersections between data, technology, and the plurality of Souths that constitute our world.

A number of funders have supported our work. This project has received funding from the European Research Council (ERC), under the European Union's Horizon 2020 research and innovation program (grant agreement No. 639379-DATACTIVE; https://data-activism.net). In addition, the blog platform *COVID-19 from the Margins* was assisted by the Amsterdam School of Cultural Analysis (ASCA) at the University of Amsterdam (The Netherlands), and the School of Journalism, Media and Culture (JOMEC) at Cardiff University (UK). The book was made possible by funding from the Research Priority Areas Amsterdam Centre for European Studies (ACES) and Global Digital Cultures (GDC) at the University of Amsterdam.

We wish to also thank the institutions who did *not* fund this initiative because it was, for example, "too international"; their lack of support made us volunteer our time and labour but encouraged us to endure. We learned that if a project funding line on a topic does not yet exist, it means that research is sorely needed.

We are indebted to Geert Lovink and his team (Tommaso Campagna in particular) of the Institute of Network Cultures at the Amsterdam University of Applied Sciences (The Netherlands) for enthusiastically supporting this project from the start. We share their commitment to critical theory and openness. It is an honour to be able to leave our mark in their edgy "Theory on Demand" series.

We wish to wholeheartedly thank our amazing copy-editors Andrew R. Schrock from Indelible Voice (English), Nicolás Fuster (Spanish), Sergio Barbosa (Portuguese), and Giulia Polettini (Chinese). We are grateful to the outlets that co-published, re-published, or published before us some of the contributions that appear in this volume, particularly the independent global media organization *openDemocracy* (with special thanks to Rosemary Bechler, and Breno Bringel and Geoffrey Pleyers and their openMovements series). Our gratitude extends also to the members of the DATACTIVE team who assisted us over these months, especially Jeroen de Vos, Zhen Ye, Guillén Torres and Yiran Zhao. Special thanks to Nicolás Fuster, who has been supporting the editorial team since the inception of the blog. Leontien Cremers, Astrit Blommestijn, and the leadership teams of Research Priority Areas ACES and GDC at the University of Amsterdam also deserve a mention.

Finally, we would like to acknowledge and sincerely thank all the authors who accepted our invitation to share their stories in these strange and difficult times. Together, we took part in an urgent experiment to make space, give voice, and lend an ear to the people and communities that remain at the margins of collective care. While so much more remains to be done, we are proud of what we accomplished together.

CONTENTS

Praise for the Book 4

Acknowledgements 6

Introduction: COVID-19 seen from the land of otherwise 14

Stefania Milan, Emiliano Treré & Silvia Masiero

THEME I: HUMAN INVISIBILITIES AND THE POLITICS OF COUNTING

01. A Widening Data Divide: COVID-19 and the Global South 24

Stefania Milan & Emiliano Treré

02. COVID-19 Pandemic and Biopolitics in Latin America 29

Silvio Waisbord & María Soledad Segura

03. European Stereotypes in Times of COVID-19: The 'Frugal Four' and the 'Irresponsible South' 33

Luiza Bialasiewicz

04. The Trouble of Visualizing COVID-19 During a Nation-wide Lockdown in South Africa 39

Adriaan Odendaal

05. Riesgos e Incertidumbres en las Aplicaciones Para el Rastreo de Contagios 43

Javier Sánchez-Monedero

06. Surveillance in the time of COVID-19: The case of the Indian contact tracing app Aarogya Setu 57

Soumyo Das

THEME II: PERPETUATED VULNERABILITIES AND INEQUALITIES

07. La Otra Epidemia: Los Feminicidios que no se Cuentan **62**

Teresa Villaseñor

08. The LGBTQ+ Community During the COVID-19 Pandemic in Brazil **65**

Ricardo H. D. Rohm & José Otávio A. L. Martins

09. The Dilemma Of Undocumented Migrants Invisible To Covid-19 Counting **70**

Annalisa Pelizza, Stefania Milan & Yoren Lausberg

10. Disrupting "business as usual": COVID-19 and platform labour **79**

Niels van Doorn, Eva Mos & Jelke Bosma

11. The Role of a Gig-Worker During Crisis: Consequences of COVID-19 on Food Delivery Workers in South India **84**

Shyam Krishna

12. Gerenciando Incertezas às Próprias Custas: Motoristas Uber sob a Pandemia no Brasil **88**

Ana Guerra

13. COVID-19 and its Impact on Marginalised Communities in Singapore, South Korea, Indonesia, and the Philippines **95**

Irene Poetranto & Justin Lau

14. Fuera de Alcance: Educación a Distancia en Zonas Rurales Peruanas Durante la Pandemia **102**

Karla Zavala Barreda

15. COVID-19 in the UK: The Exacerbation of Inequality and a Digitally-Based Response **106**

Massimo Ragnedda & Maria Laura Ruiu

16. Africa's Responses to COVID-19: An Early Data Science View **110**

Vukosi Marivate, Elaine Nsoesie & Herkulaas MVE Combrink

THEME III: DATAFIED SOCIAL POLICIES

17. Silent Silencing: A Survivor's Reflection on Domestic Violence During COVID-19 **113**

Anonymous

18. Beyond Touchscreens: The Perils of Biometric Social Welfare in Lockdown **116**

Silvia Masiero

19. On Not Being Visible to the State: The Case of Peru **120**

Diego Cerna Aragón

20. The Case of the Solidarity Income in Colombia: The Experimentation With Data on Social Policy During the Pandemic **126**

Joan Lopéz

21. A Pandemia e a Nova Ordem Sociodigital no Sul Global: O Caso de São Paulo **129**

Larissa G. de Magalhães

22. COVID-19 Data on the Fringes: The Scottish Story **135**

Angela Daly/Aingeal Ní Dhálaigh

23. Pandemic Paternalism: A Reflection on Indigenous Data from Aotearoa **141**

Donna Cormack & Tahu Kukutai

24. 走向渐变的健康码：这是安全，还是控制? **145**

Yiran Zhao

25. Data Cudgel or how to Generate Corona-Compliance in Israel **149**

Alex Gekker & Anat Ben-David

26. Making Sense of the Pandemic Through Data: The Italian Case **153**

Tiziano Bonini

27. Contact Tracing Apps and "Good Data"? The Case of Australia's COVIDSafe app **157**

Alexandra Elliott

THEME IV: TECHNOLOGICAL RECONFIGURATIONS IN THE DATAFIED PANDEMIC

28. Solutionism, Surveillance, Borders and Infrastructures in the "Datafied Pandemic" **164**

Philip Di Salvo

29. COVID-19 and the Stripping of Power from the Edges **171**

Niels ten Oever

30. The Russian "Sovereign Internet" Facing COVID-19 **174**

Francesca Musiani, Olga Bronnikova, Françoise Daucé, Ksenia Ermoshina, Bella Ostromooukhova & Anna Zaytseva

31. Alternative Perspectives on Relationality, People and Technology During a Pandemic: Zenzeleni Networks in South Africa **179**

Nic Bidwell & Sol Luca de Tena

32. L'Imperialismo delle Piattaforme nella Pandemia: Il Ruolo degli Utenti di YouTube nell'Analisi della Moderazione dei Contenuti in Lingue "Altre" **184**

Claudio Agosti

33. Living with Instalive in Iran: Social Media use in Authoritarian Countries During the Pandemic **192**

Hossein Kermani & Maria Faust

34. COVID-19 and the Argentine Theatre 195

Nicolás Fuster

35. COVID-19 and Non-Personal Data in the Indian Context: On the Normative Ideal of Public Interest 200

Preeti Raghunath

36. Argentina-Brasil: La Resignificación del uso de la Tecnología en Épocas de Pandemia 203

Julián Cordoba Pivotto

37. A Brazilian Cautionary Tale on Pandemic Negationism: Open Data is an Essential Safeguard for Evidence-Based Policy-Making 207

Nicolo Zingales

38. Towards Civic Data Policies: Participatory Safeguards in COVID-19 Times 212

Arne Hintz

THEME V: PANDEMIC SOLIDARITIES AND RESISTANCE FROM BELOW

39. In Memory of COVID-19 in China: Forms of Digital Resistance Towards Censorship 216

Kinoko Merini

40. Tejidos Comunitarios Desde los Márgenes: Las Cajas de Resistencia Como Herramienta Autónoma y Autoorganizada en Tiempos de Necesidad 221

Marta Espuny Contreras

41. Citizen Sensing and Ontopolitics in the Anthropocene: Engaging with COVID-19 and Climate Change 225

Marie-Catherine Petersmann & Anna Berti Suman

42. Liberating COVID-19 Data with Volunteers in Brazil **241**

Peter Füssy

43. La Marcha Digital de las Madres de los Desaparecidos en México **246**

Thomas Aureliani

44. Brazilian Counter-Surveillance Collective Action in a Data-Sensitive era: The Case of #VidasNegrasImportam **249**

Simone da Silva Ribeiro Gomes

45. Rescatar lo Común. Redes de cuidados en España **253**

Irene Ortiz

46. COVID-19 in Argentina: When the Micro-Practices of Activism fit in a WhatsApp Message **256**

Raquel Tarullo

47. Under Other Skies: Astronomy as a Tool to Face COVID-19-Induced Isolation in the Indigenous Village of Aldeia Verde, Brazil **259**

Arianna Cortesi, Claudia Magnani, Roberto Romero, Paula C.P. Silva, Sueli Maxakali, Isael Maxakali, Ana Maria R. Gomes

48. Fighting for Feminist COVID-19 Figures: A Call for Feminist Data Visualizations During the Pandemic **263**

Erinne Paisley

Biographies **268**

INTRODUCTION: COVID-19 SEEN FROM THE LAND OF OTHERWISE

STEFANIA MILAN, EMILIANO TRERÉ & SILVIA MASIERO

As we enter a new decade of the third millennium, cities have become "smart," information systems are assumed to be "intelligent," service work has moved to the "platform," and identities have been made "digital." Yet, society's technologization and datafication has not prevented it from falling victim to an unexpected and nasty virus. At the time of writing, over one million people have lost their lives to COVID-19. Since the World Health Organisation declared the outbreak of COVID-19 a pandemic on March 11, 2020, narratives about counting, measuring, and quantifying the consequences of the virus have dominated governmental and public discourse. By enumerating and comparing cases and locations, diffusion rates, victims, and the occupancy of intensive care units, policymakers and experts have given life to a data-driven narrative. But something was missing in the first pandemic narrative of the datafied society; communities at the margins—workers in the informal economy, victims of domestic violence, low-income families, and the so-called "Global South"—remained ignored. The disempowered were denied a voice in the narrative.

To ensure they were heard, this book gathered the untold stories of the pandemic. It started with *COVID-19 from the Margins*, a multilingual blog launched in May 2020 to empower social groups and individuals silenced in the mainstream narrative of the pandemic. *COVID-19 from the Margins* emerged from the *Big Data from the South Initiative* (also known as BigDataSur), since 2017 actively decolonizing how we understand datafication and its consequences on a plurality of "Souths."

Drawing on 47 blog posts submitted to *COVID-19 from the Margins* between May and October 2020, the book features stories of invisibility and injustice, and hope and resistance. These stories come from communities with limited statistical capacity, domestic violence survivors, and indigenous people. Their stories, which had remained on the fringe of global news reports and relief efforts, found an audience within these pages.

Our introduction starts by offering three conceptual tenets to help the reader interpret the stories presented in this book, and the many others that no single book alone can contain. It then explores the five themes of the book: human invisibilities and the politics of counting; perpetuated vulnerabilities and inequalities; datafied social policies; technological reconfigurations in the datafied pandemic; and pandemic solidarities and resistance from below. Finally, we illustrate how this manuscript came to life, since our goal is also to forge distinct relationships and ways of working together to decolonize knowledge production.

Theorising from the Margins: In and Beyond COVID-19

The COVID-19 pandemic has exposed the inadequacy of conceptual development in multiple disciplines. Sociology, media studies, informatics, and health sciences have failed to capture the nuances of harms and vulnerabilities brought about by the first pandemic of the datafied society. We hope this book, taken as a whole, helps us rethink our theories and de-Westernize our approaches. We start this process of rethinking by exploring three concepts that we believe can help us disentangle the complexities of the present. The first concept is *the margins,* which captures the multiplicity and diversity of the communities represented in these pages. The second concept is *data poverty*, which contextualizes the unusual invisibilities brought about by the pandemic, intensified by existing vulnerabilities in the global health crisis. The third concept is the *datafication of anti-poverty programmes*, which helps us understand the need to include datafied anti-poverty architectures in the pandemic.

Data at the Margins

"[T]he margin," maintains Colombian citizen media scholar Clemencia Rodríguez, is "a shortcut to speak of complex dynamics of power inequality. Processes of asymmetrical access to material and symbolic resources shape differentiated and unequal access to the public sphere".[1] Drawing on Rodríguez, we situate the margins as complex sites of struggle where the challenges of datafication unfold in in different ways from the mainstream, and also where particular data ecologies and original territories might emerge and thrive. At the margins, data defy expectations. It is frequently used in ways that substantially differ from their originally intended purpose, and do not develop in a predictable manner. Data might even be absent because people lack the infrastructure or skills needed to produce and share it. Hence, journeying into data at the margins is "stepping into the land of otherwise".[2] This is why we have chosen the powerful conceptual lens of the margins to gather and amplify the underrepresented and neglected voices of the datafied society during COVID-19. The margins convey and make sense of the peripheral nature of the stories presented here, capturing the significance, resourcefulness, and unexpectedness of their data-related practices.

The notion of the margins resonates with the understanding of "the South" as plural.[3] Such multiple, overlapping Souths constitute at the core of the *Big Data from the South Research Initiative*. If we conceive the South as a multi-layered place of resistance, subversion, and creativity—rather than merely as a geographical marker—we can see how "Southern" data practices and revolts contesting oppression can also be found in the Global North. In the Global North, marginalized and oppressed groups also fight daily against forms of data injustice to reclaim their visibility in an increasingly datafied social landscape. Therefore, reflecting on how data, power and resistance unfold in the Global South cannot be easily separated from

1 Clemencia Rodríguez, 'Studying media at the margins: Learning from the field', in Viktor Pickard and Goubing Yang (eds) *Media Activism in the Digital Age*, London: Routledge, 2017, p. 49.
2 Clemencia Rodríguez, 'Studying media at the margins: Learning from the field', p. 49.
3 Stefania Milan and Emiliano Treré, 'Big Data from the South(s): Beyond Data Universalism', *Television & New Media* 20, 4, 2019.

confronting how oppression and inequality are interwoven with datafication of vulnerable populations in the Global North.

Data Poverty

Only 53% of the world population is now connected to the Internet.[4] Technologies of datafication, including Artificial Intelligence, are still more unevenly distributed. However, in an increasingly datafied society, reducing the problem to a simple dichotomy between the "Big Data rich" and the "have nots" would be a mistake.[5] A new type of "data poverty" has emerged with the pandemic. Data poverty has to do with the very same existence of people on the map of concerns. This oversight occurs because policymakers increasingly rely on "calculated publics" to make decisions and allocate public resources, such as health care or vaccines. As a result, peoples' existence is increasingly yoked to data, as the COVID-19 health crisis has made evident. Being "datafied" during a pandemic—e.g., visible to the state or to the surrounding community—might be for many disempowered groups a *conditio sine qua non* of survival and care; think of undocumented migrants, low-income families, indigenous peoples, and domestic violence survivors. While data poverty is exacerbated by fundamental inequalities that pre-date the datafied society, it is also aggravated by the limited citizen agency in a complex ecosystem of data extractivism.[6]

The data poverty we see emerging with COVID-19 cannot be easily described by other popular critiques of the datafied society, such as the notion of "data colonialism".[7] The latter seems to assume that privacy and data protection—to the extent of being invisible to the state—are the primary human rights to be protected. However, Couldry and Meijas "hypostatize a certain 'data universalism,' which represents, at once, the hermeneutical ground and horizon of the whole discussion".[8] Data poverty, instead, demands further situating any analysis of the impact of datafication in relation to the specific, contingent harms it might impose on people and communities on the ground.

The Datafication of Anti-poverty Programmes

Developing our theorisation further, the concepts introduced above could improve the datafication of anti-poverty programmes, which Masiero and Das (2019) theorise as the conversion into data of social protection scheme beneficiaries.[9] The pandemic generates the new vulner-

4 International Telecommunication Union (2019) ITU Statistics. Available at https://www.itu.int/en/ITU-D/Statistics/Pages/default.aspx, accessed 16 October 2020.

5 danah boyd and Kate Crawford, 'Critical questions for big data: Provocations for a cultural, technological, and scholarly phenomenon', *Information, Communication & Society* 15, 5, 2012.

6 Stefania Milan and Emiliano Treré, 'Big Data from the South(s): Beyond Data Universalism'.

7 Nick Couldry and Ulises Mejias, 'Data Colonialism: Rethinking Big Data's Relation to the Contemporary Subject', *Television & New Media* 20, 4, 2019.

8 Stefano Calzati, 'Decolonising "Data Colonialism" Propositions for Investigating the Realpolitik of Today's Networked Ecology', *Television & New Media*, September 2020.

9 Silvia Masiero and Soumyo Das, 'Datafying Anti-Poverty Programmes: Implications for Data Justice', *Information, Communication & Society* 22, 7, 2019.

abilities, invisibilities, and forms of socio-economic fragility illustrated in this book. In response, social protection schemes on a global scale need to respond with new forms of inclusivity that oppose the restrictive logic of social protection targeting. More broadly, the datafied social policy responses of COVID-19 need to be globally inclusive and optimise resources that—as food and entitlement crises emerging worldwide demonstrate—have become scarce. This scarcity leads to new trade-offs where the datafication of user populations, rather than conducive to targeting, needs to generate new forms of inclusion in social welfare systems.

COVID-19 From the Margins: Mapping Core Themes

Many themes have emerged and overlapped in the stories in this book, and only a thorough read will do justice to their heterogeneity and to rich specificities. This introduction summarises five core threads that comprise the organizational structure of the book. By bringing these threads together, we offer an overview of the topics that we hope inspires a much-needed discussion about how the world can endure the long-term consequences of COVID-19.

Human Invisibilities and the Politics of Counting

Upon its launch on May 4, 2020, the inaugural piece of the COVID-19 from the Margins blog identified a widening data divide for communities in the South. Multiple contributions explored how disease surveillance in the pandemic determined invisibility, raising concerns about the extent to which a just data management is being applied to populations. As these questions became increasingly raised during the crisis, data visualization gained important implications for data management. Authors in this book expand on privacy and surveillance concerns raised by COVID-19 tracking apps. Problematizations of app-based surveillance in the margins are driven by ongoing discussions of data justice[10], highlighting how such issues intersect with the stories of invisibility and marginalisation throughout this book.

Perpetuated Vulnerabilities and Inequalities

This book's contributors have illuminated perpetuated vulnerabilities that have affected a variety of communities during the COVID-19 emergency. Discussing the struggles experienced by the LGBTQ+ community, one of the chapters notes that, as "stay at home" becomes the new normal, ingrained societal prejudice may result in LGBTQ+ people not having a home to stay in. Diverse contributions of workers in the gig economy note the continued uncertainty under COVID-19, which leaves them unable to hold public and private entities accountable for health and economic risks under the pandemic. In times of crisis and vulnerability, victims of pre-existing oppression—femicide, domestic violence survivors, and migrants—suffer a twofold burden. In this light, narratives of heightened vulnerability under the pandemic become crucial, since they highlight situations that require inter-

10 Linnet Taylor, Gargi Sharma, Aaron Martin and Shazade Jameson. 'What does the COVID-19 response mean for data justice?', in Linnet Taylor, Gargi Sharma, Aaron Martin and Shazade Jameson (eds) *Data Justice and COVID-19: Global Perspectives*, London: Meatspace Press, 2020, pp. 8-18.

ventions that recognise pre-existing conditions and their extremisation. The perpetuation of inequalities under the pandemic thus reinforces the need for response measures that redistribute access to services and resources.

Datafied Social Policies

As national lockdowns took hold of civil societies worldwide during COVID-19, vulnerable groups have been disproportionately affected by the crisis. Stories collected in this book highlight the importance of social policies in emergency response, as well as consequences of datafication on such policies. While portraying different country cases, these narratives have at least two common themes. First, these stories make the point that information on who is entitled to emergency assistance and to what degree is vital to devising social protection policy. Datafication reifies the way existing entitlements are determined. In the cases of narrow targeting, datafication exposes the consequences of making social assistance conditional on strict entitlement criteria.

A second policy theme in this book is that the COVID-19 crisis has exacerbated the consequences of making social welfare conditional on digital identity. In India, security concerns have emerged around how the national contact-tracing app builds on a pre-existing ecosystem of digital identity based on Aadhaar (the largest biometric database worldwide). The use of biometrics as a means to combat inclusion errors rather than wrongful exclusions has banned access for the unentitled, without assuring access or affording data justice to the wrongfully excluded. On a global scale, the reshuffled priorities of the COVID-19 emergency powerfully illustrate biometric issues, drawing into question the ethics of targeting and its impact on social assistance programs.

Technological Reconfigurations in the Datafied Pandemic

Existing technologies have been repurposed during the pandemic, and narratives in this book highlight multiple impacts that these reconfigurations have had on the margins. In the pandemic, social media platforms have been repurposed to promote new forms of collective action. Data policies have required the provision of additional safeguards due to marginalized communities being vulnerable to unfair data treatment. This problem has become more acute in contexts that lack data protection policies, or where data policies are not enforced. In extreme cases, such as national contexts where pandemic denial magnifies the problem, open data emerges as a safeguard against the vulnerabilities of marginalized communities.

Pandemic Solidarities and Resistance From Below

Stories throughout this book explore the intersection of technology and political power. These narratives provoke questions around the importance of resistance “from below” during the pandemic. To appraise the perpetuation of vulnerabilities under the pandemic, understanding the affordances of digital platforms to give voice to excluded people is crucial. Accordingly, authors interrogate platforms’ affordances to provide information

to and support vulnerable groups during the crisis. Equally important is the role of data visualisation in enabling solidarity-making, especially when data on groups at the margins, such as victims of domestic violence, lack proper representation. Crucially, the emergence of new forms of technology-mediated solidarity can be seen in the stories unfolding through digital platforms and narrated in this book. New modes of action, such as citizen sensing, have emerged in the datafied society, generating important questions about the implications of such practices under COVID-19. The fifth theme in the book brings these ideas together, establishing continuity between visualisation, solidarity, and protest, and how they intertwine in situations of crisis.

A Note on Process

This book is special in three ways. First, it is a much-needed multilingual conversation. We wanted to acknowledge and celebrate linguistic and cultural diversity within its pages. Seeking diversity drove us to open space and give voice for different ways people express themselves through distinct epistemologies, ontologies, and worldviews. Linguists have long recognized that a language is much more than just a system of conventional signs to refer to the physical reality around us. Rather, language enforces a certain cognitive view of the world. As such, allowing people from different corners of the globe to pick their preferred language to join the conversation can help readers understand their unique perspective on the world. At the same time, language represents a way to practice "epistemic disobedience" and question the primacy of the Euro/Western-centric episteme[11], and de-center dominant ways of being and knowing.[12] In a recent article, Ana Cristina Suzina called out English as the *lingua franca* of the academic debate as "an additional barrier to achieving more equitable participation and a diversity of perspectives in scientific publications" and "a filter that strongly limits the encounters between Western theory and scientific cultures rooted in other languages".[13]

This book wants to lead the way towards multicultural encounters, in a historical moment when the first global disease of the datafied society keeps being reported from Western-centric angles. We hope this book gives voice to a "pluriverse" in the making, as anthropologist Arturo Escobar describes a world "where many worlds fit".[14] In a pluriverse, we are free to reimagine and reconstruct local worlds that would otherwise be invisible. But there is a second motivation we had to write a multilingual book. We wanted to make readers experience first-hand what individuals and communities at the margins undergo on a regular basis: discomfort. Marginalized communities are often forced to read texts in a language that reflects a worldview that is not their own. Each book chapter published in the authors' original language includes an abstract in English, but it is the responsibility of the reader to find a way around and forward.

11 Walter Mignolo, The Darker Side of Western Modernity: Global Futures, Decolonial Options, Boston: Duke University Press, 2011.

12 Santiago Castro-Gómez and Ramon Grosfoguel, Reflexiones para una diversidad epistémica más allá del capitalismo global, Bogotá: Siglo del hombre editors, 2007.

13 Ana Cristina Suzina, 'English as Lingua Franca. Or the Sterilisation of Scientific Work', Media, Culture & Society, 2020.

14 Arturo Escobar, The Making of Social Movements in Latin America: Identity, Strategy, and Democracy, New York: Routledge, 2018, p. 4.

We hope readers are driven by a passion to learn and explore to go beyond the inevitable initial discomfort.

Second, this book's novel format embraces the twisted time of the pandemic. It does not try to flatten or universalize the narrative, and instead traces the impact of the pandemic on the margins as the virus spread across the world. The contributions, initially meant for the web and crafted with a popular audience in mind, were written between May and October 2020. For this reason, they bundle phases of the pandemic into an "instant history" that speaks of fear and uncertainty, but also addresses hope and collective organizing as they coalesced in the grassroots response to the virus. We deliberately decided not to update the texts, nor to indicate when they were first published. The reader is left to navigate the stories, embrace or reject the experiences recounted in the distinct chapters, and be inspired. This plurality of stories reflects the accelerated yet abnormal times of the pandemic itself, since different regions and communities were hit at different times and through different modalities. Because "second" or "third waves" have come back to haunt us and vaccines are only now being slowly rolled out, our book is not the final word about COVID-19. As "history in the making," the pandemic demands a reading experience that helps us creatively disentangle complexity while providing inspiration for proactively engaging with it.

Finally, this book is special because it crafts a distinct type of conversation that nurtures a community of practice. To start with, researchers enter into a productive dialogue with activists, practitioners, and communities on the ground, offering timely, critical reflections in near-real time and in an accessible language. Second, our focus in this book is on stories and experiences, rather than on the classic criteria germane to judging the worth of academic publications, like seniority and reputation. For example, this book has allowed many junior authors—most of them coming from the peripheries of mainstream academia—to reclaim their voice and their situated experience. In practice, we broke down elitist academic barriers by allocating funding for honoraria to pay contributors in need, and by providing editorial support to help individuals with less writing experience to edit their contributions.

Unfortunately, no matter how special, this book only tells a small number of the many stories of vulnerability, suffering, and hope that deserve a global audience. Our over 70 authors were self-selected, and enthusiastically responded to our invitation to put their writing into stories. Many more, however, were so badly affected by the pandemic and its socio-economic consequences that they were not able to join the conversation. Numerous vulnerable communities are still under-represented; think of small island communities, disabled people, and care workers. As editors, our framing of their writing also reflects our own perspectives. We have been part of many conversations, but we are still also situated, meaning how we write about these stories still reflects our biases. Nonetheless, we offer this work-in-progress to shape "alternative networks of knowledge"[15] capable of "dewesternalizing" our collective thinking.[16]

15 Karen Bennett, 'English as a Lingua Franca in Academia: Combating Epistemicide through Translator Training', *The Interpreter and Translator Trainer* 7, 2, 2013.

16 Silvio Waisbord and Claudia Mellado, 'De-Westernizing Communication Studies: A Reassessment', *Communication Theory* 24, 4, 2014.

Looking Forward

As the world encounters the long-term consequences of COVID-19, more vulnerabilities will likely emerge for the communities in this book, and for the many more communities we were not able to include. In this rapidly evolving scenario, this book—still a work in progress—offers a way to make sense of the harms of the first pandemic of the datafied society. We hope it offers an initial important step to open space for the multiple untold stories of COVID-19 from the margins that have yet to be narrated, amplified, and circulated. This is why this book ends by inviting you, as readers, to share and amplify these global, invisibilized, multilingual narratives of the pandemic from and within the Global Souths.

References

Bennett, Karen. 'English as a Lingua Franca in Academia: Combating Epistemicide through Translator Training', The Interpreter and Translator Trainer, 7, 2 (2013): 169-193.

boyd, danah and Kate Crawford. 'Critical Questions for Big Data: Provocations for a Cultural, Technological, and Scholarly Phenomenon', Information, Communication & Society, 15, 5 (2012): 662-679.

Calzati, Stefano. 'Decolonising "Data Colonialism" Propositions for Investigating the Realpolitik of Today's Networked Ecology', Television & New Media, September 2020, https://doi.org/10.1177/1527476420957267

Castro-Gómez, Santiago and Ramon Grosfoguel. Reflexiones para una Diversidad Epistémica Más Allá del Capitalismo Global, Bogotá: Siglo del hombre editores, 2007. Couldry, Nick and Ulises Mejias. 'Data colonialism: Rethinking big data's relation to the contemporary subject', Television & New Media, 20, 4, 2019: 336-349.

Couldry, Nick and Ulises A. Mejias. 'Data colonialism: Rethinking Big Data's Relation to the Contemporary Subject', Television & New Media, 20(4), 2019: 336-349.

Escobar, Arturo. Designs for the Pluriverse. Radical Interdependence, Autonomuy, and the Making of Worlds, Durhamn, NC: Duke University Press, 2018.

International Telecommunication Union (2019). ITU Statistics. https://www.itu.int/en/ITU-D/Statistics/Pages/default.aspx.

Masiero, Silvia and Soumyo Das. 'Datafying Anti-Poverty Programmes: Implications for Data Justice', Information, Communication & Society, 22, 7, 2019: 916-933.

Mignolo, Walter. The darker side of western modernity: Global futures, decolonial options, Boston: Duke University Press, 2011.

Milan, Stefania and Emiliano Treré. 'Big Data from the South(s): Beyond Data Universalism',Television & New Media, 20, 4, 2019: 319-335.

Rodríguez, Clemencia. 'Studying media at the margins: Learning from the field', in Viktor Pickard and Goubing Yang (eds) Media Activism in the Digital Age, London: Routledge, 2017, pp. 49-61.

Suzina, Ana Cristina. 'English as Lingua Franca. Or the Sterilisation of Scientific Work', Media, Culture & Society, September 2020, https://doi.org/10.1177/0163443720957906.

Taylor, Linnet, Gargi Sharma, Aaron Martin and Shazade Jameson. 'What does the COVID-19 response mean for data justice?', in Linnet Taylor, Gargi Sharma, Aaron Martin and Shazade Jameson (eds) Data Justice and COVID-19: Global Perspectives, London: Meatspace Press, 2020, pp. 8-18.

Waisbord, Silvio and Claudia Mellado. 'De-Westernizing Communication Studies: A Reassessment', Communication Theory, 24, 4, 2014: 361-372.

HUMAN INVISIBILITIES AND THE POLITICS OF COUNTING

THEME I

01. A WIDENING DATA DIVIDE: COVID-19 AND THE GLOBAL SOUTH

STEFANIA MILAN & EMILIANO TRERÉ

The COVID-19 pandemic is sweeping the world. First identified in mainland China in December 2019, it rapidly spread worldwide, making Antarctica the only "corona-free" continent. News reports globally are filled with numbers and figures about testing. We count tests, follow the rise of positive results, and mourn the dead by looking at the daily tolls. These numbers are deeply shaped by socio-economic and political geography; the virus follows distinct diffusion curves, and countries and institutions count cases differently. These numbers exist in both state policies and people's imaginaries, and affect our ability to care, share empathy, and donate to relief efforts. They are the conditions of existence of the problem, and place a country on a global map of concerns. Yet most countries from the so-called Global South are absent from the number-based narration of the pandemic. Why are they missing, and with what consequences?

Data Availability and Statistical Capacity in Developing Countries

If numbers are the conditions of existence of the COVID-19 problem, we ought to pay attention to the (in)ability of many countries in the South to test their population for the virus and produce reliable population statistics—let alone adequately care for them. Countries struggle with a "data gap" as well as of data quality. Even in "normal" times, such data issues hinder "evidence-based policy making, tracking progress and development, and increasing government accountability".[1] While the World Health Organization issues warnings about the "dramatic situation" concerning the spread of COVID-19 in the African continent (to name just one of the blind spots of our datasets of the global pandemic), the World Economic Forum calls for "flattening the curve" in developing countries.[2] Progress has been made following the revision of the United Nations' Millennium Development Goals in 2005, when countries in the Global South were invited to devise National Strategies for the Development of Statistics. Yet, a cursory look at the NYU GovLab's valuable repository of "data collaboratives"[3] addressing the COVID-19 pandemic reveals an absence of data collection and monitoring projects South of the hemisphere. The dearth of Southern data lulls us into believing that "no data = no problem."

1 Shuang Chen, François Fonteneau, Johannes Jütting and Stephan Klasen, 'Towards a post-2015 framework that counts: developing national statistical capacity', Partnership in Statistics for Development in the 21st Century (PARIS) Discussion Paper no. 1 (2013), https://paris21.org/sites/default/files/PARIS21-DiscussionPaper1-MDG.pdf.

2 Ricardo Hausmann, 'Flattening the COVID-19 curve in developing countries,' *Project Syndicate* 24 (2020), https://www.project-syndicate.org/commentary/flattening-covid19-curve-in-developing-countries-by-ricardo-hausmann-2020-03.

3 Data Collaboratives, https://datacollaboratives.org/.

Disease and "Whiteness"

Epidemiology and pharmacogenetics (i.e., the study of the genetic basis of how people respond to pharmaceuticals) are largely based on the "inclusion of white/Caucasians in studies and the exclusion of other ethnic groups".[4] In other words, modeling disease evolution and related solutions are based on datasets primarily account for the Caucasian population. This is a known problem in the field, which derives from the "assumption that a Black person could be thought of as being White," dismisses specificities and differences. This problem has been linked to the "lack of social theory development, due mainly to the reluctance of epidemiologists to think about social mechanisms (e.g., racial exploitation)".[5] While COVID-19 represents a slight variation on this trend—having been first identified in China—the large-scale problem remains. A global health emergency like COVID-19 risks reinforcing and perpetuating racist differentials of whiteness through data.[6]

A Ripe Market for the Industry

The developing world's lack of national testing capacity might fall prey to two booming industries: genetic and disease testing, and telecom-enabled population monitoring. Private companies might be able to fill the gap left by the state, mapping populations at risk while monetizing their data. The case of *23andme*[7] is symptomatic of the rise of industry-led testing, which constitutes a double-edge sword. On the one hand, private actors might supply key services that resource-poor or failing states are unable to provide. On the other hand, the distorted, hidden agendas of profit-led players reveal their shortcomings and dangers. If we look at the telecom industry, we can see how it has contributed to track disease propagation in health emergencies such as Ebola.[8] The global open data community has called for[9] smoother data exchange between the private and the public sector to collectively address the spread of the virus. However, in the absence of adequate regulatory frameworks for privacy and data retention in the Global South, local authorities might fall prey to dubious outside interventions.

4 Richard Tutton, 'Opening the white box: Exploring the study of whiteness in contemporary genetics research', *Ethnic and Racial Studies* 30, 4 (2007).

5 Carles Muntaner, 'Invited commentary: social mechanisms, race, and social epidemiology. ' *American Journal of Epidemiology* 150, 2 (1999).

6 Stefania Milan, 'Techno-solutionism and the standard human in the making of the COVID-19 pandemic.' *Big Data & Society*, July (2020).

7 23andMe, https://www.23andme.com/en-eu/.

8 Amy Wesolowski, Caroline O. Buckee, Linus Bengtsson, Erik Wetter, Xin Lu and Andrew J. Tatem, 'Commentary: Containing the Ebola Outbreak—the Potential and Challenge of Mobile Network Data.' *PLoS Currents* 6 (29 September 2014), 10.1371/currents.outbreaks.0177e7fcf52217b8b634376e2f3efc5e. http://currents.plos.org/outbreaks/index.html%3Fp=42561.html

9 The GovLab, 'A Call for Action', *Medium*, 16 March 2020, https://medium.com/data-stewards-network/a-call-for-action-813669f32244.

The Populism and Racism Factors

The lack of reliable numbers to accurately portray the COVID-19 pandemic as it spreads to the Southern hemisphere also offers fertile ground for malicious actors to promote distorted narratives for political reasons. The dearth of data allows populist leaders like Brazil's Jair Bolsonaro to announce the "return to normality" in the country, dismissing the harsh reality as a collective "hysteria." In Italy, the fake news that migrant populations of African origin would be "immune" to the disease swept social media, unleashing racist comments and anti-migrant calls for action.[10] While the same rumor has been circulating on the African continent[11] and populism has been hitting Western democracies hard, it might be have more dramatic consequences in the more populous countries of the South. In Mexico, left-wing populist president Andrés Manuel López Obrador responded to the coronavirus emergency by insisting that Mexicans should "keep living life as usual."[12] He did not stop his tour in the south of the country and frequently contradicted the advice of public health officials. Obrador repeatedly ignored social distancing by touching, hugging, and kissing his supporters—going as far as to say that he considered the pandemic to be a plot to derail his presidency. These dangerous comments, assumptions and attitudes are a by-product of the lack of reliable data and testing that we explore in this essay.

The Risk of Universalising the Problem

Luckily, the experience and harsh familiarity of various countries from the Global South[13] to cope with disasters, catastrophes, and emergencies has prompted them to deploy containment measures more quickly than many countries in the Global North. The lack of reliable data from the South, however, will make modelling the diffusion of the disease difficult. The temptation will likely be to import models and appropriate predictions from other countries and socio-economic realities, and then base domestic measures and policies on them. "Universalizing" the problem as well as the solutions, as we warned in a 2019 article[14], is tempting, especially in these times of global uncertainty. Universalizing entails erroneously thinking that a problem manifests itself in exactly the same manner everywhere, disregarding local features. Coupled with the "whiteness" observed earlier, universalising gives rise to an explosive cocktail that is likely to create more problems than it solves.

10 'Africani immuni? È una ipotesi. ' Ma Galli precisa: "La tubercolosi non c'entra', *Huffington Post*, 24 March 2020, https://www.huffingtonpost.it/entry/extra-comunitari-immuni-e-una-ipotesi_it_5e79d2c4c5b63c3b6496e69f.

11 Ruth Maclean, 'Africa braces for coronavirus, but slowly', *The New York Times*, 17 March 2020, https://www.nytimes.com/2020/03/17/world/africa/coronavirus-africa-burkina-faso.html.

12 David Agren, 'Coronavirus advice from Mexico's president: "Live life as usual"', *The Guardian*, 25 March 2020, https://www.theguardian.com/world/2020/mar/25/coronavirus-advice-from-mexicos-president-live-life-as-usual.

13 Dan Carden, 'The British government has abandoned the Global South to coronavirus', *openDemocracy*, 25 March 2020, https://www.openDemocracy.net/en/openDemocracyuk/british-government-has-abandoned-global-south-coronavirus/.

14 Stefania Milan and Emiliano Treré, 'Big data from the South (s): Beyond data universalism', *Television & New Media* 20, 4 (2019).

Beyond the Blind Spot?

While many have enough to worry about "at home," the largest portion of the world population today resides in the so-called Global South, with all the concrete challenges of their situation. For instance, for a good portion of the 1,3 billion Indian citizens now on lockdown, staying at home might mean starving.[15] How can the global community of open data experts, researchers, life science scholars, and digital rights activists help "fix" the widening data divide that risks severely weakening any local effort to curb the expansion of COVID-19 to populations already at the margins? We argue that the question is not simply whether we pump in the much-needed resources, or how we collaborate. The question is where we decide to look? COVID-19 will make apparent the need for a global alliance of diverse experts who, jointly with civil society organizations, can fast-track the capacity-building of developing countries involved with counting.

This essay has been first published in openDemocracy (3 April 2020) and the Data & Policy blog of Medium (7 April 2020).

References

23andMe, https://www.23andme.com/en-eu/.

'Africani immuni? È una ipotesi." Ma Galli precisa: "La tubercolosi non c'entra', *Huffington Post*, 24 March 2020, https://www.huffingtonpost.it/entry/extra-comunitari-immuni-e-una-ipotesi_it_5e79d2c-4c5b63c3b6496e69f.

Agren, David. 'Coronavirus advice from Mexico's president: "Live life as usual"', *The Guardian*, 25 March 2020, https://www.theguardian.com/world/2020/mar/25/coronavirus-advice-from-mexicos-president-live-life-as-usual.

Carden, Dan. 'The British government has abandoned the Global South to coronavirus', *openDemocracy*, 25 March 2020, https://www.openDemocracy.net/en/openDemocracyuk/british-government-has-abandoned-global-south-coronavirus/.

Chen, Shuang, François Fonteneau, Johannes Jütting and Stephan Klasen. 'Towards a post-2015 framework that counts: developing national statistical capacity', Partnership in Statistics for Development in the 21st Century (PARIS) Discussion Paper no. 1 (2013), https://paris21.org/sites/default/files/PARIS21-DiscussionPaper1-MDG.pdf.

Data Collaboratives, https://datacollaboratives.org/.

Hausmann, Ricardo. 'Flattening the COVID-19 curve in developing countries. ' *Project Syndicate 24* (2020), https://www.project-syndicate.org/commentary/flattening-covid19-curve-in-developing-countries-by-ricardo-hausmann-2020-03.

Maclean, Ruth. 'Africa braces for coronavirus, but slowly', *The New York Times*, 17 March 2020, https://www.nytimes.com/2020/03/17/world/africa/coronavirus-africa-burkina-faso.html.

Milan, Stefania. 'Techno-solutionism and the standard human in the making of the COVID-19 pandemic', *Big Data & Society*, July (2020), doi:10.1177/2053951720966781.

15 Singh, Karan Deep, Vindu Goel, Hari Kumar, and Jeffrey Gettleman, 'India, Day 1: World's Largest Coronavirus Lockdown Begins', *The New York Times*, 25 March 2020, https://www.nytimes.com/2020/03/25/world/asia/india-lockdown-coronavirus.html.

Milan, Stefania and Emiliano Treré. 'Big data from the South (s): Beyond data universalism', *Television & New Media* 20, 4 (2019): 319-335.

Muntaner, Carles. 'Invited commentary: social mechanisms, race, and social epidemiology', *American Journal of Epidemiology* 150, 2 (1999): 121-126.

Singh, Karan Deep, Vindu Goel, Hari Kumar and Jeffrey Gettleman. 'India, Day 1: World's Largest Coronavirus Lockdown Begins', *The New York Times*, 25 March 2020, https://www.nytimes.com/2020/03/25/world/asia/india-lockdown-coronavirus.html.

The GovLab. 'A Call for Action', *Medium,* 16 March 2020, https://medium.com/data-stewards-network/a-call-for-action-813669f32244.

Tutton, Richard. 'Opening the white box: Exploring the study of whiteness in contemporary genetics research', *Ethnic and Racial Studies* 30, 4 (2007): 557-569.

Wesolowski, Amy, Caroline O. Buckee, Linus Bengtsson, Erik Wetter, Xin Lu and Andrew J. Tatem. 'Commentary: Containing the Ebola Outbreak—the Potential and Challenge of Mobile Network Data.' *PLoS Currents* 6 (29 September 2014), 10.1371/currents.outbreaks.0177e7fcf52217b8b634376e-2f3efc5e.

02. COVID-19 PANDEMIC AND BIOPOLITICS IN LATIN AMERICA

SILVIO WAISBORD & MARÍA SOLEDAD SEGURA

As the first pandemic in the datafied society, COVID-19 offers an opportunity to reassess debates about digital communication and governability. These debates are driven by an interest in understanding particular aspects of "digital biopolitics"—the ambitious efforts by governments and corporations to maximize knowledge and control of populations for political and economic power. Digital biopolitics also draws into question the vulnerability of democratic rights such as privacy and the "right to know." In a recent article, Stefan Ecks concludes that, "we have never seen biopolitics on such a scale. 2020 is the birth year of radical biopolitics."[1]

Given our longstanding interest in the datafied society in Latin America, we are interested in assessing the applicability of arguments about contemporary biopolitics in Europe and the United States. Even if it is too early to draw categorical conclusions, given that the evolution and aftermath of the pandemic are unpredictable, there are indications that the current situation in the region does not match recent conclusions about the escalation of biopolitics. Various factors shape biopolitics, such as government objectives; bureaucratic systems; accountability and transparency of mechanisms and policies; the reliability of digital platforms; and conditions of epidemiological surveillance. None of these factors in Latin America are comparable to the situation in most countries in the global North.

At the time of this writing, Latin America has become the new epicenter of the pandemic, based on an increase in reported cases of infections and deaths.[2] Various governments in Latin America (Perú, Argentina, Bolivia, Chile, Ecuador, México, Colombia and Brasil) and the Inter-American Development Bank have deployed digital technologies to control the transmission of the virus and support testing and tracing. They have collaborated with private companies and universities to set up mobile applications for geolocalizing and contact-tracing possibly infected people. Expectedly, these actions have raised concerns about the negative impact of massive surveillance.

While we recognize the legitimacy of these concerns, the problem in Latin America has taken on different dimensions than similar efforts in Europe, North America, and East Asia. For the moment, the governments in the region have encountered significant problems launching and maintaining massive digital surveillance apparatuses. What stands in the way of pandemic-driven biopolitics is not a firm official commitment to protecting personal data or balancing public health objectives and democratic rights. Rather, the obstacles are technological and

1 Stefan Ecks, 'Coronashock Capitalism: The Unintended Consequences of Radical Biopolitics', *READING* 30, no. 3 (2016).

2 Talha Burki, 'COVID-19 in Latin America.' *The Lancet Infectious Diseases* 20, no. 5 (2020).

institutional: poor reach and limited effectiveness of digital and mobile technologies, as well as the inability of the Latin American state to govern and provision health services.

Most national health systems suffer from chronic deficits in provisioning services and monitoring populations. These deficits have been driven by a lack of funding and effective government administrative systems to set up, conduct, and maintain monitoring of health data and personal data. Underreported health data is common; in countries such as Nicaragua, Perú and Venezuela, health authorities have not even bothered to report basic epidemiological data. As a result, underreporting of cases is widely suspected. It is hard to imagine that malnourished health systems, when combined with other government agencies, would result in well-lubricated apparatuses. Take, for example, the decision by Brazil's President Jair Bolsonaro to terminate the agreement between telecommunications companies and the Ministry of Science, Technology, Innovation and Communication to provide information on mobile phones related to geographic location and mobilization. The decision to terminate was driven more by Bolsonaro's reckless pandemic policy than concerns about data protection. His government has had an appalling performance since the beginning of the pandemic, and has flatly dismissed concerns raised by health experts (including his former Ministry of Health Nelson Teich) and the World Health Organization.

Official disinterest in mobilizing digital technologies to control the pandemic pales in comparison to the way that police, military and intelligence services in the region historically approach communication and information technologies for securitization. From the early decades of the twentieth century until recent military dictatorships and contemporary democracies, governments have developed surveillance technologies to control populations, often with support from foreign countries. Recently, governments in countries including Colombia, Mexico, and Guatemala have beefed up surveillance technologies[3] to spy on critics including human rights activists, politicians and journalists. Nowhere in the region did national governments show comparable interest in incorporating digital technologies to maximize biopolitics. These national differences reflect distinct priorities and approaches to surveillance and population management.

Digital technologies do not improve outcomes without a high rate of adoption of contact tracing and geo-localization mobile applications. Technology's usefulness to controlling the pandemic would be quite limited due to the restricted availability of high-end cell phone equipment with Bluetooth and GPS and the unequal infrastructure of cell coverage in the region. An effective digital system would also require relatively updated mobile phones, which is rare, as civil society organizations such as *Derechos Digitales*[4] and *Fundación Sadosky*[5]

3 Katitza Rodriguez, 'Where Governments Hack Their Own People and People Fight Back: 2018 in Review', *Electronic Frontier Foundation*, 30 December 2018, https://www.eff.org/ko/deeplinks/2018/12/where-government-hack-their-own-people-and-people-fight-back-latin-american.

4 J. Carlos Lara, 'La pandemia de COVID-19 y la pulsión por la vigilancia estatal', *Derechos Digitales*, 1 May 2020, https://www.derechosdigitales.org/14411/la-pandemia-de-covid-19-y-la-pulsion-por-la-vigilancia-estatal/.

5 Fernando Schapachnik, 'Apps para Contact Tracing, ¿ahora?', *Medium*, 8 May 2020, https://medium.com/@fernando_36842/apps-para-contact-tracing-ahora-69e01b68d8c1.

have observed. According to 2010 data, between 65 % and 85 % of households own mobile phones in Latin American countries, except for Cuba and Venezuela, where numbers are lower.[6] Mobile phone services in many countries, such as Mexico, Argentina, Brazil, Colombia and Venezuela, have received frequent complaints for poor quality, according to consumer rights protection associations.[7]

Other technological barriers to tracing effectiveness include battery power and memory space, which current mobile health applications rely on. Apple and Google, the two largest providers of operating systems for cell phones, joined forces to address this issue. Nonetheless, it is not yet clear whether digital corporations will make certain applications available in older mobile phones that are more common in the region. Application malfunctions during the somewhat chaotic launch of COVID-19 in several countries have discouraged people from using them. Due to poor design, applications have also had many vulnerabilities. This was the case in Argentina in the province of San Luis, where national identity documents—including the processing code that is an authentication factor and the photo—were leaked. In Buenos Aires, it is possible to access the date of birth and address of any citizen.

In summary, the pandemic has prompted state-directed plans for monitoring COVID-19 prevalence in partnership with digital corporations and universities. The scope of the disease requires collecting massive amounts of data on populations, improving reporting systems, and deploying state-of-the-art technologies. However, it is not clear that these plans would achieve desired results. The obstacle is not a strong culture of privacy and data protection, but rather chronic problems among government agencies to ensure that health systems have ample and quality coverage, coupled with a weak and uneven commitment to addressing the pandemic. Government commitment has been notoriously lacking in Latin American health systems. In countries with serious infrastructure problems and inadequate funding for health services, it would have been surprising if governments had actively promoted data tracking to inform healthcare research and policy and fix intractable problems. Indeed, the spotty record of health systems in the region in responding to dengue, zika, chagas and other infectious disease outbreaks in recent years suggests that government negligence and lethargy are not conducive to deploying massive digital monitoring interventions.[8] Biopolitics assumes the willingness of states to know and roll out systems to track and control populations. On health matters, Latin American states have largely lacked the political will as well as human, economic and technical resources to know and act.

6 Alejandra Silva, 'Una mirada regional al acceso y tenencia de tecnologías de la información y comunicaciones a partir de los censos.' *Enfoques*, 17 December 2018, https://www.cepal.org/es/enfoques/mirada-regional-al-acceso-tenencia-tecnologias-la-informacion-comunicaciones-tic-partir.

7 Daniel Pardo, 'Por qué los latinoamericanos se quejan tanto de los celulares.' *BBC News Mundo*, 1 July 2013, https://www.bbc.com/mundo/noticias/2013/07/130701_tecnologia_celulares_latinoamerica_quejas_dp.

8 Hugo Lopez-Gatell, Mauricio Hernandez-Avila, Juan E. Hernández Avila, and Celia M. Alpuche-Aranda, 'Dengue in Latin America: A Persistent and Growing Public Health Challenge', in Carlos Franco-Paredes and José Ignacio Santos-Preciado (eds) *Neglected Tropical Diseases—Latin America and the Caribbean*, Vienna: Springer, 2015, pp. 203–224.

References

Burki, Talha. 'COVID-19 in Latin America.' The Lancet Infectious Diseases 20, no. 5 (2020): 547-548.

Ecks, Stefan. 'Coronashock Capitalism: The Unintended Consequences of Radical Biopolitics.' READING 30, no. 3 (2016).

Lara, Carlos J.. 'La pandemia de COVID-19 y la pulsión por la vigilancia estatal,' Derechos Digitales, 01 May 2020, https://www.derechosdigitales.org/14411/la-pandemia-de-covid-19-y-la-pulsion-por-la-vigilancia-estatal/.

Lopez-Gatell, Hugo, Mauricio Hernandez-Avila, Juan E. Hernández Avila, and Celia M. Alpuche-Aranda. 'Dengue in Latin America: A Persistent and Growing Public Health Challenge', in Carlos Franco-Paredes and José Ignacio Santos-Preciado (eds) Neglected Tropical Diseases—Latin America and the Caribbean, Vienna: Springer, 2015, pp. 203–224.

Pardo, Daniel. 'Por qué los latinoamericanos se quejan tanto de los celulares.' BBC News Mundo, 1 July 2013, https://www.bbc.com/mundo/noticias/2013/07/130701_tecnologia_celulares_latinoamerica_quejas_dp.

Rodriguez, Katitza. 'Where Governments Hack Their Own People and People Fight Back: 2018 in Review', Electronic Frontier Foundation, 30 December 2018, https://www.eff.org/ko/deeplinks/2018/12/where-government-hack-their-own-people-and-people-fight-back-latin-american.

Fernando Schapachnik. 'Apps para Contact Tracing, ¿ahora?', Medium, 8 May 2020, https://medium.com/@fernando_36842/apps-para-contact-tracing-ahora-69e01b68d8c1.

Silva, Alejandra. 'Una mirada regional al acceso y tenencia de tecnologías de la información y comunicaciones a partir de los censos', Enfoques, 17 December 2018, https://www.cepal.org/es/enfoques/mirada-regional-al-acceso-tenencia-tecnologias-la-informacion-comunicaciones-tic-partir.

03. EUROPEAN STEREOTYPES IN TIMES OF COVID-19: THE 'FRUGAL FOUR' AND THE 'IRRESPONSIBLE SOUTH'

LUIZA BIALASIEWICZ

The on-going debates regarding the coronavirus Recovery Fund that will form the focus of discussions at the upcoming EU summit on July 17, 2020 have highlighted the pernicious persistence of national stereotypes that continue to afflict political positioning and decision-making within the Union. It would be easy to dismiss such stereotypes simply as an easy short-hand adopted by politicians to position themselves within EU political debates. Self- and other- stereotypes also play very well to domestic audiences, providing an easy set of representations to draw from when arguing for a national position, both vis-a-vis Brussels or other EU member states.

The self-ascribed moniker "the frugal four" adopted by Austria, Denmark, the Netherlands and Sweden is no exception. Intended to mark out these countries' opposition to "irresponsible" and "excessive" spending of the proposed EU-wide Recovery Fund, it speaks to moral and economic positionings. Indeed, the term "moral hazard" wielded by Dutch politicians in 2012 when a previous proposal for mutualizing European debt was raise has once more appeared on the scene. Today, we remain tied to a distinct geographical imagination of hazard, irresponsibility, and excess. We must take such monikers seriously, because they tell us about radically different views across EU countries about the roles and responsibilities of the national state towards its citizenry, their responsibilities to Europe and fellow Europeans.

Moral Geographies

Italy and the Netherlands offer the most striking example of a "clash of stereotypes." In recent months, Dutch PM Mark Rutte has taken on the role of the most vocal leader of the "frugal four." Rutte has threatened to block recovery funding to Italy and other (mostly southern European) states if these do not undertake a comprehensive package of reforms. With this positioning, Rutte and his Finance Minister Wopke Hoekstra maintain a long-standing self-representation of the Netherlands' position in the EU as an economically "thrifty" (if not directly self-serving) actor; the leading government think tank Clingendael described perceptions of Dutch interest promotion within the EU as "effective without empathy" in a report published in the spring of 2019.[1] Beyond re-playing long-standing self-stereotypes within EU institutions, Rutte is also singing a familiar tune to a home audience conscious of the parliamentary elections that await him in the coming year. When Italian PM Giuseppe Conte arrived in The Hague this past week for a meeting with Rutte, he was greeted outside

1 Dekker, Brigitte, Rem Korteweg, Adriaan Nunes, Monika Sie Dhian Ho, and Wouter Zweers. 'Percepties van Nederlandse belangenbeharting in de Europese Unie', Clingendael, 17 April 2019, https://www.clingendael.org/publication/perceptions-dutch-interest-promotion-inside-eu.

of the Parliament by far-right leader Geert Wilders, who raised a sign reading, “Not a cent for Italy.”[2]

Fig. 1. “Not a Cent for Italy” (Source: Twitter)

Wilders may represent an extreme wing of Dutch nationalist politics, but the same slogan was featured just a month earlier on the front cover of Dutch popular weekly *Elsevier Weekblad*. It was accompanied by an illustration that summed up the competing stereotypes: at the top were two industrious Dutch workers, and below, two supposed “Mediterranean types” lounging in the sun. The cover caused a popular uproar in Italy. Curiously, it was Giorgia Meloni, the leader of the right-nationalist *Fratelli d’Italia* party that allied with Wilders for the 2019 European Parliament elections, who filed a formal complaint. She demanded that the government exact an immediate apology from the Dutch ambassador to Rome.[3] “The cover is repugnant” she said, noting the cover depicted Italians and Mediterraneans as “parasites.”

2 ‘Recovery fund, Conte avverte il premier Rutte: ‘Dirò che abbiamo fretta o salta anche l’Olanda.’’ *la Repubblica*, 9 July 2020, https://www.repubblica.it/politica/2020/07/09/news/giuseppe_conte_olanda_rutte-261444509/.

3 Claudio Bozza, ‘«Italiani come parassiti». Meloni contro la copertina del giornale olandese (di destra)’, *Corriere della Sera*, 30 May 2020, https://www.corriere.it/politica/20_maggio_30/italiani-come-parassiti-copertina-l-ira-meloni-contro-settimanale-olandese-di-destra-ded644ba-a24e-11ea-bc2b-bdd292787b00.shtml.

"We don't accept lessons from Holland which has created a tax haven in Europe and is draining resources from all other Member States," she added.[4] Other southern European opinion makers reacted, many in jest. In a tweet from *El País* Brussels correspondent Bernardo de Miguel, a Portuguese re-working of the image depicted fat and sunburned Northern European tourists lounging at the bottom of the image instead:

Fig. 2. "No Lessons from The Netherlands" (Source: Twitter)

4 Just days after the publication of the unfortunate cover story, the European Tax Justice Network published a calculation—widely reported in Italy—on how many millions of euros the Dutch state was 'stealing' from Italian state coffers by offering multinational companies (including Italian ones like car maker FIAT) a tax haven in the Netherlands. The report remarked on how 'the EU countries with the highest reported cases of COVID-19 have been the biggest historical losers of corporate tax to the Netherlands, which is currently a leading opponent of solidarity measures proposed by the EU'.

Guy Verhofstadt, Belgian MEP and chair of the Alliance of Liberals and Democrats for Europe, was even stronger in his criticisms. He tweeted that 'this sort of false reporting led to Brexit," noting that under the terms of the plan "not 1 NL citizen will pay 1 euro more to the COVID-19 Recovery Fund." *Elsevier Weekblad* simply discounted the protests with a headline noting "Neo-fascist *Fratelli d'Italia* demands apologies."

The Still-Authoritarian South

Notwithstanding the accurate descriptor (*Fratelli d'Italia* is, indeed, the direct heir to the "post" fascist *Alleanza Nazionale* party), this choice of terminology also offered the Dutch weekly yet another easy stereotype: the Southern European authoritarian. Along with the spendthrift image, the stereotype of the (still) authoritarian Southern Europeans, whether Italian, Spanish or Greek, was another powerful trope that circulated throughout the lockdown. It was not even a particularly implicit one; in his weekly televised addresses to Dutch citizens in the early weeks of the Netherlands' so-called "intelligent lockdown," PM Rutte insisted on the differences in "national character" that would make the harsh measures adopted in Southern European countries impossible in the Netherlands. He suggested that Dutch citizens would simply not accept the sort of limitations on their personal freedoms imposed in Italy and Spain.

The choice to adopt only a very limited set of restrictions was a risky one. In the first months of the "intelligent lockdown," the Netherlands had one of the highest European mortality rates from the virus. The government position also initially insisted on the need to "build up population immunity" though with the rapid debunking of the UK's "herd immunity" approach. Anna Holligan, writing for BBC News noted in her report on the scientifically-questionable Dutch strategy, noted that notion was "rapidly repackaged as a useful by-product rather than the main goal."[5] The country had one of the lowest COVID-19 testing rates in Europe, and it was not until the start of June that testing became available to the general population: a convenient way to "keep the numbers down."

To justify limited state intervention into public health measures, Rutte repeatedly described the Netherlands in his weekly addresses as a "grown-up country." As he noted in one speech, "what I hear around me, is that people are glad that they are treated as adults, not as children." The implication was that the Dutch did not need to be treated like children "to behave responsibly," unlike other European citizenries.

Irresponsible Children

The paternalism at work in the imagined geographies of Europe is not new. Very similar imaginations were at play during and following the 2008 financial crisis, which had profoundly unequal consequences across the European space. As Greek economic geographer Costis Hadjimichalis has argued, to properly understand the geographies of uneven development in the EU, we need to appreciate their founding "economic mythologies" that continue to

5 Anna Holligan, 'Coronavirus: Why Dutch Lockdown May Be a High-Risk Strategy,' *BBC News*, 4 April 2020, https://www.bbc.com/news/world-europe-52135814.

frame popular imaginations of political-economic choices and outcomes in Europe's North and South.[6] Disparaging geographical metaphors like "Club Med" and the infamous "PIIGS" (Portugal, Italy, Ireland, Greece and Spain) are examples of economic mythologies in the post-2008 years. The tropes of childishness and irresponsibility applied to Southern European countries like Italy, Spain, and Greece today thus draw on a longer-standing set of imaginations. They trace a direct line from the financial crisis to the COVID-19 crisis. So too do the prescriptions offered; self-reliance and individual responsibility are hallmarks of neoliberal capitalism.

"Italians Must Learn to Make it on Their Own"

In a front-page interview in the Italian newspaper Corriere della Sera in the first week of July, 2020, Dutch PM Rutte outlined his country's position on the Recovery Fund. "Dear Italy, learn to make it on your own" the headline announced.[7] In the interview, the first given by Rutte to an international newspaper since the start of the pandemic, the PM was direct in his assessment: European solidarity at this moment was important, of course, but so too was "national responsibility." Rutte noted that "this means that Member States that require and request assistance right now must do what is necessary to be able to face a future crisis of this sort on their own, in resilient fashion."

His prescription included "measures that will not be popular," including "reforms that should increase the productivity and competitiveness of Italy" and the "sustainability of public finances," along with "promoting fiscal integrity and transparency." The irony of the head of the Netherlands—widely considered to be one of the least transparent corporate tax havens— calling for more "fiscal integrity and transparency" was not lost on the *Corriere* interviewer. It is not just a question of competing economic visions at play here, however. As Alexander de Croo, Belgium's Deputy Prime Minister and Minister of Finance, wrote in an editorial published on politico.eu in mid-June,[8] the battle over the Recovery Fund was not simply an economic one, regarding whether or not to create debt. It was "an existential one."

The European project faced nothing less than a battle for the future. As de Croo wrote, it was time "to break free from the narrative of the 'lazy' south and the 'hard-working' north," since "when it comes to the economic impact of the coronavirus we are all in the same boat." De Croo's words were echoed just last week by Angela Merkel in the extended interview[9] she gave to a group of European newspapers, as Germany took up the rotating presidency of the European Council.

---

6 Costis Hadjimichalis, 'Uneven geographical development and socio-spatial justice and solidarity: European regions after the 2009 financial crisis', *European Urban and Regional Studies* 18, no. 3 (2011).

7 Paolo Valentino (2020), 'Cara Italia, impara a farcela da sola'. *Corriere della Sera Weekly Newsmagazine* '7', July 3rd, 14-19.

8 Alexander De Croo. 'Europe's Existential Recovery Fund Battle', *POLITICO*, 15 June 2020, https://www.politico.eu/article/coronavirus-economy-europe-existential-recovery-fund-battle/.

9 Philip Oltermann, ''For Europe to Survive, Its Economy Needs to Survive': Angela Merkel Interview in Full', *The Guardian*, 26 June 2020, https://www.theguardian.com/world/2020/jun/26/for-europe-survive-economy-needs-survive-angela-merkel-interview-in-full.

In discussing proposals for the Recovery Fund, Merkel rejected the idea that the Fund was a "major concession to the southern countries." She replied, "I don't find it helpful to talk about *the* northern countries, *the* southern countries and *the* eastern Europeans. That is seeing things in black and white. I expect each of us always to put ourselves in the other person's shoes and consider problems from the other's point of view." Keeping in mind "the huge burden in economic, medical and, of course, because of the many lives lost, emotional terms" faced by countries like Italy and Spain, she said it was "only right for Germany to think not just about itself but to be prepared to engage in an extraordinary act of solidarity."

The Recovery Fund proposal, originally advanced by Merkel and French President Emmanuel Macron, is indeed about much more than keeping the EU economy afloat. It elicits a much broader existential question regarding who Europe is "for." As with all existential questions, the symbols, metaphors, and stereotypes that inscribe it matter greatly. Is the EU little more than a free-trade area, where every state can advance its own particular interests, if need be, at a cost to others? Or should it be an autonomous and supranational political actor, able to collectively make political decisions? In a moment when the well-being of all Europeans is at stake, the choices made at Friday's summit will have much wider consequences.

This essay has been first published in openDemocracy (13 July 2020).

References

'Recovery fund, Conte avverte il premier Rutte: 'Dirò che abbiamo fretta o salta anche l'Olanda'', *Repubblica*, 9 July 2020, https://www.repubblica.it/politica/2020/07/09/news/giuseppe_conte_olanda_rutte-261444509/.

Bozza, Claudio. '«Italiani come parassiti». Meloni contro la copertina del giornale olandese (di destra)', *Corriere della Sera*, 30 May 2020, https://www.corriere.it/politica/20_maggio_30/italiani-come-parassiti-copertina-l-ira-meloni-contro-settimanale-olandese-di-destra-ded644ba-a24e-11ea-bc2b-bdd292787b00.shtml.

De Croo, Alexander. 'Europe's Existential Recovery Fund Battle', *POLITICO*, 15 June 2020, https://www.politico.eu/article/coronavirus-economy-europe-existential-recovery-fund-battle/.

Dekker, Brigitte, Rem Korteweg, Adriaan Nunes, Monika Sie Dhian Ho, and Wouter Zweers. 'Percepties van Nederlandse belangenbeharting in de Europese Unie', *Clingendael*, 17 April 2019, https://www.clingendael.org/publication/perceptions-dutch-interest-promotion-inside-eu.

Hadjimichalis, Costis. 'Uneven geographical development and socio-spatial justice and solidarity: European regions after the 2009 financial crisis', *European Urban and Regional Studies* 18, no. 3 (2011): 254-274.

Holligan, Anna. 'Coronavirus: Why Dutch Lockdown May Be a High-Risk Strategy', *BBC News*, 4 April 2020, https://www.bbc.com/news/world-europe-52135814.

Oltermann, Philip. 'For Europe to Survive, Its Economy Needs to Survive': Angela Merkel Interview in Full', *The Guardian*, 26 June 2020, https://www.theguardian.com/world/2020/jun/26/for-europe-survive-economy-needs-survive-angela-merkel-interview-in-full.

Tax Justice Network. 'Revealed: Netherlands, Blocking EU's Covid19 Recovery Plan, Has Cost EU Countries $10bn in Lost Corporate Tax a Year', 8 April 2020, https://www.taxjustice.net/2020/04/08/revealed-netherlands-blocking-eus-covid19-recovery-plan-has-cost-eu-countries-10bn-in-lost-corporate-tax-a-year/.

04. THE TROUBLE OF VISUALIZING COVID-19 DURING A NATION-WIDE LOCKDOWN IN SOUTH AFRICA

ADRIAAN ODENDAAL

As of October 3, 2020, according to BBC News' interactive COVID-19 data visualization widget, the continent of Africa had 1,506,015 confirmed cases of COVID-19 and 36,288 confirmed COVID-19 related deaths.[1] It drew data from Johns Hopkins University and unspecified "national public health agencies." My home country, South Africa (SA), accounts for 677,833 of these confirmed cases and 16,909 of the respective deaths—just below half of the continent's cases of infections and deaths. I compared South Africa to the Netherlands next, having moved to Rotterdam just over a year ago. I opened the Google interactive map that appears whenever you search for anything COVID-19 related.[2] I am not the only one who developed an obsession with these interactive atlases of blue bubbles found everywhere from news websites to the World Health Organization (WHO) homepage.[3] Being obsessed with data had become the big-data equivalent of so-called "doom-scrolling."[4] Yet, the ease with which I navigated this statistical information to get an instantaneous aestheticized overview obscured the local labor and material contexts that went into supplying the data from countries such as South Africa.

The Early COVID-days in South Africa

The first case of COVID-19 in South Africa was confirmed on Thursday the 5th of March by the National Institute for Communicable Diseases (NICD).[5] While I watched the digital blue circles blooming exponentially in the Netherlands throughout March, initially South Africa seemed spared. Africa remained relatively unblemished, only a constellation of small blue pin-pricks. Trying to prevent the eventual outbreak, South Africa went into a strict lockdown on March 23, 2020 and the hashtag #LockdownSA started trending to detail all the tribulations of daily life under a quasi-militarized quarantine. Shortly before the lockdown, a small Johannesburg-based data journalism team called Media Hack Collective (MHC)[6] decided to launch its own South African COVID-19 data-visualization dashboard.[7] The dashboard followed the organization's

1 Peter Mwai, 'Coronavirus: What's Happening to the Numbers in Africa?', *BBC News*, 28 October 2020, https://www.bbc.com/news/world-africa-53181555.

2 'COVID-19 Worldwide', *Google News*, https://news.google.com/covid19/map?hl=en-US&gl=US&ceid=US%3Aen. Accessed 13 October 2020.

3 World Health Organization, https://www.who.int/.

4 'On "Doomsurfing" and "Doomscrolling"', *Merriam-Webster*, https://www.merriam-webster.com/words-at-play/doomsurfing-doomscrolling-words-were-watching. Accessed 28 October 2020.

5 Zweli Mkhize, 'First Case of COVID-19 Coronavirus Reported in South Africa', *National Institute for Communicable Diseases*, 5 March 2020, https://www.nicd.ac.za/first-case-of-covid-19-coronavirus-reported-in-sa/.

6 'Turning Data Into Visual Insights', *Media Hack*, https://mediahack.co.za/. Accessed 28 October 2020.

7 'Coronavirus in South Africa', *Media Hack*, updated 26 October 2020, https://mediahack.co.za/datastories/coronavirus/dashboard/

core tenet of making data available to the general public in an accessible and understandable format. It tracked cases per province with a detailed breakdown of travel histories, location, age, and gender. Due to a lack of timely and effectively communicated official information during the early outbreaks, the dashboard became instantly popular.

Media Diaries – Episode 2

Despite having moved to Rotterdam, I continued working remotely for a social-impact podcasting company based in Johannesburg called Volume. During #LockdownSA one of our regular partners, the South African Media Innovation Programme[8], contracted us to produce a show called Media Diaries.[9] This podcast was about the daily occupational struggles of journalists reporting on the COVID-19 crisis during the national lockdown, and sourced stories through voice-notes. The show's premise was an intriguing paradox: "What happens when our journalists, the people we expect to be out in the world for us, are forced to stay at home?" The frustrations traditional journalists faced were easy to understand. The perspective of data journalists unable to do their work during lockdown was quite different, and showed something often ignored in discussions of data reporting. In the second episode of Media Diaries, we followed the struggles of MHC in maintaining their COVID-19 dashboard.

An Obstructed Flow of COVID-19 Data

MHC, led by award-winning journalists Alastair Otter and Laura Grant, launched their COVID-19 dashboard in mid-March to a phenomenal response. "We had upwards of 300 people looking at the dashboard at any given time," says Alastair in one of the voice-notes sent to our producers. Their approach to COVID-19 reporting was to circumvent sensationalist journalism and misinformation by taking "hard solid data" and releasing it to the public in a form that was "understandable and usable." Achieving this goal meant using only authoritative data provided by the South African Department of Health and the NICD.

When Laura sent her first voice-notes at a later stage, she sounded more distressed. "It started off with this amazing flow of information from the NICD," she said. "They would put it on their website every day. Now the last time they put anything on their website was. . . three days ago." The floor of initial public support for project became interspersed with concerned emails. "It's not really our fault," Laura had to explain, "The official info is just not coming through."

Shortly after launching their COVID dashboard, MHC partnered with the Bhekisisa Centre for Health Journalism to assist with the collection of reliable data.[10] The Bhekisisa Centre sent press releases from the Department of Health to MHC, who would use the printed information to provisionally update their dashboard. The trickle-down data they had to work with necessitated a

8 South Africa Media Innovation Program, https://samip.mdif.org/

9 'Media Diaries: Covid-19 Edition Shows What Journalism Looks Like in the Time of Social Distancing and Self-Quarantine', *Volume*, https://www.volume.africa/media-diaries. Accessed 28 October 2020.

10 Samuel Flans, Alfa Fiphaza, Bongekile Booi and Boni Paku, 'eThembeni residents living in excrement: "We are citizens too"', *News24,* 28 October 2020, https://www.news24.com/news24/southafrica/news/ethembeni-residents-living-in-excrement-we-are-citizens-too-20201027.

complete rework of their dashboard. "Earlier this morning we heard there were 709 confirmed infections in South Africa," Alastair said when checking in with our team, "but beyond that number, there was very little data available." The data that was coming through was one-dimensional. "We initially started off when the first few cases of corona-virus were announced the Department of Health and NICD put out very detailed information about the ages of people, their genders, where they have traveled to, their province, etc... [W]e built the dashboard on that information thinking this would be great." Laura was sitting in her car, dogs jumping up at the window because they expected to be taken for a walk, when she described the consequent frustrations to me. "We are really struggling to get the data that we used to get at the beginning. So, we decided to change the dashboard and add international graphs and an African one and compare South Africa to other countries. . . I know we can definitely get data for that."

Suggestions from the frustrated public that MHC assist with sourcing primary data seemed untenable. "I mean, we agree in principle that people should be assisting," said Alastair, "but it's a capacity issue at the moment for most of us." In a more recent email, Laura told me how much work went into processing the data. "Collecting and keeping the database up to date is the most time-consuming part—that part could not be automated because the data was being published either in PDFs or infographics on social media." At the time, even the NCIS website's own dashboard was stalled.[11] "Their data is further out of date as far as we can tell," said Alastair, "which suggests, perhaps, that there is a huge capacity issue there."

The Overlooked Problems at the Source of the Data

The frustrations of MHC, and the struggle for reliable data updates during the lockdown, speaks to a larger issue at hand. There are few instances of fully automated data generation. There is always human labor and material conditions involved at some point in the data chain. What Episode 2 of Media Diaries shows—beyond the trials and tribulations of a small team of industrious data journalists—is that even the grand global data visualizations of Google, the BBC, and the New York Times rely on the same single local sources of information that the MHC dashboard used. In fact, both the BBC and Al Jazeera have made explicit use of data from the MHC dashboard. When you scroll down to a global overview of COVID-19 cases on Google's dashboard, the material and labor constraints that hamper data collection in South Africa gets lost in the big sea of big data, aestheticized to encourage us to accept data as quantified facts. Our data-literacy can create dangerous false confidence when reading these dashboards and widgets. For example, Tanzania has stopped reporting data on May 8, 2020, after a final submission of 509 cases and 21 deaths.[12] When you zoom out on most COVID-19 dashboards, Tanzania's figures still stand at those paltry numbers. Has Tanzania, and Africa at large, been spared from the worst outbreaks of COVID-19? WHO special envoy Samba Sow warned of a "silent epidemic" in Africa due to a lack of testing on the continent, meaning data silences such as in Tanzania can also be caused by obfuscated data reporting.[13]

11 National Institute for Communicable Diseases, https://www.nicd.ac.za/.

12 Travis L. Adkins and Jeffrey Smith, 'Will COVID-19 Kill Democracy?', *Foreign Policy*, 18 September 2020, https://foreignpolicy.com/2020/09/18/will-covid-19-kill-democracy/.

13 Katharine Houreld and David Lewis. 'In Africa, "Lack of Coronavirus Data Raises Fears of 'Silent

Since Media Diaries came out in April, a third member, Gemma Gatticchi, joined the MHC team to alleviate the labor of keeping the dashboard updated. Fortunately, the Department of Health also started consistently releasing daily updates. However, as Laura told me in a recent email that the data updates are still unreliable. “Sometimes it would be 1 PM, sometimes it would be close to midnight. We had many late nights waiting for the updates.” It’s easy to forget about the struggles of Alastair, Laura, and the governmental staff at every level of COVID-19 data collection in South Africa, sitting at my laptop in Rotterdam, interacting with the blue dots blooming over the African continent.

References

‘Coronavirus in South Africa’, Media Hack, updated 26 October 2020, https://mediahack.co.za/datastories/coronavirus/dashboard/.

‘COVID-19 Worldwide’, *Google News*, https://news.google.com/covid19/map?hl=en-US&gl=US&ceid=US%3Aen.

‘Media Diaries: Covid-19 Edition Shows What Journalism Looks Like in the Time of Social Distancing and Self-Quarantine', *Volume*, https://www.volume.africa/media-diaries. Accessed 28 October 2020.

‘On “Doomsurfing” and “Doomscrolling”, Merriam-Webster, https://www.merriam-webster.com/words-at-play/doomsurfing-doomscrolling-words-were-watching.

'Turning Data Into Visual Insights’, *Media Hack*, https://mediahack.co.za/. Accessed 28 October 2020.

Flans, Samuel, Alfa Fiphaza, Bongekile Booi and Boni Paku. ‘eThembeni Residents Living in Excrement: “We Are Citizens Too”’, *News24,* 28 October 2020, https://www.news24.com/news24/southafrica/news/ethembeni-residents-living-in-excrement-we-are-citizens-too-20201027.

Houreld, Katharine and David Lewis. ‘In Africa, 'Lack of Coronavirus Data Raises Fears of “Silent Epidemic”’, *Reuters*, 8 July 2020, https://www.reuters.com/article/us-health-coronavirus-africa-data-insigh-idUSKBN24910L.

Mkhize, Zweli. ‘First Case of COVID-19 Coronavirus Reported in South Africa’, National Institute for Communicable Diseases, 5 March 2020, https://www.nicd.ac.za/first-case-of-covid-19-coronavirus-reported-in-sa/.

Mwai, Peter. ‘Coronavirus: What's Happening to the Numbers in Africa?’, *BBC News*, 28 October 2020, https://www.bbc.com/news/world-africa-53181555.

Travis L. Adkins and Jeffrey Smith. ‘Will COVID-19 Kill Democracy?’, *Foreign Policy*, 18 September 2020, https://foreignpolicy.com/2020/09/18/will-covid-19-kill-democracy/.

Epidemic”’, *Reuters*, 8 July 2020, https://www.reuters.com/article/us-health-coronavirus-africa-data-insigh-idUSKBN24910L.

05. RIESGOS E INCERTIDUMBRES EN LAS APLICACIONES PARA EL RASTREO DE CONTAGIOS

JAVIER SÁNCHEZ-MONEDERO

Risks and Uncertainties in Contact Tracing Apps

After weeks of debate about privacy and data protection issues, there is an urgent need to interrogate the effectiveness and social impact of contact-tracking applications to fight COVID-19. The proposal by Google and Apple imposes a model to govern the pandemic that many countries have adopted. However, their applications are useless in the face of scarce resources, such as health personnel, reliable rapid diagnostic tests, and legal reforms. Tracing systems based on apps could also systematically exclude vulnerable social groups, and threaten individual and collective rights.

El despliegue de sistemas de vigilancia casi nunca es temporal

En 2003 entraba en funcionamiento el sistema EURODAC, una base de datos biométricos para coordinar las peticiones de asilo en Europa. Los datos eran sencillos, solo las huellas dactilares y el país de entrada en la UE de quien demandaba asilo, con un único objetivo: evitar peticiones de asilo en más de un país a la vez. Tras varias reformas, en la actualidad EURODAC es utilizado para controlar la inmigración irregular, deportar y separar a familias y es empleado por las fuerzas de seguridad como una base de datos de criminales. El ámbito e interoperabilidad de este sistema sigue ampliándose. La actual propuesta de reforma, en trámite, incluye la ampliación de datos (biografía, documentos, fotografía), la reducción de la edad obligatoria para el registro a 6 años, la integración sistemática de los datos en los sistemas de visado, viajeros y policiales europeos y la cesión de datos a terceros países. Así, una herramienta sencilla y con un único fin se ha ido ampliando y reformando, incluyendo el marco legal, hasta convertirse en un sistema de vigilancia a escala continental de colectivos vulnerables.[1]

Inmersos en el debate continuo sobre la gestión de la pandemia, las narrativas oficiales insisten en que si algo tienen en común las diferentes estrategias de éxito es el rol de la tecnología en la vigilancia epidemiológica de la población. En las últimas semanas, se ha intensificado el debate sobre la necesidad de adoptar aplicaciones de rastreo en nuestros móviles que permitan notificar a los usuarios que han estado en contacto con una persona infectada. Para ello, se registraría la línea temporal de desplazamientos y/o la lista de personas con las que se interactúa para informar a una persona que ha estado en contacto con un caso

1 Javier Sánchez-Monedero, 'The datafication of borders and management of refugees in the context of Europe,' *Data Justice Project*, 28 November 2018, https://datajusticeproject.net/wp-content/uploads/sites/30/2018/11/wp-refugees-borders.pdf.

positivo. Se nos presentan China, Singapur o Corea del Sur como casos de éxito basados en la tecnología y se sugiere, en aras de controlar la epidemia, sacrificar la privacidad y autonomía permitiendo a estados y empresas gestionar, a través de la tecnología, aspectos de nuestras vidas a los que hasta ahora no podían acceder, como la libertad de circulación, el acceso a nuestro puesto de trabajo o nuestra libertad para reunirnos con otras personas.

La propuesta, sin precedentes, ha encendido numerosos debates alertando de los riesgos de que tal información exista o si es posible implementar estos sistemas mitigando al máximo estos riesgos. Al debate se suman *Google y Apple*[2] con una propuesta de rastreos de contactos descentralizada y que parece ofrecer ciertas garantías de privacidad, aunque no debemos olvidar que estas dos empresas ya tienen en su poder el historial de movilidad de la mayor parte de los usuarios de sus terminales. En este texto interrogamos críticamente las opciones tecnológicas que se están barajando en Europa y España y cuestionamos tanto su función técnica como su rol desde la economía política y los riesgos que entrañan. En un momento de shock colectivo conviene no aceptar sistemas de control social irreversibles. La experiencia de casos como EURODAC nos dice que una vez puestos en marcha no se vuelven a apagar.

El (Fracasado) Modelo de Singapur

El debate viene presentado por el "éxito" del modelo empleado en Singapur, país que aparentemente había controlado la pandemia en marzo gracias, en parte, al rastreo de contactos a través de los móviles, y de un estudio matemático publicado en *Science* el 30 de marzo.[3] Frente a la idea de registrar dónde ha estado una persona, Singapur implementó el rastreo de contactos, es decir, con quién ha estado esa persona. Si tenemos una base de datos de contactos entre personas, cuando una presente síntomas y se confirme su caso, se podrá notificar a la lista de personas que estuvieron en contacto con esta persona. Este sistema funciona utilizando los sensores bluetooth de los móviles para poder establecer qué dispositivos están cerca de otros. Para ello, una aplicación emite periódicamente una serie de señales que son detectadas y almacenadas por los móviles de otras personas.

Frente a esta propuesta, otras opciones pasan por registrar todos los movimientos de una persona para ver si se ha coincidido en lugar y hora con una persona infectada o ha accedido a un recinto donde estuvo esta persona. Esto se implementaría, como ya lo hace Google para fines publicitarios, utilizando todos los sensores disponibles del móvil (GPS, wifi, bluetooth, brújula, acelerómetro, etc.). Además de estas opciones, los estados pueden implementar otras, como ocurre en el caso polaco o taiwanés, donde las personas en cuarentena deben activar la ubicación de su móvil y sacarse una fotografía en el interior de su casa tres veces

2 Jordi Pérez Colomé, 'Apple y Google se alían para facilitar que las apps para rastrear el coronavirus estén en todos los móviles', *EL PAÍS*, 10 April 2020, https://elpais.com/tecnologia/2020-04-10/apple-y-google-se-alian-para-crear-un-sistema-de-rastreo-del-coronavirus-que-no-necesite-descargar-una-app.html.

3 Luca Ferretti, Chris Wymant, Michelle Kendall, Lele Zhao, Anel Nurtay, Lucie Abeler-Dörner, Michael Parker, David Bonsall, and Christophe Fraser. 'Quantifying SARS-CoV-2 transmission suggests epidemic control with digital contact tracing *Science* 368, no. 6491 (2020).

al día o de lo contrario recibirán la visita de la policía. El catálogo de aplicaciones,[4] como vemos, es variado.

Recientemente, el caso de "éxito" de Singapur dejó de serlo cuando a finales de abril el país tuvo que adoptar el confinamiento de la población[5] ante la imposibilidad de controlar la expansión del virus por medios tecnológicos. Las causas son múltiples; por ejemplo, se ha apuntado al hacinamiento de trabajadores inmigrantes pero también al exceso de confianza en las capacidades del sistema de seguimiento de contactos a través de móviles.[6] Este sistema de rastreo de móviles de Singapur no ha funcionado por varias razones: 1) sólo 1 de cada 6 personas había instalado la aplicación; 2) para que la aplicación funcionase correctamente el móvil necesitaba estar desbloqueado[7] y la aplicación en primer plano (es decir, no se podía utilizar otra función del móvil simultáneamente); 3) y fuera del objetivo de este texto, el porcentaje tan alto de personas contagiadas y asintomáticas no diagnosticadas reduce mucho su eficacia. Además, aunque se nos presente el caso como un éxito basado en la tecnología, el gobierno de Singapur insiste en el que el sistema requería de una buena cantidad de rastreadores humanos para tener un control efectivo de los casos. Esta segunda parte de la historia no suele estar presente entre los promotores de estos sistemas automáticos.

Propuestas Europeas y Modelos con "Privacidad Desde el Diseño"

El modelo de rastreo de movilidad ha sido descartado por la mayoría de países europeos tanto por la presión de la opinión pública como por la regulación de protección de datos de la UE. De este modo, muchos países como Alemania, Francia, Suiza[8], Reino Unido[9] o Italia están estudiando o desarrollando sistemas de rastreo de interacciones entre personas. La posición de España aún no es clara al respecto. En todo caso, la UE acaba de publicar un serie de recomendaciones para el rastreo de contactos[10]: las autoridades sanitarias deberán aprobar las aplicaciones y ser responsables del cumplimiento de la normativa europea de protección de datos incluyendo a las autoridades nacionales de protección de datos, los usu-

4 GNSS for Crisis, European Global Navigation Satellite Systems Agency, https://www.gsa.europa.eu/GNSS4Crisis.

5 Peter Beaumont, 'Singapore Extends Lockdown as Covid Cases Surge Past 9,000', *The Guardian*, 21 April 2020, https://www.theguardian.com/world/2020/apr/21/singapore-coronavirus-outbreak-surges-with-3000-new-cases-in-three-days.

6 Jessie Yeung, Joshua Berlinger, Sandi Sidhu, Manisha Tank and Isaac Yee, 'Singapore's Migrant Workers Are Suffering the Brunt of the Country's Coronavirus Outbreak', *CNN*, 25 April 2020, https://edition.cnn.com/2020/04/24/asia/singapore-coronavirus-foreign-workers-intl-hnk/index.html.

7 Chris Stokel-Walker, 'Can Mobile Contact-Tracing Apps Help Lift Lockdown?', *BBC*, 16 April 2020, https://www.bbc.com/future/article/20200415-covid-19-could-bluetooth-contact-tracing-end-lockdown-early.

8 'Contact Tracing App Ready This Month, Says Expert', *SWI Swissinfo.ch*, 1 May 2020, https://www.swissinfo.ch/eng/digital-solution_contact-tracing-app-could-be-launched-in-switzerland-within-weeks/45706296.

9 NHS COVID-19 App, https://www.nhsx.nhs.uk/covid-19-response/nhs-covid-19-app/.

10 "Covid-19 Tracing Apps: Ensuring Privacy and Data Protection', *European Parliament*, 5 June 2020, https://www.europarl.europa.eu/news/en/headlines/society/20200429STO78174/covid-19-tracing-apps-ensuring-privacy-and-data-protection.

arios deben tener control total sobre sus datos, la instalación de la app debe ser voluntaria, no se podrán rastrear los movimientos de las personas, los datos deben almacenarse de forma cifrada únicamente en los móviles, las apps deben ser interoperables entre países de la UE y deberían desactivarse en cuanto no sean necesarias. Un ejemplo es la aplicación propuesta por la Generalitat de Catalunya, encargada a una empresa de marketing y geofencing [11], que incumpliría muchas de estas recomendaciones y probablemente cualquier reglamento europeo de protección de datos.[12]

La mayoría de las soluciones cabe en dos categorías, centralizadas o descentralizadas, que se diferencian en los grados de protección de la privacidad para la ciudadanía. El punto común es que todas se basan en el uso de bluetooth para detectar a personas a nuestro alrededor con las que hemos coincidido.

La opción centralizada consiste en el envío sistemático de información de interacciones de riesgo con personas a un servidor central. En este caso, se intenta mantener el anonimato dando al móvil un código (o pseudo-identificador) que permite que el servidor central notifique alguna interacción con un positivo de COVID-19 pero no permite identificar a la persona.

La opción descentralizada y con "privacidad desde el diseño" consiste en mantener los datos exclusivamente en el móvil de una persona (descentralizada) y evitar el uso de identificadores que puedan revelar la identidad de la persona pero que permitan que el sistema funcione. Este sería el ejemplo de DP-3T[13], que surge de un grupo multidisciplinar de investigadores en privacidad y seguridad de varias instituciones europeas. En este caso, cada terminal genera una serie de identificadores efímeros (cadenas de caracteres aleatorias) que emite a través de bluetooth. Estas cadenas cambian cada poco tiempo de manera que otros terminales pueden guardarlas y estimar cuánto tiempo han estado cerca de una persona sin saber quién es esta persona. En este caso, tanto los identificadores efímeros producidos como detectados se almacenan únicamente en el teléfono. Ante un caso positivo los identificadores efímeros generados desde un terminal se añadirían a una base de datos central que los teléfonos de todos los ciudadanos descargarían periódicamente para comprobar que los identificadores que han ido almacenando coinciden con los de alguna persona que haya dado positivo. De esta forma no se puede revelar la identidad de ninguna persona ni el lugar de la interacción. Para más detalles sobre el protocolo DP-3T animamos a consultar la documentación oficial y la versión en castellano del cómic explicativo.[14]

---

11 Wikipedia contributors, 'Geovalla', 12 October 2020, https://es.wikipedia.org/wiki/Geovalla, accessed 19 October 2020.

12 Jordi Pérez Colomé, 'El Peligro de Las Apps: La Generalitat Emplea Una Empresa de Marketing En Su Aplicación Contra El Coronavirus', *EL PAÍS*, 20 April 2020, https://elpais.com/tecnologia/2020-04-19/el-peligro-de-las-apps-la-generalitat-emplea-una-empresa-de-marketing-en-su-aplicacion-contra-el-coronavirus.html.

13 DT-3T, https://github.com/DP-3T/documents.

14 1, 'Para frenar el COVID-19 tendremos que utilizar apps de rastreo. Hay polémica en torno a ellas, pero nuestro derecho a la privacidad no está reñido con su utilización. He traducido este 'cómic-hilo' creado por @ncasenmare en colaboración con @carmelatroncoso Abro hilo (1/5)', Twitter post, 10 April, 2020, 06:06 AM, https://twitter.com/VanesaKershawi/status/1248462243060002820.

A este tipo de diseños se les considera "privacidad desde el diseño" porque la privacidad se garantiza a nivel de diseño y código, y no se implementa en base a confianza a terceras partes. El equipo detrás del DP-3T genera confianza por varios factores que no se dan a la vez en otras propuestas: privacidad por diseño, el equipo tiene experiencia y es interdisciplinar, la documentación y código son abiertos y discutibles[15], el sistema está siendo auditado por terceras partes, etc. Por último, el nivel de centralización o descentralización pueden ser graduales. Este es el caso de Reino Unido[16], donde una clave de cifrado maestra protege, basándonos en nuestra confianza en el buen uso y custodia del organismo correspondiente, que se puedan usar los pseudo-identificadores (que luego se utilizan para generar identificadores efímeros) que genera la app al instalarse para identificar a personas reales. Por lo demás, esta opción tiene bastantes similitudes funcionales con DP-3T. Es complejo entrar en más detalles sobre el funcionamiento de las propuestas, ya que los cambios van por días (de hecho, en el momento de escribir este artículo el NHS está considerando descentralizar su propuesta[17] en parte para cumplir con los requisitos técnicos y de privacidad que impone Apple, como veremos a continuación). Sea cual sea la opción, para completar el puzle, es necesario un servidor central, de la autoridad sanitaria, donde registrar los códigos de las personas diagnosticadas con COVID-19.

Hace un mes, Google y Apple anunciaban una alianza para desarrollar un sistema de seguimiento de contactos a través de los móviles. Su propuesta se inspira en el protocolo de seguimiento DP-3T: detección de contactos con personas a través de las balizas bluetooth con identificadores efímeros que se almacenan y verifican siempre en el terminal del usuario. La propuesta de Google y Apple se implantaría a nivel del sistema operativo en próximas actualizaciones y no queda claro cómo podría aceptarla o rechazarla el usuario, aunque las primeras versiones desveladas apuntan a que sería una opción más de la configuración. La alianza ya ha publicado las especificaciones de la interfaz de programación para impulsar el desarrollo de aplicaciones que hagan uso de estos datos.[18] La idea es que, si bien las multinacionales proporcionarán esta funcionalidad a nivel del sistema operativo, sea cada organismo local (estado, autoridad sanitaria, etc.) quien desarrolle una aplicación que haga uso de esos datos y los integre dentro del sistema de salud. Por ejemplo, en España el Ministerio de Sanidad podría desarrollar una aplicación que gestione qué acciones se disparan después de que nuestro terminal detecte que hemos estado con una persona diagnosticada de COVID-19.

En cualquier caso, las soluciones de cualquier tipo tendrán que pasar obligatoriamente por el visto bueno de Google y Apple si quieren ser operativas. Esto tiene varias razones técnicas: 1) cualquier solución pasa por la "adopción" masiva por la población, y esto probablemente se conseguirá con un sistema implantado a nivel del sistema operativo y/o una notificación a cada persona sugiriendo instalar la aplicación de la autoridad sanitaria correspondiente;

15 DT-3T issues, https://github.com/DP-3T/documents/issues.

16 Lan Levy, 'The Security behind the NHS Contact Tracing App', *National Cyber Security Centre*, 4 May 2020, https://www.ncsc.gov.uk/blog-post/security-behind-nhs-contact-tracing-app.

17 Helen Warrell, Tim Bradshaw and Sarah Neville. 'NHS Tracing App in Question as Experts Assess Google-Apple Model', *Financial Times*, 6 May 2020, https://www.ft.com/content/d44beb06-5e3e-434f-a3a0-f806ce06576c.

18 Privacy-Preserving Contact Tracing, Apple, https://covid19.apple.com/contacttracing.

2) los dispositivos de Apple no permiten que una aplicación se ejecute en segundo plano por seguridad (fuente de enfrentamiento reciente entre el Gobierno Francés y Apple)[19]; 3) los sensores bluetooth de Android y Apple, a pesar de estar estandarizados, no son capaces de interaccionar correctamente sin una serie de modificaciones en las que trabajan las dos compañías. Como vemos, esta solución tecnológica impone de facto un modelo de gobernanza sanitaria desde las multinacionales que ya han aceptado países como Suiza.[20]

Más Allá de la Privacidad y Protocolos de Rastreo

En mayo de 2020 el debate se sigue centrando en cuestiones de privacidad y modelo centralizado o descentralizado, pero la única alternativa es que la que permitan las tecnológicas. Suiza ya está desarrollando su aplicación sobre la plataforma que ofrecen Google y Apple y la Unión Europea ha escrito unas recomendaciones que son compatibles con esta propuesta.

Sin embargo, quedan muchas preguntas por responder. ¿Pueden funcionar estos sistemas? ¿Bajo qué hipótesis? ¿Afectarán a todas las personas por igual? ¿Excluirá a colectivos sociales? ¿Deberíamos estar hablando más de otro tipo de medidas[21]? En la segunda parte de este artículo analizaremos si es posible que funcione el rastreo de contactos y qué problemas y riesgos plantean estas propuestas más allá de cuestiones de privacidad y protección de datos.

En la primera parte de este artículo hemos analizado los problemas de puesta en práctica del modelo de rastreo de contactos de Singapur, así como las propuestas que hay sobre la mesa a nivel europeo. En esta segunda parte analizamos las hipótesis de éxito del rastreo automatizado así como riesgos de exclusión e impacto desigual de estos sistemas.

¿Podría Funcionar el Rastreo de Contactos?

El debate sobre modelos de aplicaciones de rastreo apenas cuestiona la supuesta utilidad de este despliegue y se está centrando fundamentalmente en el cómo hacerlo y el impacto en la privacidad de las personas y la compatibilidad con leyes de protección de datos. El Parlamento Europeo acaba de publicar un documento sobre el rastreo de móviles como estrategia de lucha contra el coronavirus[22] donde las referencias sobre utilidad de estas soluciones tecnológicas provienen de medios de comunicación estadounidenses, como Wired, caracterizados por su devoción por el solucionismo tecnológico. Como en otros temas, sobre todo relacionados con la puesta en marcha de sistemas de vigilancia en Europa, el Europarlamento sigue las recomendaciones de la Comisión Europea que "recomienda apoyar las

19 Alex Hern, 'France Urges Apple and Google to Ease Privacy Rules on Contact Tracing', *The Guardian*, 21 April 2020, https://www.theguardian.com/world/2020/apr/21/france-apple-google-privacy-contact-tracing-coronavirus.

20 Swissinfo.Ch., 1 May 2020, https://www.swissinfo.ch/eng/digital-solution_contact-tracing-app-could-be-launched-in-switzerland-within-weeks/45706296.

21 Sergio Minué, 'El Gerente De Mediado: La Eterna Chapuza', *El Gerente De Mediado*, 10 May 2020, https://gerentedemediado.blogspot.com/2020/05/la-eterna-chapuza.html.

22 European Parliament, 'Tracking mobile devices to fight coronavirus', https://www.europarl.europa.eu/RegData/etudes/BRIE/2020/649384/EPRS_BRI(2020)649384_EN.pdf.

estrategias de salida del confinamiento que se basen en datos móviles y aplicaciones"[23] sin aportar ninguna evidencia sobre la supuesta utilidad. No obstante, según las hipótesis y simulaciones matemáticas del mencionado artículo en *Science*[24] del equipo de Ferretti, y que cita Singapur como caso de éxito (lo era en el momento de escribirse), la adopción generalizada de esta aplicación, por parte de la población, junto con medidas de distanciamiento físico, ayudaría a controlar la pandemia.

Diversos artículos e incluso el propio Parlamento Europeo citan al estudio de Ferretti para justificar que una tasa de adopción de la aplicación del 60 % de la población podría controlar la epidemia.[25] Sin embargo, esta cifra debe interpretarse correctamente y comprender las condiciones necesarias. En el estudio se plantean varios escenarios (ver siguiente figura) que dependen de lo rápido que se aísle a una persona diagnosticada y también a las personas asintomáticas que han estado en contacto con esta. Todos los escenarios asumen un ritmo reproductivo R0=2.0. Tanto los periodistas como el Europarlamento consideran el escenario más favorable, que es el aislamiento inmediato (figura de la derecha). Ignorando los márgenes de error, si un 60 % de las personas diagnosticadas utiliza la aplicación y se aísla inmediatamente tras el diagnóstico, y el 60 % de las personas asintomáticas con las que estas han estado en contacto son notificadas y aisladas inmediatamente, se consigue detener la transmisión. En un escenario de margen de actuación (detección, notificación y aislamiento) de 24h se necesitaría aislar al 80 % de las personas con síntomas y al 60 % de sus contactos. El matiz de la ventana de actuación es importante en la operacionalización, porque significa que una buena parte de personas asintomáticas será puesta en cuarentena sin realizar un diagnóstico. A partir de 3 días de margen de actuación el uso de aplicaciones solo ralentizará la propagación. A día de hoy, en la mayoría de países y en particular en España, estas hipótesis de margen de notificación y actuación son inviables, además de otros problemas que comentaremos a continuación.

Efectividad de las Aplicaciones de Rastreo en Diferentes Escenarios

Por el contrario, otros estudios interdisciplinares difieren de esta hipótesis. El estudio COVID-19 Rapid Evidence Review: Exit through the App Store?[26], publicado por el Ada Lovelace Institute, concluye que "No hay pruebas que apoyen el despliegue nacional inmediato de aplicaciones de rastreo de síntomas, aplicaciones de rastreo de contactos digitales y

23 European Commission, 'Coronavirus: Commission adopts Recommendation to support exit strategies through mobile data and apps', 8 April 2020, https://ec.europa.eu/commission/presscorner/detail/en/ip_20_626.

24 Luca Ferretti, Chris Wymant, Michelle Kendall, Lele Zhao, Anel Nurtay, Lucie Abeler-Dörner, Michael Parker, David Bonsall, and Christophe Fraser. 'Quantifying SARS-CoV-2 transmission suggests epidemic control with digital contact tracing,' *Science* 368, no. 6491 (2020).

25 European Commission, 'Mobile applications to support contact tracing in the EU's fight against COVID-19, Common EU Toolbox for Member States,' 15 April 2020, https://ec.europa.eu/health/sites/health/files/ehealth/docs/covid-19_apps_en.pdf.

26 Ada Lovelace Institute, COVID-19 Rapid Evidence Review: Exit through the App Store?, https://www.adalovelaceinstitute.org/our-work/covid-19/covid-19-exit-through-the-app-store/.

certificados digitales de inmunidad". Esta conclusión afecta a las aplicaciones de rastreo, pero también a las de autodiagnóstico, como la que el Gobierno de España acaba de encargar a *Telefónica*[27] o la aplicación de autodiagnóstico de la Comunidad de Madrid (con un algoritmo insultantemente simple[28]) que además se descubrió que recopilaba sistemáticamente datos sensibles de las personas[29]. Por otro lado, el rastreo y gestión de personas a través de sus móviles ya se ha probado con anterioridad. El investigador Sean McDonald, quien estudió este tipo de información en la pandemia de ébola de África en 2014-5 concluye en una entrevista que "el mayor determinante de la mortalidad del COVID-19 es la capacidad del sistema sanitario"[30] y advierte de que los gobiernos están enfocando la pandemia como un problema de gestión de las personas más que de construcción de capacidad de respuesta y apunta a la falta de evidencias de que los modelos predictivos matemáticos y la tecnología de vigilancia puedan ayudar a controlar el virus.

Ante la ausencia de datos de validación, resulta difícil pensar en experimentos, fuera de planes piloto minuciosos, que puedan extrapolar sus conclusiones a la diversidad de situaciones de la vida cotidiana. Por poner un ejemplo, la exposición durante unos segundos puede ser significativa entre dos personas sin mascarilla a una distancia menor de dos metros o no serlo si una de ellas la lleva, o puede no ser significativo que una persona comparta transporte público con 20 más si todas llevan la protección adecuada o mantienen la distancia oportuna. Dos vecinos de pared pueden detectarse como contactos y no haberse cruzado en semanas. Por otro lado, también es necesario estudiar la capacidad real de la tecnología bluetooth para estimar la distancia entre dos dispositivos. Ante esto, solo cabe esperar una cantidad importante de falsos positivos (personas que reciban una notificación de riesgo no justificada) y de falsos negativos (interacciones de riesgo que no son detectadas). Las capturas de la nueva actualización del sistema operativo de Apple (figura anterior) indican que el usuario puede contribuir en el calibrado de estos parámetros, aunque como vemos, sigue habiendo mucha incertidumbre asociada a la información no medible.

Más Allá de los Debates Sobre Privacidad: Riesgos sobre Utilidad, Exclusiones y Seguridad

Además de las limitaciones técnicas de interacción entre terminales y protocolo de rastreo (que resolverían Google y Apple), se necesitará la cooperación de la población que disponga de terminales; esto es, que acepten el rastreo a nivel de sistema operativo, que instalen la aplicación de la autoridad regional, que se encarguen de llevar el móvil consigo en todo

27 Ministerio de Asuntos Económicos y Transformación Digital, 'Boletín Oficial del Estado', https://boe.es/boe/dias/2020/05/05/pdfs/BOE-A-2020-4829.pdf#BOEn.

28 open-covid19-test, https://github.com/celiavelmar/open-covid19-test.

29 'La Comunidad de Madrid modifica el aviso de privacidad de su app móvil para COVID-19: amplía las finalidades de uso de los datos y cuándo los anonimiza', *Maldita Tecnología*, 24 March 2020, https://maldita.es/malditatecnologia/2020/03/24/aplicacion-madrid-coronavirus-oficial-comparte-datos-empresas/.

30 Crofton Black, 'Monitoring Being Pitched to Fight Covid-19 Was Tested on Refugees', *The Bureau of Investigative Journalism*, 28 April 2020, https://www.thebureauinvestigates.com/stories/2020-04-28/monitoring-being-pitched-to-fight-covid-19-was-first-tested-on-refugees.

momento durante su desplazamiento y actividad laboral, y que, por supuesto, acudan a la asistencia sanitaria para que esta realice tests fiables y se desencadene la alerta a la cadena de contactos. Para todo esto es necesario que las personas confíen en los actores tecnopolíticos y entiendan los componentes del sistema, lo que nos lleva a privacidad desde el diseño, código abierto, protecciones legales garantistas, limitación de uso, etc. pero también que las personas no sean penalizadas laboral o socialmente al dar a conocer su enfermedad o al ser etiquetados como sospechosos por la aplicación y que cuenten con sistemas de protección social adecuados, como ya apuntamos en otro artículo.[31]

Resulta paradójico que el artículo del equipo de Ferretti[32] argumente que uno de los problemas del confinamiento sea que los "individuos con bajos ingresos tengan capacidad limitada para quedarse en casa" y que a la vez la solución sea disponer de un móvil de última generación con un sistema operativo actualizado que incorpore los cambios técnicos necesarios para implementar la solución tecnológica. Recientemente, *Ars Technica* publicó un artículo en el que se afirma que dos mil millones de teléfonos inteligentes activos[33] no tienen la tecnología necesaria para participar en el esquema de detección de contactos propuesto por *Apple* y *Google*. Precisamente, la mayoría de estos dispositivos incompatibles son los que utilizan las personas con pocos ingresos o las personas mayores. Otros 1500 millones de personas que utilizan móviles "no inteligentes" quedarían excluidas directamente. Por supuesto, segmentos completos de la población, como personas en exclusión social, mayores o niños no tienen móviles de ningún tipo. Ante semejantes datos, parece naíf pensar en un escenario de adopción generalizada de esta situación que además no incremente, aún más, las desigualdades estructurales de nuestras sociedades.

Las exclusiones del sistema de alarma no tienen que ver solo con el "parque" móvil sino también con las variables, pesos y umbrales del modelo riesgo. La conceptualización matemática del riesgo al modelar comportamientos puede resultar en impactos muy dispares a diferentes grupos sociales y colectivos, a menudo los más vulnerables, que no se han considerado durante el diseño y validación del modelo. La experiencia los sistemas de análisis de movilidad de las personas a menudo conceptualizan técnicamente el fenómeno que estudian excluyendo a colectivos[34]. Pensemos, por ejemplo, cómo se mueve e interactúa, junto con su móvil, una trabajadora interna en un hogar o una abogada con un despacho propio.

En cualquier caso, todas las opciones de seguimiento de contactos a través de bluetooth son susceptibles de una serie de ataques individuales o globales al conjunto del sistema. Hablar

31 Alfredo Caro-Maldonado, 'Coronavirus, tecnociencia y poder', *El Salto*, 10 February 2020, https://www.elsaltodiario.com/paradoja-jevons-ciencia-poder/coronavirus-tecnociencia-y-poder.

32 Ferretti, Luca, Chris Wymant, Michelle Kendall, Lele Zhao, Anel Nurtay, Lucie Abeler-Dörner, Michael Parker, David Bonsall, and Christophe Fraser. 'Quantifying SARS-CoV-2 transmission suggests epidemic control with digital contact tracing', *Science* 368, no. 6491 (2020).

33 Tim Bradshaw, '2 Billion Phones Cannot Use Google and Apple Contact-Tracing Tech', *Ars Technica*, 20 April 2020, https://arstechnica.com/tech-policy/2020/04/2-billion-phones-cannot-use-google-and-apple-contract-tracing-tech/.

34 danah boyd and Kate Crawford. 'Critical questions for big data: Provocations for a cultural, technological, and scholarly phenomenon,' *Information, Communication & Society* 15, no. 5 (2012).

de los problemas de interoperabilidad y seguridad de bluetooth daría para varios artículos, pero aquí daremos algunos ejemplos. Es factible inyectar falsos encuentros a los móviles para disparar falsas alarmas o por el contrario sabotear la detección de contactos. Además, es posible desplegar un sistema de dispositivos bluetooth a lo largo de una ciudad para recoger identificadores efímeros y direcciones físicas de los sensores bluetooth (dirección MAC) para reindentificar a las personas. Independientemente del protocolo, DP-3-T u otros, las aplicaciones de las autoridades regionales necesitan comunicarse con un servidor central que podría revelar la identidad de las personas. Para más información, el equipo de DP-3T ha publicado un análisis completo de estos y otros riesgos.[35] Las amenazas no son solo para la protección individual, sino que puede afectar a nivel de los estados hasta el punto de que los servicios de seguridad de Países Bajos enviaron una carta[36] de cinco páginas al Ministerio de Sanidad Neerlandés advirtiendo de los riesgos de seguridad nacional que podría suponer el despliegue apresurado de aplicaciones de estas características.

Aplicaciones de Rastreo: De Bala de Plata a Posible Parte de una Solución

El rastreo de contactos es una práctica de salud pública utilizada para la respuesta a enfermedades infecciosas[37]. Necesitamos protocolos de detección, investigación y reacción rápidos para los que las aplicaciones de seguimiento pueden ser un elemento más pero en ningún caso sustituir ni menoscabar los trabajos epidemiológicos hechos por personas que, como tales, tienen capacidad y flexibilidad para adaptarse e indagar en situaciones diversas. En las narrativas sobre la eficacia tecnológica se suelen eliminar tanto las incertidumbres funcionales o de seguridad en torno a las herramientas como el rol de las personas en las tareas y su interacción con la tecnología. A menudo se ignora que algunos de los países que han tenido éxito deteniendo la pandemia coinciden con los que en 2003 sufrieron la epidemia SARS. La preparación y respuesta ante epidemias van más allá de las soluciones técnicas, significa "disponer de recursos, competencias, planes y legitimidad política para desplegar las soluciones cuando hagan falta".[38] Las aplicaciones son inútiles ante la escasez de otros recursos, como personal sanitario con formación específica, disponibilidad de pruebas diagnósticas fiables y rápidas, reformas legales o respuestas sociosanitaria en caso de contagio, que a día de hoy, siguen siendo insuficientes. Por tanto, su papel debe ser de apoyo a las intervenciones desde la Salud y la Sanidad Públicas y no deben servir de coartada[39] para

35 Privacy and Security Attacks on Digital Proximity Tracing Systems, https://github.com/DP-3T/documents/blob/master/Security%20analysis/Privacy%20and%20Security%20Attacks%20on%20Digital%20Proximity%20Tracing%20Systems.pdf.

36 Joost Schellevis, 'Veiligheidsdiensten Waarschuwden Ministerie Om Corona-App', *Nederlandse Omroep Stichting*, 20 April 2020, https://nos.nl/l/2331107.

37 Adam J. Kucharski, Petra Klepac, Andrew Conlan, Stephen M. Kissler, Maria Tang, Hannah Fry, Julia Gog, John Edmunds and CMMID COVID-19 Working Group, 'Effectiveness of isolation, testing, contact tracing and physical distancing on reducing transmission of SARS-CoV-2 in different settings,' *The Lancet,* 2020*,* https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(20)30457-6/fulltext.

38 Algorithm Watch, 'Automated decision-making systems and the fight against COVID-19 – our position', 2 April 2020, https://algorithmwatch.org/en/our-position-on-adms-and-the-fight-against-covid19/

39 Colectivo Silesia. ''Hacer-tests-masivos' como cliché', 18 April 2020, https://colectivosilesia.net/2020/04/18/hacer-tests-masivos-como-cliche/.

evitar tomar otro tipo de decisiones. Por ejemplo, numerosos medios de comunicación y profesionales están denunciando la falta de planes y personal con formación epidemiológica para seguir el rastro de nuevos contagios.[40] En cualquier caso, los márgenes temporales de diagnóstico y aislamiento propuestos por el equipo de Ferretti, que proporcionan la evidencia científica que justifica el despliegue de estos sistemas de vigilancia, están lejos de ser realistas en nuestro país.

Resulta sorprendente y preocupante que, en general, periodistas, políticos y ciudadanía se centren en debates sobre estas aplicaciones mientras se deja de lado medidas esenciales y con efecto positivo demostrado como el refuerzo de la atención primaria, desmantelada en la Comunidad de Madrid durante la gestión de la crisis. Puestos a hacer una inversión tecnológica, parece más sensato invertir esfuerzos en mejorar la calidad e integración de datos desde las diferentes administraciones sobre casos confirmados, datos que ya están en manos de las administraciones públicas custodiados por empleados públicos y sujetos a una protección legal clara.

Los problemas de reutilización de la tecnología siempre van a planear sobre cualquier opción. Sabemos que la mayoría de sistemas de vigilancia que se han implantado durante diferentes crisis han permanecido después en la sociedad. Durante el confinamiento, Marruecos ha usado la información de localización de aplicaciones de citas para identificar a hombres homosexuales[41]. Nada impide, con opción descentralizada o no descentralizada, que regímenes no democráticos obliguen a entregar las claves efímeras recibidas para comprobar si un grupo de personas han tenido contacto entre ellas. Hemos de considerar el riesgo de que estas aplicaciones sean parte o normalicen los sistemas de vigilancia a las trabajadoras y trabajadores, tal y como advierte el *European Trade Union Institute*.[42] No podemos olvidar los riesgos para la seguridad colectiva tales como la generación de falsas alarmas por actores con multitud de intereses. Por tanto, estamos ante un movimiento arriesgado que valorar sin prisas[43] tras un debate científico, interdisciplinar y social.

El rastreo de contactos basado en apps excluirá a personas en situación de vulnerabilidad como personas con pocos ingresos, menores, mayores y, seguramente, otros grupos que nos cuesta anticipar. Las exclusiones sistemáticas de grupos de la población afectarán a la precisión y por tanto a la utilidad real de cualquier solución, descentralizada o no. Esta advertencia, junto con otras, se plantean en el documento sobre garantías en derechos del

40 Elena G. Sevillano, 'Sin pistas de los 'rastreadores' necesarios para la desescalada', *EL PAÍS*, 3 May 2020, https://elpais.com/sociedad/2020-05-03/sin-rastro-de-los-rastreadores-necesarios-para-la-desescalada.html.

41 Aida Alami, 'Dozens of Gay Men Are Outed in Morocco as Photos Are Spread Online', *New York Times*, 26 April 2020, https://www.nytimes.com/2020/04/26/world/middleeast/gay-morocco-outing.html.

42 Ponce del Castillo, Aida María. 'Covid-19 Contact-Tracing Apps: How to Prevent Privacy from Becoming the next Victim', *The European Trade Union Institute*, May 2020, https://www.etui.org/publications/policy-briefs/european-economic-employment-and-social-policy/covid-19-contact-tracing-apps-how-to-prevent-privacy-from-becoming-the-next-victim.

43 Gálvez Muñoz, Lina, 'Coronavirus: Las Tecnologías de La Covid-19 Marcarán Nuestro', *EL PAÍS*, 26 April 2020, https://elpais.com/tecnologia/2020-04-26/las-tecnologias-de-la-covid-19-marcaran-nuestro-manana.html.

documento "*The Coronavirus (Safeguards) Bill 2020*".[44] A día de hoy, desconocemos cualquier estudio o simulación matemática que analice los impactos desiguales que estas soluciones podrían tener sobre colectivos vulnerables. Debemos, en general, reflexionar sobre qué significa la validación de la evidencia, quién la realiza y qué significa esta validación para cada comunidad.

Cualquier despliegue de sistemas de rastreo necesita la adopción masiva a unos niveles probablemente muy difíciles de conseguir considerando las exclusiones de los sistemas propuestos. En todo caso, sería esencial conseguir la confianza de la sociedad. Las personas tienen que saber que su privacidad y derechos serán respetados, y para ello, la instalación de la app debe ser un acto voluntario y sin consecuencias negativas para el individuo en caso de no hacerse o no poderse hacer. No podemos permitir que los grupos más vulnerables vean mermados sus derechos de movilidad, laborales o de acceso a espacios por no poder pagar un móvil con las prestaciones necesarias.

Debemos permanecer vigilantes ante las propuestas de solucionismo tecnológico[45] donde las empresas están no solo imponiendo un modelo de gobernanza sobre la gestión de la pandemia, que afecta a derechos individuales y colectivos, sino limitando el imaginario de soluciones y sirviendo a la agenda de la austeridad con la promesa de reemplazar o reducir las medidas de salud pública eficaces por medios tecnológicos inteligentes. No debemos olvidar que las intervenciones sociotécnicas no solo monitorizan, sino que disciplinan a la ciudadanía, y que dejar que las empresas de Silicon Valley definan e implementen la gobernanza de cada vez más aspectos de la vida es un ataque directo a la democracia y los derechos individuales y colectivos.

Agradecimientos

Gracias a todo el colectivo de La Paradoja de Jevons *y a Elena Ruiz Peralta por sus correcciones y aportaciones.*

This essay has been first published in the Spanish daily newspaper El Salto (11 May 2020).

References

'La Comunidad de Madrid modifica el aviso de privacidad de su app móvil para COVID-19: amplía las finalidades de uso de los datos y cuándo los anonimiza,' *Maldita Tecnología*, 24 March, 2020, https://maldita.es/malditatecnologia/2020/03/24/aplicacion-madrid-coronavirus-oficial-comparte-datos-empresas/.

'Para frenar el COVID-19 tendremos que utilizar apps de rastreo. Hay polémica en torno a ellas, pero nuestro derecho a la privacidad no está reñido con su utilización. He traducido este 'cómic-hilo' creado por @ncasenmare en colaboración con @carmelatroncoso Abro hilo (1/5)', Twitter post, 10 April 2020, 06:06 AM, https://twitter.com/VanesaKershawi/status/1248462243060002820.

44 Edwards, Lilian et al, 'The Coronavirus (Safeguards) Bill 2020: Proposed protections for digital interventions and in relation to immunity certificates' (2020).

45 Evgeny Morozov, 'The Tech 'Solutions' for Coronavirus Take the Surveillance State to the next Level', *The Guardian*, 15 April 2020, https://www.theguardian.com/commentisfree/2020/apr/15/tech-coronavirus-surveilance-state-digital-disrupt.

Ada Lovelace Institute. 'COVID-19 Rapid Evidence Review: Exit through the App Store?', https://www.adalovelaceinstitute.org/our-work/covid-19/covid-19-exit-through-the-app-store/.

Alami, Aida. 'Dozens of Gay Men Are Outed in Morocco as Photos Are Spread Online', *New York Times*, 26 April 2020, https://www.nytimes.com/2020/04/26/world/middleeast/gay-morocco-outing.html.

Algorithm Watch. 'Automated decision-making systems and the fight against COVID-19 – our position', 2 April 2020, https://algorithmwatch.org/en/our-position-on-adms-and-the-fight-against-covid19/.

Beaumont, Peter. 'Singapore Extends Lockdown as Covid Cases Surge Past 9,000', *The Guardian*, 21 April 2020, https://www.theguardian.com/world/2020/apr/21/singapore-coronavirus-outbreak-surges-with-3000-new-cases-in-three-days.

Black, Crofton. 'Monitoring Being Pitched to Fight Covid-19 Was Tested on Refugees', *The Bureau of Investigative Journalism*, 28 April 2020, https://www.thebureauinvestigates.com/stories/2020-04-28/monitoring-being-pitched-to-fight-covid-19-was-first-tested-on-refugees.

boyd, danah and Kate Crawford. 'Critical questions for big data: Provocations for a cultural, technological, and scholarly phenomenon. ' Information, communication & society 15, 5 (2012): 662-679.

Bradshaw, Tim. '2 Billion Phones Cannot Use Google and Apple Contact-Tracing Tech', *Ars Technica*, 20 April 2020, https://arstechnica.com/tech-policy/2020/04/2-billion-phones-cannot-use-google-and-apple-contract-tracing-tech/.

Caro-Maldonado, Alfredo. 'Coronavirus, tecnociencia y poder', *El Salto*, 10 February 2020, https://www.elsaltodiario.com/paradoja-jevons-ciencia-poder/coronavirus-tecnociencia-y-poder.

Colectivo Silesia. 'Hacer-tests-masivos como cliché', 18 April 2020, https://colectivosilesia.net/2020/04/18/hacer-tests-masivos-como-cliche/.

Pérez Colomé, Jordi. 'Apple y Google se alían para facilitar que las apps para rastrear el coronavirus estén en todos los móviles', *EL PAÍS*, 10 April 2020, https://elpais.com/tecnologia/2020-04-10/apple-y-google-se-alian-para-crear-un-sistema-de-rastreo-del-coronavirus-que-no-necesite-descargar-una-app.html.

Edwards, Lilian et al.. 'The Coronavirus (Safeguards) Bill 2020: Proposed protections for digital interventions and in relation to immunity certificates', *LawArXiv* (2020), https://osf.io/preprints/lawarxiv/yc6xu/.

European Commission. 'Coronavirus: Commission adopts Recommendation to support exit strategies through mobile data and apps', 8 April 2020, https://ec.europa.eu/commission/presscorner/detail/en/ip_20_626.

European Commission. 'Mobile applications to support contact tracing in the EU's fight against COVID-19, Common EU Toolbox for Member States,' 15 April 2020, https://ec.europa.eu/health/sites/health/files/ehealth/docs/covid-19_apps_en.pdf.

European Parliament. 'Tracking mobile devices to fight coronavirus', https://www.europarl.europa.eu/RegData/etudes/BRIE/2020/649384/EPRS_BRI(2020)649384_EN.pdf.

Ferretti, Luca, Chris Wymant, Michelle Kendall, Lele Zhao, Anel Nurtay, Lucie Abeler-Dörner, Michael Parker, David Bonsall and Christophe Fraser. 'Quantifying SARS-CoV-2 transmission suggests epidemic control with digital contact tracing', *Science* 368, no. 6491 (20.20).

Gálvez Muñoz, Lina. 'Coronavirus: Las Tecnologías de La Covid-19 Marcarán Nuestro', *EL PAÍS*, 26 April 2020, https://elpais.com/tecnologia/2020-04-26/las-tecnologias-de-la-covid-19-marcaran-nuestro-manana.html.

GNSS for Crisis. European Global Navigation Satellite Systems Agency, https://www.gsa.europa.eu/GNSS4Crisis.

Kucharski, Adam J., Petra Klepac, Andrew Conlan, Stephen M. Kissler, Maria Tang, Hannah Fry, Julia Gog, John Edmunds and the CMMID COVID-19 Working Group. 'Effectiveness of isolation, testing, con-

tact tracing and physical distancing on reducing transmission of SARS-CoV-2 in different settings,' *The Lancet,* 2020, https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(20)30457-6/fulltext.

Levy, Lan. 'The Security behind the NHS Contact Tracing App', *National Cyber Security Centre*, 4 May 2020, https://www.ncsc.gov.uk/blog-post/security-behind-nhs-contact-tracing-app.

Ministerio de Asuntos Económicos y Transformación Digital. 'Boletín Oficial del Estado', https://boe.es/boe/dias/2020/05/05/pdfs/BOE-A-2020-4829.pdf#BOEn.

Morozov, Evgeny. 'The Tech 'Solutions' for Coronavirus Take the Surveillance State to the next Level', *The Guardian*, 15 April 2020, https://www.theguardian.com/commentisfree/2020/apr/15/tech-coronavirus-surveilance-state-digital-disrupt.

Ponce del Castillo, Aida María. 'Covid-19 Contact-Tracing Apps: How to Prevent Privacy from Becoming the next Victim', *The European Trade Union Institute*, May 2020, https://www.etui.org/publications/policy-briefs/european-economic-employment-and-social-policy/covid-19-contact-tracing-apps-how-to-prevent-privacy-from-becoming-the-next-victim.

Privacy and Security Attacks on Digital Proximity Tracing Systems, https://github.com/DP-3T/documents/blob/master/Security%20analysis/Privacy%20and%20Security%20Attacks%20on%20Digital%20Proximity%20Tracing%20Systems.pdf.

Sánchez-Monedero, Javier. 'The datafication of borders and management of refugees in the context of Europe,' Data Justice Project, 28 November 2018, https://datajusticeproject.net/wp-content/uploads/sites/30/2018/11/wp-refugees-borders.pdf.

Schellevis, Joost. 'Veiligheidsdiensten Waarschuwden Ministerie Om Corona-App', *Nederlandse Omroep Stichting*, 20 April 2020, https://nos.nl/l/2331107.

Sevillano, Elena G.. 'Sin pistas de los 'rastreadores' necesarios para la desescalada', *EL PAÍS*, 3 May 2020, https://elpais.com/sociedad/2020-05-03/sin-rastro-de-los-rastreadores-necesarios-para-la-desescalada.html.

Helen Warrell, Tim Bradshaw and Sarah Neville. 'NHS Tracing App in Question as Experts Assess Google-Apple Model', *Financial Times*, 6 May 2020, https://www.ft.com/content/d44beb06-5e3e-434f-a3a0-f806ce06576c.

Yeung, Jessie Joshua Berlinger, Sandi Sidhu, Manisha Tank and Isaac Yee. 'Singapore's Migrant Workers Are Suffering the Brunt of the Country's Coronavirus Outbreak', *CNN*, 25 April 2020, https://edition.cnn.com/2020/04/24/asia/singapore-coronavirus-foreign-workers-intl-hnk/index.html.

06. SURVEILLANCE IN THE TIME OF COVID-19: THE CASE OF THE INDIAN CONTACT TRACING APP AAROGYA SETU

SOUMYO DAS

COVID-19 has brought governments across the world back to the drawing boards to design efficient pandemic containment strategies. In India, while reports suggest that the rise in number of cases has declined from exponential levels, the spread continues. The government, alongside enforcing a complete lockdown of all human activity in non-essential services and sectors, has considered the use of digital technologies (ICTs) to monitor and control the spread of the virus as an informational and preventive model. In tune with other national governments, including those of Singapore and China, on April 2, 2020 the Government of India launched the "*contact tracing technology"* initiative called *Aarogya Setu*. Developed by the National Informatics Center of the Ministry of Electronics and Information Technology, the mobile application is available in eleven national languages. As of April 25, it has reached 7.5 million registered users.[1]

The application, designed to keep track of the travel and contact history of an individual, can be downloaded by users voluntarily. It registers the personal information of users, including name, age, gender, health status, and recent travel history. Asking users to respond to a series of questions designed to assess if the person is COVID-19 positive, Aarogya Setu generates a Unique Digital Identifier (UDI) number for the individual. It uses Bluetooth and GPS to collect other data. The Bluetooth connectivity allows the application to record details of other registered users that the registered individual comes in contact with. The location tracking system (GPS) constantly registers the location of a user at 15-minute intervals. Using this data, Aarogya Setu assigns the user a COVID-19 status: *low risk, high risk, positive*, or *negative*. In the initial phase, users' data is stored locally on their mobile device. For those who are assessed to be positive, their data is transferred from the mobile device to a national server for assessment and communication purposes—which raises a number of concerns.

Aarogya Setu Raises Privacy and Security Concerns

The application is supposed to empower the government to analyse the virus spread in a localized area, and inform individuals who came in contact with the positive individuals about self-isolation and further steps. Two things have to be kept in mind about the application. Firstly, its effectiveness depends on the individual practice of self-reporting symptoms in an honest and timely manner. Secondly, it was designed for smartphone users and participation

1 Neha Alawadhi, 'Coronavirus Spread: Aarogya Setu Tops Charts with 75 Million Downloads,' *Business Standard India*, 24 April 2020, https://www.business-standard.com/article/current-affairs/covid-tracker-aarogya-setu-recommended-but-not-mandatory-clarifies-govt-120042401721_1.html.

is voluntary, meaning the app can effectively only monitor a subset of Indians.[2] As Jason Say, Senior Director of the Government Technology Agency of Singapore, argues,[3] "automated contact testing is not a panacea," and "a competent human-in-the-loop system with sufficient capacity" is a more effective strategy than relying solely on techno-centric solutions.

On top of that, Aarogya Setu comes with its fair share of privacy and security problems. To start with, with no comprehensive legislation in the Indian lawbooks that outlines individual privacy protections, application users have no choice but to agree to privacy policies set by the developers, as instructed by the Government of India. This policy provides only a sketchy outline of where and for how long individual data will be retained.[4] The majority of the text offers only a string of vague statements that don't disclose who owns and controls access to the data. Specifically, the policy reads that "persons carrying out medical and administrative interventions necessary in relation to COVID-19" can gain access to the data. Given that practically all ministries and departments of the Government of India are playing an active role in devising strategies and implementing processes to contain the spread of the virus, policy statements like this evoke ample chances for the "interdepartmental exchanges of people's personal information," based on an analysis of the application's privacy by the Internet Freedom Foundation (EFF).[5]

Beyond the concerns surrounding undisclosed and vague data use and data protection policies, the fact that individuals are assigned a Unique Digital Identifier number raises additional privacy concerns. First, given that all individuals are provided with a static identity number, there are concrete chances of identity breach. Moreover, all individuals in India have a national Unique Identity Number (a so-called "Aadhar Number") associated with the contact details of the same mobile device used to run Aarogya Setu. Linking the UDI with a Unique Identity Number amplifies risks of data sharing. For example, these two identities might be leaked, potentially linking biographical information, location, and contact history of registered users of Aarogya Setu with their Aadhar number. Numerous cases have also been recorded of the National Unique Identity system being used to link identity metrics, including linking an individual's financial accounts with their social welfare program accounts.[6] The same harmful data linkage might happen for individual data collected with Aarogya Setu. Finally, fears have multiplied with intel sources reporting that software already available in the market can bypass the system security and extract an individual's sensitive information. [7]

2 'Smartphone Users in India Crossed 500 Million in 2019, States Report', *News18*, 30 January 2020, https://www.news18.com/news/tech/smartphone-users-in-india-crossed-500-million-in-2019-states-report-2479529.html.

3 Jason Bay, 'Automated Contact Tracing Is Not a Coronavirus Panacea', *Medium*, 20 April 2020, https://blog.gds-gov.tech/automated-contact-tracing-is-not-a-coronavirus-panacea-57fb3ce61d98.

4 Rohit Chatterjee, 'Arogya Setu App Gets Revised Privacy Policy', *Analytics India Magazine*, 17 April 2020, https://analyticsindiamag.com/arogya-setu-app-gets-revised-privacy-policy/.

5 'Is Aarogya Setu Privacy-First? Nope, but It Could Be-If the Government Wanted', *Internet Freedom Foundation*, 14 April 2020, https://internetfreedom.in/is-aarogya-setu-privacy-first-nope-but-it-could-be-if-the-government-wanted/.

6 Silvia Masiero and Soumyo Das, 'Datafying anti-poverty programmes: implications for data justice', *Information, Communication & Society* 22, no. 7 (2019): 916-933.

7 Amrita Nayak Dutta, 'Pakistani Operatives Create Fake Arogya Setu App to 'steal Info' from Indian

Voluntary Adoption?

While downloading the application is voluntary, certain states have made individual registration on the application mandatory. For example, in New Delhi, Mr. Surjit K. Singh, Director of National Center for Disease Control, has strongly recommended the Delhi government to allow people to enter the city capital only after they have installed the application[8], therefore setting the tone for using the application for monitoring inter-district and inter-state movement of people. Similarly, the Tamil Nadu state government has urged employees of all higher education institutions in the state to use the application.[9] App-based platforms like Zomato have made Aarogya Setu registration mandatory for food delivery personnel, while IT companies have mandated the same for employees who are reporting to an office.[10] Furthermore, both government and private organizations are actively pushing individuals to register on the Aarogya Setu application. Reports exist of the government working towards procuring thousands of wristbands to be integrated with the application for greater individual monitoring.[11]

A "Bridge to Wellness"

With no documentation available at the time of writing for Aarogya Setu, organizations such as the *Internet Freedom Foundation*[12] and *Software Freedom Law Center*[13] have raised concerns that the application is a black-box. They have called for more transparency on the algorithmic functioning of the application. Ironically, the name of the application—which can be roughly translated as "Bridge to Wellness"—suggests empowerment and better futures. But what would it take for the app to yield the "wellness" its name evokes? It is time for individuals and action groups in India to raise demands for a greater transparency regarding the functioning of the application. The government must address the privacy concerns of its citizens. It must provide clarity on who owns the data, where it is stored, who can access it, and for how long it will be stored. Until such concerns are addressed and effective measures taken, Aarogya Setu only promises to usher in a world of algorithmic surveillance.

Defence Forces', *ThePrint*, 27 April 2020, https://theprint.in/defence/fears-rise-that-pakistan-based-intel-operatives-could-misuse-aarogya-setu-app/409798/.

8 Shishir Gupta, 'Don't Allow Entry into Delhi without Aarogya Setu App, Lt Guv Anil Baijal Told', *Hindustan Times*, 25 April 2020, https://www.hindustantimes.com/india-news/don-t-allow-entry-into-delhi-without-aarogya-setu-app-lt-guv-anil-baijal-told/story-eADHEVyCTs2sYfhKJQIIuO.html.

9 'T.N. Govt. Asks Varsity, College Staff to Download Arogya Setu App', *The Hindu*, 25 April 2020, https://www.thehindu.com/news/national/tamil-nadu/tn-govt-asks-varsity-college-staff-to-download-arogya-setu-app/article31433152.ece.

10 Peermohamed Alnoor and Aditi Shrivastava, "Some Startups Mandate Aarogya Setu, Others Remain Wary', *The Economic Times*, 24 April 2020, https://economictimes.indiatimes.com/small-biz/startups/newsbuzz/some-startups-mandate-aarogya-setu-others-remain-wary/articleshow/75339322.cms.

11 Aarzoo Mittal, 'Govt to Procure E-Monitoring Wristbands to Integrate with Aarogya Setu App', *Entrackr*, 22 April 2020, https://entrackr.com/2020/04/govt-to-procure-e-monitoring-wristbands-to-integrate-with-aarogya-setu-app/.

12 'Is Aarogya Setu Privacy-First? Nope, but It Could Be-If the Government Wanted', *Internet Freedom Foundation*, 14 April 2020, https://internetfreedom.in/is-aarogya-setu-privacy-first-nope-but-it-could-be-if-the-government-wanted/.

13 'Our Concerns With The Aarogya Setu App. ' *SFLC.in*., 4 August 2020, https://sflc.in/our-concerns-aarogya-setu-app.

References

'Is Aarogya Setu Privacy-First? Nope, but It Could Be-If the Government Wanted,' *Internet Freedom Foundation*, 14 April, 2020. https://internetfreedom.in/is-aarogya-setu-privacy-first-nope-but-it-could-be-if-the-government-wanted/.

'Our Concerns With The Aarogya Setu App.' *SFLC.in*, 4 August, 2020. https://sflc.in/our-concerns-aarogya-setu-app.

'Smartphone Users in India Crossed 500 Million in 2019, States Report', *News18*, 30 January 2020, https://www.news18.com/news/tech/smartphone-users-in-india-crossed-500-million-in-2019-states-report-2479529.html.

'T.N. Govt. Asks Varsity, College Staff to Download Arogya Setu App', *The Hindu*, 25 April 2020, https://www.thehindu.com/news/national/tamil-nadu/tn-govt-asks-varsity-college-staff-to-download-arogya-setu-app/article31433152.ece.

Alawadhi, Neha. 'Coronavirus Spread: Aarogya Setu Tops Charts with 75 Million Downloads', *Business Standard India*, 24 April 2020, https://www.business-standard.com/article/current-affairs/covid-tracker-aarogya-setu-recommended-but-not-mandatory-clarifies-govt-120042401721_1.html.

Bay, Jason. 'Automated Contact Tracing Is Not a Coronavirus Panacea', *Medium*, 20 April 2020, https://blog.gds-gov.tech/automated-contact-tracing-is-not-a-coronavirus-panacea-57fb3ce61d98.

Chatterjee, Rohit. 'Arogya Setu App Gets Revised Privacy Policy', *Analytics India Magazine*, 17 April 2020. https://analyticsindiamag.com/arogya-setu-app-gets-revised-privacy-policy/.

Dutta, Amrita Nayak. 'Pakistani Operatives Create Fake Arogya Setu App to 'steal Info' from Indian Defence Forces', *ThePrint*, 27 April 2020, https://theprint.in/defence/fears-rise-that-pakistan-based-intel-operatives-could-misuse-aarogya-setu-app/409798/.

Gupta, Shishir. 'Don't Allow Entry into Delhi without Aarogya Setu App, Lt Guv Anil Baijal Told', *Hindustan Times*, 25 April 2020, https://www.hindustantimes.com/india-news/don-t-allow-entry-into-delhi-without-aarogya-setu-app-lt-guv-anil-baijal-told/story-eADHEVyCTs2sYfhKJQIIuO.html.

Masiero, Silvia and Soumyo Das. 'Datafying anti-poverty programmes: Implications for data justice.' *Information, Communication & Society* 22, 7 (2019): 916-933.

Mittal, Aarzoo. 'Govt to Procure E-Monitoring Wristbands to Integrate with Aarogya Setu App', *Entrackr*, 22 April 2020, https://entrackr.com/2020/04/govt-to-procure-e-monitoring-wristbands-to-integrate-with-aarogya-setu-app/.

Peermohamed, Alnoor and Aditi Shrivastava. 'Some Startups Mandate Aarogya Setu, Others Remain Wary', *The Economic Times*, 24 April 2020, https://economictimes.indiatimes.com/small-biz/startups/newsbuzz/some-startups-mandate-aarogya-setu-others-remain-wary/articleshow/75339322.cms.

PERPETUATED VULNERABILITIES AND INEQUALITIES

THEME II

07. LA OTRA EPIDEMIA: LOS FEMINICIDIOS QUE NO SE CUENTAN

TERESA VILLASEÑOR

The Other Epidemic: The Feminicides that are not Tallied

As the COVID-19 virus spreads across Central America, another pandemic is flying under the radar. The lockdown induced by the pandemic has worsened domestic violence. This chapter explores the efforts of Mexican women to raise awareness of gender violence, and reflects on how data facilitates their activism.

Mientras la pandemia provocada por el COVID-19 avanza en Latinoamérica, existe otra pandemia que sigue invisible: la creciente cantidad de casos de violencia de género que arrasa en México. Los números siguen aumentando, como la consecuencia no deseada de la cuarentena impuesta por el gobierno para combatir el contagio del virus. Esta violencia de género es la otra epidemia que lleva años cobrando vidas en México. ¿Qué están haciendo las mujeres mexicanas para visibilizar la violencia de género en tiempos de cuarentena?

Violencia de Género en México y la Movilización Feminista

La violencia de género ya era una epidemia en México cuando se dieron los primeros casos positivos de COVID-19 en El País. Durante el 2019 asesinaron a 3,825 mujeres, cifra que la geofísica María Salguero ha rastreado a través de su mapa de feminicidios.[1] El proyecto, que comenzó en 2016 y que se nutre de los asesinatos a mujeres reportados en la prensa, indica que en México se asesinaba por lo menos a diez mujeres al día. Cabe notar que estas no son cifras oficiales gubernamentales, las cuales difieren mucho de las de este proyecto generado por la ciudadanía.

En febrero de este año las redes sociales se llenaron de los hashtags #JusticiaParaTodas y #CosasQuePasanPorSerMujer.[2] La sociedad mexicana se había enfurecido por los asesinatos de la pequeña Fátima e Ingrid Escamilla. El caso de Fátima se trató de una niña de 7 años secuestrada, asesinada y mutilada por sus vecinos. Ingrid Escamilla fue una mujer asesinada y mutilada, cuyas imágenes del cuerpo sin vida fueron publicadas en varios medios de comunicación. Como resultado, las fotografías fueron compartidas en las redes sociales. Esto causó que muchos usuarios etiquetaran fotografías hermosas con el nom-

1 María Salguero, 'Yo Te Nombro: El Mapa De Los Feminicidios en México', Accessed 21 October 2020, http://mapafeminicidios.blogspot.com/p/inicio.html.

2 Darinka Rodríguez, 'La creadora del mapa de feminicidios: 'El Estado no entiende las causas de la violencia'', *EL PAÍS*, 19 February 2020, https://verne.elpais.com/verne/2020/02/18/mexico/1582062096_338935.html.

bre de Ingrid Escamilla, para "limpiar" su nombre y hacer que se perdieran las imágenes publicadas por los medios de comunicación amarillistas.

Este año, el 8 de marzo, Día Internacional de la Mujer, fue muy especial para las mexicanas. Ese día salieron a la calle cientos de mujeres para protestar contra la violencia de género, un problema que lleva años en la sociedad latinoamericana y que parece empeorar cada vez más.Las manifestantes demandaron un cambio en la estructura social para que ya no se permita la violencia sexual, exigieron igualdad de género en las políticas públicas y la no impunidad a los agresores, y la transparencia en los datos sobre violencia de género.

Hasta ese momento, todo el cambio que se había logrado venía desde las mismas sociedades, de las mujeres reunidas bajo un objetivo y sin el apoyo del gobierno mexicano. Cuatro días después, el 12 de marzo, se declaró la pandemia mundial, y en México el 20 de marzo el gobierno federal decretó la cuarentena. Pero esto no fue lo peor para las mujeres mexicanas. La mayoría de los casos de violencia de género se da en los hogares, y ahora muchas mujeres se vieron obligadas a estar encerradas junto con sus agresores.

Sin Mecanismos Para Frenar la Violencia de Género Durante la Pandemia

En México se están haciendo esfuerzos para frenar el contagio de COVID-19, pero no existen mecanismos para frenar la violencia doméstica de género. Esto hace que las mujeres mexicanas no sólo tengan miedo de un contagio, sino que también aumenta el miedo a sufrir violencia en sus casas, sin contar el número de mujeres que viven en condición de pobreza.

En el Banco Nacional de Datos e Información sobre Casos de Violencia contra las Mujeres (BANAVIM), se declaró que del 20 de marzo al 2 de mayo se registraron 19,602 agresiones[3] contra la mujer, y el 90% de estas agresiones fueron cometidas por personas que viven bajo el mismo techo. El Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública (SESNSP) mencionó que durante el mes de marzo se recibieron 64,858 llamadas[4] al 911 debido a violencias contra la mujer, con un aumento del 23% en comparación con el mes anterior.

Esto indica que cada día de cuarentena se denuncian de manera formal 490 casos de violencia, uno cada tres minutos. Este cálculo no cuenta el número de casos que se dan en casa y no son denunciados a las autoridades. Hasta el mes de abril se declararon al menos 210 feminicidios en El País.

3 El Duende, 'La Violenta Cuarentena Contra Las Mujeres', *La Razón*, 10 October 2020, https://www.razon.com.mx/opinion/el-duende-la-violenta-cuarentena-contra-las-mujeres/.

4 Bajo Palabra, 'México recibe 87 llamadas por hora por violencia familiar en confinamiento' , 29 April 2020, https://bajopalabra.com.mx/mexico-recibe-87-llamadas-por-hora-por-violencia-familiar-en-confinamiento.

Todos los esfuerzos que se han hecho para medir el índice de contagios han desviado la mirada al problema que afectaba a las mujeres desde hace años. La crisis provocada por la pandemia es más visible porque ocurre a nivel mundial y se compara a México con otros países. De esta manera, los recursos gubernamentales han sido recortados de los programas de violencia de género para darlos a la infraestructura en el sector salud, a pesar de que la violencia contra las mujeres sigue creciendo.

Las Respuestas Desde Abajo

Como ahora están prohibidos los eventos masivos, las marchas y las protestas como las ocurridas el 8 de marzo, la mejor opción para las mujeres mexicanas es recurrir al activismo digital, como se vio en los casos de Fátima e Ingrid Escamilla. El 6 de mayo, el presidente de México, Andrés Manuel López Obrador, fue cuestionado sobre las políticas contra la violencia doméstica durante la cuarentena. López Obrador negó que los índices hubieran aumentado. Los días posteriores, diversas organizaciones feministas como Brujas del Mar y Luchadoras alzaron la voz, y junto con otras asociaciones de derechos humanos hicieron declaratorias públicas en sus redes sociales.

Desde el lunes 11 de mayo, muchísimas mujeres se unieron a exigir que se visibilice la violencia de género doméstica bajo el hashtag #NosotrasTenemosOtrosDatos, para pedir transparencia en la identificación y publicación de casos de violencia doméstica en todo El País.

Debido a la pandemia, el activismo de datos -es decir el uso estratégico de información para generar un cambio social- es cada vez más relevante y necesario para visualizar todos los problemas que enferman a la sociedad, no sólo las infecciones de COVID-19 sino también las otras epidemias como la violencia de género.

References

Bajo Palabra, 'México recibe 87 llamadas por hora por violencia familiar en confinamiento,' 29 April, 2020, https://bajopalabra.com.mx/mexico-recibe-87-llamadas-por-hora-por-violencia-familiar-en-confinamiento.

El Duende, 'La Violenta Cuarentena Contra Las Mujeres', *La Razón*, 10 October 2020, https://www.razon.com.mx/opinion/el-duende-la-violenta-cuarentena-contra-las-mujeres/.

Rodríguez, Darinka. 'La creadora del mapa de feminicidios: 'El Estado no entiende las causas de la violencia'', *EL PAÍS*, 19 February 2020, https://verne.elpais.com/verne/2020/02/18/mexico/1582062096_338935.html.

Salguero, María. 'Yo Te Nombro: El Mapa De Los Feminicidios en México', http://mapafeminicidios.blogspot.com/p/inicio.html.

08. THE LGBTQ+ COMMUNITY DURING THE COVID-19 PANDEMIC IN BRAZIL

RICARDO H. D. ROHM & JOSÉ OTÁVIO A. L. MARTINS

On May 17, the International Day Against Homophobia, Transphobia, and Biphobia was celebrated. The day promoted international events that raise awareness of LGBTQ+ rights violations worldwide. This date was chosen due to the decision of the World Health Organization (WHO) to remove the term "homosexuality" from the list of mental disorders of the International Classification of Diseases in 1990, disregarding homosexuality as a pathology. Even though the date is now remembered as the day against LGBTQphobia, it is important to remember that so-called "gender incongruence" was only removed by the WHO from its International Classification of Diseases and Related Health Problems (ICD 11) on June 18, 2018.

This date is a great achievement for the LGBTQ+ community, especially if we consider the context in which the decision took place. In the early 1990s, the world was still reverberating from the spread of AIDS. For the LGBTQ+ community, notably for those who were born in the 1950s and 1960s and fully experienced the demonization of their bodies during the 1980s, the situation in which we live today, with the COVID-19 pandemic, elicits painful memories. Still recovering from being considered the source and proliferator of HIV/AIDS, the LGBTQ+ community seems to once again being irrationally blamed by authorities and public personalities for the current pandemic, as we can see in the United States[1], Israel[2], and Iraq[3]. Situations like these demonstrate the constant hostile prejudice and discrimination that the LGBTQ+ community suffers, day after day, year after year, century after century. Even if we are not at the heart of the matter, we are blamed for it.

This system of oppression constantly puts our community in a situation of social and emotional vulnerability. The vast majority only lives the fullness of their sexual orientation and gender identity far away from the coziness that family and home should symbolize. Many LGBTQ+ people are only free when they are among friends, a *chosen family*, lovers, on a stage performing with a wig on, or waving their flags at Pride parades. Distance from their family and home could be by choice, when it is unbearable to cope with prejudice, or not, like when they are rejected, abused, or thrown out of their home. Therefore, we should ask, at a time

1 Lee Fang, 'Trump Cabinet Bible Teacher Blames Coronavirus Pandemic on God's Wrath—Somehow It Involves China, Gay People, and Environmentalists', *The Intercept*, 25 March 2020, https://theintercept.com/2020/03/24/trump-cabinet-bible-studies-coronavirus/.

2 Toi Staff, 'Israeli Rabbi: Coronavirus Outbreak Is Divine Punishment for Gay Pride Parades', *Times of Israel*, 8 March 2020, https://www.timesofisrael.com/israeli-rabbi-blames-coronavirus-outbreak-on-gay-pride-parades/.

3 Alex MacDonald, 'Coronavirus: Iraqis Criticise Muqtada al-Sadr for Same-Sex Marriage Claims', *Middle East Eye*, 30 March 2020, http://www.middleeasteye.net/news/coronavirus-iraq-muqtda-sadr-covid-19-same-sex-marriage.

when the WHO and other government officials say "stay at home," which home does the LGBTQ+ community have the option to stay in?

In Marseille, France, a couple was kicked out of the apartment they rented because they were "the first to be contaminated" by the COVID-19, a claim with no scientific base, just homophobia.[4] Exposed to a new vulnerability only increases the existing ones the LGBTQ+ population has been facing. Our community is even more targeted during the coronavirus crisis, as pointed out by the High Commissioner for Human Rights of the United Nations (UN), Michelle Bachelet.[5] The UN draws attention to people who are HIV positive in the LGBTQ+ community. In Brazil, HIV among men who have sex with men is a reality classified as an epidemic.[6] Although they are not part of the risk group, they have a specific health care routine and ongoing medical treatments that require going out to withdraw retroviral drugs in health units. The UN also reinforces the importance of the local authorities to ensure the maintenance of these treatments and the continuous supply of HIV medication during the pandemic, not allowing prejudices to affect access and availability of essential drugs.

Other health issues raise worries when we are facing the dissemination of a virus that attacks the respiratory system. Some studies show that the LGBTQ+ population uses tobacco at rates 50% higher than the general population.[7] The community still has a significant number of people with cancer and, consequently, a fragile immune system. It is important to note that LGBTQ+ people are historically discriminated against by both health employees and the health system. As a result, many are reluctant to seek medical care, even in urgent situations. That can mean a dire health risk in COVID-19 times.

Talking about employment issues in Brazil, a national survey conducted by the group #VoteLGBT and researchers from two major Brazilian universities, points out that within the LGBTQ+ community, 22% of respondents are unemployed and 21% have no income.[8] This survey was conducted through online questionnaires, therefore, it is possible that it did not reach some of the most vulnerable people in the community. It is also relevant to highlight difficulties in access to income by transgender women who are sex workers, since 90% of the Brazilian trans population uses prostitution as a source of income.[9] In times of social distancing, they can no longer conduct their business, and may lose their source of income.

4 Rhuaridh Marr, 'Gay Couple Told to Leave Home Because 'Homosexuals Are Contaminated by COVID-19'', *Metro Weekly*, 1 April 2020, https://www.metroweekly.com/2020/04/gay-couple-told-to-leave-home-because-homosexuals-are-contaminated-by-covid-19/.

5 'COVID-19: Rights Experts Highlight LGBTI Discrimination, Antisemitism', *UN News*, 17 April 2020, https://news.un.org/en/story/2020/04/1062042.

6 Ana Maria De Brito, Inês Dourado, Mark Drew Crosland Guimarães, Andréa Fachel Leal, Carl Kendall, Ligia Kerr, Alexandre Kerr Pontes et al., 'HIV prevalence among men who have sex with men in Brazil.' *Medicine* 97 (2018): S9-S15.

7 National LGBT Cancer Network, Open Letter About Coronavirus and the Lgbtq+ Communities, https://cancer-network.org/wp-content/uploads/2020/03/Press-Release-Open-Letter-LGBTQ-Covid19-2.pdf.

8 https://docs.google.com/document/d/1FkdQib_mrApYY_PpGhE8HzOMPxvBGJkoyO3aqFRZUBE/edit.

9 Asociação Nacional de Travestis e Transexuais, 'Dicas Para Travestis e Mulheres Trans Profissionais do Sexo em Tempos de COVID-19', https://antrabrasil.files.wordpress.com/2020/03/dicas-profissionais-do-sexo-antra.pdf.

Transphobia also does not cease during a pandemic. Some Latin American countries have determined that social distancing means that men and women only leave their houses on separate days. There have been cases of trans women being fined for leaving their home on the day designated for women, making the pandemic period even more difficult for the trans population. In addition to fighting the virus, they still must fight to reaffirm who they are.

Addressing the challenges of staying home during the pandemic and finding a safe place to be protected, a global survey conducted by the relationship app Hornet with gay and bisexual men found that 1 out of 3 men felt physically and emotionally insecure in their own homes.[10] The reasons were not only due to intrafamilial prejudice, but also the loneliness of those living alone. Data from #VoteLGBT's survey also pointed out that 28% of the Brazilian respondents have been diagnosed with depression, which worsened the scenario presented by Hornet's survey.

Shelters (in Portuguese *Casas de Acolhimento*) are an alternative for surviving for LGBTQ+ people who are unable to earn a living or who have been kicked out of their families' homes. Although each has its administration, they support each other on joint projects to collect donations and carry out cultural actions. In addition to a shelter, they provide food and personal hygiene products for marginalized people. They also rely on donations and sponsorships to develop academic, capacity-building, and cultural activities. During the pandemic, when everything is more urgent and scarce, shelters have seen a decrease of donations, while requests for shelter have increased.

Initiatives to Cope with This Scenario

Amid the plight that the LGBTQ+ community faces today, some initiatives deserve particular support. They are the result of the mobilization of the community, with support of LGBTQ-friendly companies and celebrities. Regarding the shelters mentioned above, some fundraising initiatives have managed to provide significant support to these institutions in this time of crisis. A virtual live concert with a famous Brazilian DJ organized by NGO Casinha—produced by Tenho Orgulho, FestivalUniverso, and TODXS[11]—raised more than 5,000 Brazilian Real (BRL) (ca. 750 EUR) for organizations such as Casa Nem, LGBT+ Movimento and Casainha. Another virtual live concert titled Festival do Orgulho was organized by Amstel Brewery and payment app AME. The Festival was headlined by nationally-famous artists, including the singer and *drag queen* Pabllo Vittar. It raised 115,000 BRL[12] (over 17,000 EUR) for the organizations Casa Florescer, Grupo Pela Vidda, Projeto Séfora's, Família Stronger and Arco Íris de Ribeirão Preto.

10 Stephan Horbelt, 'Hornet Study: A Third of Gay Men Feel Unsafe at Home, Struggle With Anxiety and Isolation During the Pandemic', *Hornet*, 18 May 2020, https://hornet.com/about/hornet-report-coronavirus-anxiety/.

11 TODXS, https://www.todxs.org/.

12 Thales Brandão, 'Live Festival do Orgulho arrecada R$115 mil com shows de Pablo Vittar, Pepita, Aretuza Lovi, Urias e Mateus', *Citade Marketing*, 1 May 2020, https://www.cidademarketing.com.br/marketing/2020/05/01/live-festival-do-orgulho-arrecada-r115-mil-com-shows-de-pabllo-vittar-pepita-aretuza-lovi-urias-e-mateus-carrilho/.

Another fundraising initiative for shelters across the country was the crowdfunded campaign run by All Out Brazil[13] to support the maintenance, purchase, and distribution of cleaning products, hygiene materials, and food. The initiative raised approximately 54,000 BRL (over 8,000 EUR) for CasAmor LGBTQI+ (Aracaju), Astra Human Rights and LGBT Citizenship | Acódi LGBT (Aracaju), Casa Transformar (Fortaleza), Casa Miga Acolhimento LGBT+ (Manaus), Casa da Diversidade Niterói (Niterói), Transviver (Recife), CasaNem (Rio de Janeiro), Casa Aurora (Salvador), Casa dos Direitos da Baixada (São João de Meriti), Casa Chama (São Paulo), Casa Florescer 1 (São Paulo) and Casa Florescer 2 (São Paulo).

Another initiative, linked to the arts, was created by #VoteLGBT, the same group that conducted the aforementioned survey. Created during quarantine, LGBTFLIX[14] is a free-access platform that compiles more than 200 LGBTQ+ themed short films. This initiative brings entertainment to the LGBTQ+ community during this period of social isolation. On the platform, you can choose short films with homosexual, bisexual, or transgender themes. Some nationwide initiatives are still ongoing and accepting donations. One of them is The Emergency Fund for trans people organized by Casa Chama in São Paulo, which has already raised 83,000 BRL (12,500 EUR).[15]

These initiatives illuminate a path of light amid so many adversities. They demonstrate the capacity of the LGBTQ+ community to unite to face another major challenge with COVID-19. It is essential to understand the reality of the LGBTQ+ community during this pandemic, to highlight what has been already accomplished and call for people to support initiatives on an ongoing basis. With prudence and responsibility, while following scientific and WHO`s guidelines, the COVID-19 pandemic will be surpassed.

References

'COVID-19: Rights Experts Highlight LGBTI Discrimination, Antisemitism', *UN News*, 17 April 2020, https://news.un.org/en/story/2020/04/1062042.

'Fundo de Emergência Para Pessoas TRANS', *Vakinha*, Accessed October 21 2020, https://www.vakinha.com.br/vaquinha/fundo-de-emergencia-para-pessoas-trans-1-3.

Asociação Nacional de Travestis e Transexuais. 'Dicas Para Travestis e Mulheres Trans Profissionais do Sexo em Tempos de COVID-19', https://antrabrasil.files.wordpress.com/2020/03/dicas-profissionais-do-sexo-antra.pdf.

Brandão, Thales. 'Live Festival do Orgulho arrecada R$115 mil com shows de Pablo Vittar, Pepita, Aretuza Lovi, Urias e Mateus', *Citade Marketing*, 1 May 2020, https://www.cidademarketing.com.br/marketing/2020/05/01/live-festival-do-orgulho-arrecada-r115-mil-com-shows-de-pabllo-vittar-pepita-aretuza-lovi-urias-e-mateus-carrilho/.

Fang, Lee. 'Trump Cabinet Bible Teacher Blames Coronavirus Pandemic on God's Wrath — Somehow It Involves China, Gay People, and Environmentalists', *The Intercept*, 25 March 2020, https://theintercept.com/2020/03/24/trump-cabinet-bible-studies-coronavirus/.

13 https://action.allout.org/en/

14 https://www.votelgbt.org/flix

15 'Fundo de Emergência Para Pessoas TRANS', *Vakinha*, Accessed October 21 2020, https://www.vakinha.com.br/vaquinha/fundo-de-emergencia-para-pessoas-trans-1-3.

Horbelt, Stephan. 'Hornet Study: A Third of Gay Men Feel Unsafe at Home, Struggle With Anxiety and Isolation During the Pandemic', *Hornet*, 18 May 2020, https://hornet.com/about/hornet-report-coronavirus-anxiety/.

MacDonald, Alex. 'Coronavirus: Iraqis Criticise Muqtada al-Sadr for Same-Sex Marriage Claims', *Middle East Eye*, 30 March 2020, http://www.middleeasteye.net/news/coronavirus-iraq-muqtda-sadr-covid-19-same-sex-marriage.

Marr, Rhuaridh. 'Gay Couple Told to Leave Home Because "Homosexuals Are Contaminated by COVID-19" ', *Metro Weekly*, 1 April 2020, https://www.metroweekly.com/2020/04/gay-couple-told-to-leave-home-because-homosexuals-are-contaminated-by-covid-19/.

National LGBT Cancer Network. Open Letter About Coronavirus and the Lgbtq+ Communities, https://cancer-network.org/wp-content/uploads/2020/03/Press-Release-Open-Letter-LGBTQ-Covid19-2.pdf.

Staff, Toi. 'Israeli Rabbi: Coronavirus Outbreak Is Divine Punishment for Gay Pride Parades', *Times of Israel*, 8 March 2020, https://www.timesofisrael.com/israeli-rabbi-blames-coronavirus-outbreak-on-gay-pride-parades

09. THE DILEMMA OF UNDOCUMENTED MIGRANTS INVISIBLE TO COVID-19 COUNTING

ANNALISA PELIZZA, STEFANIA MILAN & YOREN LAUSBERG

On March 13, 2020, after announcing that Europe had become the epicenter of the COVID-19 pandemic, World Health Organization's Executive Director Dr. Michael Ryan made a plea to assist invisible populations. "We cannot forget migrants, we cannot forget undocumented workers, we cannot forget prisoners," he argued.[1] In just a few days, civil societies around the world discovered that invisibility is indeed a recurrent companion to the virus. COVID-19 is exceptionally hard to contain due to its asymptomatic contagion and long incubation period. It has also been hard to classify as a cause of death, complicating the efforts to trace it and count its victims.[2] Despite narratives about its alleged democratic character, the virus seems to decimate weak, invisible populations the hardest. The elderly confined to care homes have been decimated across Europe, and largely uncounted.[3] From China to Pennsylvania, the toll of people passing away in the solitude of their homes or shelters does not appear in official statistics. Undocumented migrants are also dying from the virus because they are too afraid to seek help,[4] so their numbers are typically not reflected in official statistics. If today "being counted" is even more so a condition of existence and care[5], Western countries are failing to account for the health conditions of these invisible populations. In the days of COVID-19, what these dramatic missing numbers make apparent is that invisibility may mean death.

The COVID-19 pandemic forces a dilemma about invisibilized populations, and migrants in particular—one which has to do simultaneously with societal and technological concerns. On one hand, visibility gaps are a systemic aspect of population management that might be welcomed by policy makers and populations alike. Indeed, the illusion of a "data panopticon" does not account for the conditions of data collection, data gaps, and the limits of system interoperability; not everyone is counted in all systems, and not in the same way. Such invisibility serves the needs of informal economies and unscrupulous politicians ready to mobilize security concerns for their own goals. From housing insecure people to the incarcerated, from migrants

1 @BBCWorld, '"We cannot forget migrants, we cannot forget undocumented workers, we cannot forget prisoners" World Health Organization Executive Director Dr Michael J Ryan says "the only way to beat [coronavirus] is to leave no one behind… we are in this together" http://bbc.in/2w3PUbv', Twitter post, 13 March 2020, 5:40 PM, https://twitter.com/BBCWorld/status/1238507690537730048.

2 Sarah Kliff and Julie Bosman, 'Official Counts Understate the U.S. Coronavirus Death Toll', *The New York Times*, 7 April 2020, https://www.nytimes.com/2020/04/05/us/coronavirus-deaths-undercount.html.

3 Niamh McIntyre and Pamela Duncan, 'Care Homes and Coronavirus: Why We Don't Know the True UK Death Toll', *The Guardian*, 14 April 2020, https://www.theguardian.com/world/2020/apr/14/care-homes-coronavirus-why-we-dont-know-true-uk-death-toll.

4 May Bulman, 'Charities and MPs Warn Undocumented Migrants Are Dying of Coronavirus Because They're Too Afraid to Seek Help', *The Independent*, 17 April 2020, https://www.independent.co.uk/news/uk/home-news/coronavirus-undocumented-migrants-deaths-cases-nhs-matt-hancock-a9470581.html.

5 See chapter 1 in this volume (pp. 24)

to sex workers, invisibility can be deemed a protection from care that too often resembles control and surveillance.[6]

On the other hand, a surge in the visibility of migrant populations might help curb the contagion and avoid COVID-19 spreading within vulnerable populations. Indeed, being invisible translates into the inability to access crucial services in the time of the pandemic, particularly health care. Access to testing, medication, and treatment requires insurance, and insurance demands people are countable. Even when the costs of insurance can be offset by the collective, being countable remains a key condition of access. In the US, for example, the second coronavirus relief package known as the Families First Coronavirus Response Act has extended testing to the Medicaid-eligible population,[7] even when uninsured, but not to undocumented migrants, nor to other temporary residents.[8]

We suggest that the current situation requires to reconsider the relationship between data, populations and (in)visibility. Under which conditions would including invisibilized populations in the general COVID-19 count result in a just outcome? For sure, some precautions should be heeded. Even in the best case scenario, instead of exposing vulnerable populations, such reconsideration might even entail a de facto form of civil inclusion. What follows makes the point by considering migrants and undocumented populations as especially vulnerable to COVID-19, due to their invisibilized status in official registries and administration, and the barriers to formal and professional care that their invisibility entails. While most of our examples originate in the European continent, we believe that there is something universal in this exercise that can also inform the way other countries and communities relate to people in the move in pandemic times.

People on the Move do not Show in COVID-19 Counts

In mid-April, António Vitorino, Director General of the International Organization for Migration, called for a universal response to COVID-19, regardless of migratory status.[9] Portugal has specifically addressed the migrant condition in its response to the pandemic. It has extended access to the same services of the resident population to third country nationals with pending applications: national health care, welfare benefits, bank accounts, and work and rental contracts.[10] The Portuguese response constitutes a temporary inclusion of foreign citizens, in the name of pragmatism and human rights. Admittedly,

6 Polly Pallister-Wilkins, 'Hotspots and the Geographies of Humanitarianism', *Environment and Planning D: Society and Space*, 2020; 38(6): 991-1008. doi:10.1177/0263775818754884.

7 Keith Katie, 'Unpacking the Coverage Provisions In The House Coronavirus Bill', *HealthAffairs*, 16 March 2020, https://www.healthaffairs.org/do/10.1377/hblog20200316.471367/full/.

8 Nicole Narea, 'The Missing Piece in the Coronavirus Stimulus Bill: Relief for Immigrants', *Vox*, 1 April 2020, https://www.vox.com/2020/4/1/21197017/immigrants-coronavirus-stimulus-relief-bill.

9 @IOMchief, 'All migrants, regardless of their migratory status, must be included in our response if we are to curb the spread of #COVID19. Only together, we will overcome this global crisis', Twitter post, 14 April 2020, 3:57 PM, https://twitter.com/IOMchief/status/1250606745643376 64.

10 'Portugal to Treat Migrants as Residents during Coronavirus Crisis', *Reuters*, 28 March 2020, https://www.reuters.com/article/us-health-coronavirus-portugal-idUSKBN21F0N7.

this response is unique in a continent that has halted most bureaucratic procedures and data processing involving people on the move.

Sweden[11], The Netherlands[12], and Belgium[13] have suspended administrative services for migrants, refugees and asylum-seekers. After halting asylum procedures, Greece has put migrants living in overcrowded camps[14] under quarantine.[15] In Serbia, along the so-called Balkan Route, armed forces have taken over the security of about 150 social welfare institutions, 120 medical facilities and 20 migrant camps, locking migrants in.[16] Similarly, Bosnia Herzegovina has introduced tighter controls in the reception centres, so migrants and refugees can no longer leave or enter.[17] Italy has declared its ports "unsecure",[18] asylum and police offices are closed and data processing suspended.[19] Meanwhile, an estimated 200,000 undocumented farmworkers in Italy live in cramped informal settlements in precarious hygienic conditions without running water, which makes it impossible to implement the social distancing and hygienic measures necessary to slow the contagion. In France, many sleep in makeshift camps or on the streets, and local nongovernmental organizations (NGOs) sound alarm bells about an upcoming "health scandal", and question the government's lack of adequate response.[20] In the UK, NGOs point out that the suspension of various support networks increasingly puts already precarious people at risk, noting how the hostile environment deters undocumented people from seeking help.[21] In many European countries migrants are not included in

11 Emma Löfgren, 'No Coronavirus Legislation Planned for Work Permit Holders in Sweden', *The Local*, 26 March 2020, https://www.thelocal.se/20200326/no-coronavirus-legislation-planned-for-work-permit-holders.

12 'New Corona Measures, Limited IND Services', *Immigratie en Naturalisatiedienst*, 15 March 2020, http://ind.nl:80/en/news/Pages/New-corona-measures,-limited-IND-services-.aspx.

13 Leslie Carretero, 'Belgian Government Is Doing Nothing to Protect Migrants from Coronavirus, NGOs', *InfoMigrants*, 1 April 2020, https://www.infomigrants.net/en/post/23804/belgian-government-is-doing-nothing-to-protect-migrants-from-coronavirus-ngos.

14 Agence France-Presse in Athens, 'Fire Wrecks Greek Refugee Camp after Unrest over Woman's Death', *The Guardian*, 19 April 2020, https://www.theguardian.com/world/2020/apr/19/fire-wrecks-greek-migrant-camp-after-iraqi-death-sparks-unrest.

15 'Μέτρα Προστασίας Από Τον Κορωνοϊό Στα Κέντρα Υποδοχής Και Ταυτοποίησης, Στις Δομές Φιλοξενίας Και Στην Υπηρεσία Ασύλου', Accessed October 22 2020, https://www.mitarakis.gr/gov/migration/1956

16 'Group of Serbian Doctors Calls for Dismissal of National COVID-19 Response Team', *Euractiv*, 14 March 2020, https://www.euractiv.com/section/coronavirus/short_news/serbia-update-covid-19/.

17 Danijel Kovacevic, 'No Coronavirus Cases Found Yet Among Migrants, Refugees in Bosnia', *Balkan Insight*, 6 April, 2020, https://balkaninsight.com/2020/04/06/no-coronavirus-cases-found-yet-among-migrants-refugees-in-bosnia/.

18 Pietro Salvatori, 'L'Italia chiude i porti', *Huffington Post*, 8 April 2020, https://www.huffingtonpost.it/entry/litalia-chiude-i-porti_it_5e8d89f2c5b6e1d10a6c2671.

19 'Coronavirus (COVID-19) in Italy: Asylum and Immigration', *JumpMap*, Accessed 22 October 2020, https://coronavirus.jumamap.com/en/asilo-e-immigrazione/.

20 Leslie Carretero, 'France: Migrants Left out in Fight against Coronavirus', *InfoMigrants*, March 20 2020, https://www.infomigrants.net/en/post/23522/france-migrants-left-out-in-fight-against-coronavirus.

21 Emma Wallis, 'UK Charities Demand Urgent Steps for Migrants during Covid-19 Pandemic', *InfoMigrants*, 26 March 2020, https://www.infomigrants.net/en/post/23653/uk-charities-demand-urgent-steps-for-migrants-during-covid-19-pandemic.

COVID-19 counts, hindering access to care and relief systems. What are the consequences of this situation, and how can it be rectified?

The Consequences of Invisibility

The invisibility of moving populations in pandemic time can have health, economic, and social consequences. First, we are seeing that its effects stack on existing social and institutional inequalities.[22] Vulnerable populations are left behind when addressing the public health threats of the coronavirus outbreak. As already hostile environments bar mobile populations from seeking professional and official health care, the spread and effects of the coronavirus will be exacerbated among these populations. They are already vulnerable due to a lack of accessible information and access to hygiene facilities, and also because their economic vulnerability forces them to seek employment when others can choose to stay at home. The exclusion of some people from comprehensive efforts to counter the spread of COVID-19 will cause harsher and more prolonged sanitary effects among these groups. These effects will impact not only their well-being, but also the general well-being of society at large, as failure to contain the virus will exacerbate its spread.

Second, invisibility may exacerbate asymmetries in economy and labor relations. Invisibility not only permits exploitation in agricultural economies, construction work, and temporary job markets. It also marks a harsh asymmetry between migrant workers' contribution to the COVID-19 response and their under-representation in statistics. For instance, European countries like Austria and Germany are importing farmhands from Eastern Europe to harvest seasonal vegetables like asparagus. The Italian Minister of Agriculture Teresa Bellanova has proposed to give some of the estimated 600,000 undocumented immigrants in the country temporary work permits to plug the labor gap, which is large and urgent in the agri-food sector.[23] Yet counting, as well as rights asymmetries, continue to permeate job sectors that are vital to the COVID-19 response. Food delivery workers in European cities are largely migrants who cannot afford to "stay home" and lose income. According to the Migration Policy Institute, in the US, the foreign-born represent 38 % of home care and a significant share of workers in food production and distribution, all sectors at the coronavirus response frontline.[24]

Third, invisibility has societal consequences, because it fuels racism and xenophobia. In Italy, for example, pseudoscientific myths are spreading on social media, in a country where migration is often associated with heterogeneous skin traits, and hospitalized patients are largely white.[25]

---

22 Afua Hirsch, 'If Coronavirus Doesn't Discriminate, How Come Black People Are Bearing the Brunt?', *The Guardian*, 8 April 2020, https://www.theguardian.com/commentisfree/2020/apr/08/coronavirus-black-people-ethnic-minority-deaths-pandemic-inequality-afua-hirsch.

23 Hannah Roberts, 'Italy's Coronavirus Farmworker Shortage Fuels Debate on Illegal Migration', *POLITICO*, 13 April 2020, https://www.politico.eu/article/italy-seasonal-migrant-farm-workers-coronavirus-covid-19/.

24 Julia Gelatt, Immigrant Workers: Vital to the U.S. COVID-19 Response, Disproportionately Vulnerable, *Migration Policy Institute*, March 2020, https://www.migrationpolicy.org/research/immigrant-workers-us-covid-19-response.

25 ' "Africani immuni? È una ipotesi'. Ma Galli precisa: 'La tubercolosi non c'entra",'

Not only do these resurgent racialized explanations of alleged immunity to the virus fuel racist narratives, they lack any scientific base and disregard empirical evidence of African-American communities tragically and disproportionally hit by the virus on the other side of the Atlantic.[26] They also reignite racial classifications and genetic pseudoscientific thinking that we assumed had dissipated with nineteenth-century colonial anthropology. Furthermore, they counteract socio-scientific explanations and consequent policy action. If temporary residents are less rone to ask for support when confronting COVID-19 symptoms, their reluctance might be due to their tendency to associate the health care system with repressive authorities, scarce linguistic skills and fragmented social networks—all explanations that should be investigated in order to curb the contagion.

Our Proposals for Just Visibility

All things considered, one might wonder whether the current emergency requires reconsidering the relationship between data, visibility and populations. Institutional solutions appear to timidly move in the direction of making migrant populations more visible. In Italy, the introduction of mandatory self-certification to exit home was sufficient to halt the agricultural production chain, as work force is mainly constituted by irregular migrants. As a result, the Italian Agriculture Ministry is attempting to overcome the impasse by creating a new registry of agricultural labor.[27] US scholar and author Shoshana Zuboff, a fierce critic of what she herself terms "surveillance capitalism," in an interview with the Italian daily *La Repubblica*, surprisingly argued that contact-tracing apps should be mandatory and data should be managed by public bodies.[28] But Zuboff's argument falls short when it meets vulnerable populations who don't want to be traced and are suspicious of authorities. Becoming visible through an app of this kind clashes with the fears of repression and deportation these vulnerable populations live with.

The question becomes, how can visibility be *just*? The consequences of invisibility we have identified do not exist in isolation, because forms of invisibilization stack upon each other. As mentioned above, mobile populations often work in already precarious and exploitative sectors, which have suddenly become foregrounded as "essential" during the pandemic. This creates the paradox that while the work is visibilized as vital, the workers are barred from accessing civil rights, and are still kept out of the count and thus excluded from aid and relief. It is then crucial to consider what inclusion in the COVID-19 response is for; is it a temporal

Huffington Post, 24 March 2020, https://www.huffingtonpost.it/entry/extra-comunitari-immuni-e-una-ipotesi_it_5e79d2c4c5b63c3b6496e69f.

26 John Eligon, Audra D. S. Burch, Dionne Searcey and Richard A. Oppel Jr., 'Black Americans Face Alarming Rates of Coronavirus Infection in Some States', *The New York Times*, 14 April 2020, https://www.nytimes.com/2020/04/07/us/coronavirus-race.html.

27 'Agricoltura: Mipaaf, iscrizione virtuale per Sos manodopera - Terra & Gusto', *ANSA*, 14 April 2020, https://www.ansa.it/canale_terraegusto/notizie/a_tavola_con_ansa/2020/04/14/agricoltura-mipaaf-iscrizione-virtuale-per-sos-manodopera_d482075b-76f5-4a33-9e1d-03afa1f86657.html.

28 Jaime D'Alessandro, 'Shoshana Zuboff: 'Le App per Il Controllo Della Pandemia Possono Essere Obbligatorie Come i Vaccini'', *La Repubblica*, 09 April 2020, https://rep.repubblica.it/pwa/intervista/2020/04/09/news/shoshana_zuboff_altro_che_privacy_le_app_per_il_controllo_della_pandemia_devono_essere_obbligatorie_come_i_vaccini_-253587046/?ref=RHPPTP-BH-I253595676-C12-P4-S3.4-T1.

visibilization in disease tracing and tracking, so that people who have been immunized can return to orchards and elderly houses to become invisibilized workers again? Or will access to civil rights be granted on a permanent basis to all?

In facing the visibility/invisibility dilemma for populations on the move, diverse scenarios open up, from repressive authorities identifying and tracking undocumented migrants, to a de facto form of civil inclusion. De facto inclusion would entail universal access to civil institutions such as health care, welfare and civil rights. It would be an infrastructural (but nevertheless political) way to classify people on the move as members of civil communities, while at the same time protecting them through civil rights. De facto inclusion would entail protected visibility. In what follows, we reflect on the conditions under which the counting of invisibilized populations can lean towards this second scenario.

We argue that a multi-pronged approach is needed to address the problem of making the invisible population of migrants countable under fair conditions. First, we need to carefully consider how we count and what digital infrastructure we employ. For starters, counting should respect the principles enshrined in the EU General Data Protection Regulation, most notably data minimization (i.e., data collection should be limited to what is necessary) and purpose limitation (i.e., data should be collected for specific, explicit and legitimate purposes). But data collection should also commit to fairness and transparency, meaning that personal data should be processed transparently to data subjects, and abide by democratic oversight and accountability. In other words, the counting we propose should protect populations and the societies surrounding them, rather than exclude, discriminate, or repress them. To this end, we need to ensure that data collection and use are discrimination- and future-proof. Data about, for example, health conditions collected during the pandemic emergency should not be used against these vulnerable populations at a later stage. In this process of envisioning fair rules for counting vulnerable populations, the infrastructural dimension should be given adequate consideration. Although "invisible" in themselves, digital infrastructures—including how they are designed, integrated, and owned—are an integral part of any decision-making with regards to counting.

Second, civil rights for people on the move must also include the right to be deleted from any database, and to not be traced beyond the original goals (i.e., the purpose limitation mentioned in GDPR). Data about people who have been on the move is already stored in systems of identification and registration used at the border, with the risk of carrying stigmas far and wide. On top of that, entering a health care or welfare database often means being subjected to a system of invasive cross checks. As many counts and registries are also modes of control and surveillance, inclusion should also entail the right to be forgotten. Furthermore, any restrictive or invasive measure should come with adequate sunset provisions, whereby any data collection that is in some way invasive of people's privacy can cease to have effect when a vaccine becomes available and is widely administered.

Third, the practice of counting empowers the counter more than for the counted, so we propose an alliance between different counting entities rallying around the need for public critical care. These entities include migrant-led organizations, shelters, health

care institutions, unions, and local organizations. Our rallying cry comes with its own set of challenges, including database interoperability issues and principles, as various organizations will have to gather around a concern for care and public health, while bringing their own experiences and values. The alternative would leave us with a prolonged public health crisis or empower state authorities and private corporations to collect population data.

Finally, and most importantly, the counting we propose should take stock of the European migration regime, and invert the priority given since 2015 to securitization at the expenses of health data. Our research at Processing Citizenship has shown that in European frontline countries, the assessment of health conditions was originally the primary concern among people rescued at sea upon disembarkation.[29] However, with the so called "Hotspot approach" introduced in 2015, priority has shifted to fill administrative databases for security concerns.[30] If anything, COVID-19 is a powerful reminder of the need to restore the original priority given to health data in population management. In sum, we argue that identification and tracking of migrants for purely security purposes should be replaced with health care assessment through specialized, non-interoperable information systems that count resident populations and those on the move.

To conclude, we cannot but note that the bulk of our proposals—especially around data protection, data minimization, purpose limitation, and sunset clauses—are also valid when considering deploying contact-tracing apps for the general population. We wonder, to what extent can any counting measure to contain the virus be effective while distinguishing among populations? By considering how to fairly include invisibilized populations in what is today's most pressing count, we might end up realizing that even most classifications for visible populations are being redefined. A more comprehensive solution to this conundrum would be to include all residents of a given polity in critical services, regardless of their status. If so, the challenge is how to ensure that this redefinition is as inclusive as possible. This might require changing the ways Europe sees its people and who these people are, and ultimately, the role of data infrastructures in this inclusive recounting.

Acknowledgements

This project has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme under grant agreements No 714463 (Processcitizens) and No 639379 (DATACTIVE).

This essay has been first published in openDemocracy (28 April 2020). An Italian translation ("Come e perché rendere visibili i migranti nei dati della pandemia") has appeared in the Italian weekly magazine Internazionale (14 May 2020).

29 Processing Citizenship, https://processingcitizenship.eu/.

30 Annalisa Pelizza, 'Processing Alterity, Enacting Europe: Migrant Registration and Identification as Co-Construction of Individuals and Polities', *Science, Technology, & Human Values*, 45, 2 (March 1, 2020).

References

"Africani immuni? È una ipotesi'. Ma Galli precisa: 'La tubercolosi non c'entra,"' *Huffington Post*, 24 March 2020, https://www.huffingtonpost.it/entry/extra-comunitari-immuni-e-una-ipotesi_it_5e79d2c-4c5b63c3b6496e69f.

'Agricoltura: Mipaaf, iscrizione virtuale per Sos manodopera - Terra & Gusto,' *ANSA*, 14 April 2020, https://www.ansa.it/canale_terraegusto/notizie/a_tavola_con_ansa/2020/04/14/agricoltura-mipaaf-iscrizione-virtuale-per-sos-manodopera_d482075b-76f5-4a33-9e1d-03afa1f86657.html.

'Coronavirus (COVID-19) in Italy: Asylum and Immigration', *JumpMap*, Accessed 22 October 2020, https://coronavirus.jumamap.com/en/asilo-e-immigrazione/.

'Group of Serbian Doctors Calls for Dismissal of National COVID-19 Response Team', *Euractiv*, 14 March 2020, https://www.euractiv.com/section/coronavirus/short_news/serbia-update-covid-19/.

'Μέτρα Προστασίας Από Τον Κορωνοϊό Στα Κέντρα Υποδοχής Και Ταυτοποίησης, Στις Δομές Φιλοξενίας Και Στην Υπηρεσία Ασύλου', Accessed October 22 2020, https://www.mitarakis.gr/gov/migration/1956

'New Corona Measures, Limited IND Services', *Immigratie en Naturalisatiedienst*, 15 March 2020, http://ind.nl:80/en/news/Pages/New-corona-measures,-limited-IND-services-.aspx.

'Portugal to Treat Migrants as Residents during Coronavirus Crisis', *Reuters*, 28 March 2020, https://www.reuters.com/article/us-health-coronavirus-portugal-idUSKBN21F0N7.

@BBCWorld, '"We cannot forget migrants, we cannot forget undocumented workers, we cannot forget prisoners" World Health Organization Executive Director Dr Michael J Ryan says "the only way to beat [coronavirus] is to leave no one behind... we are in this together" http://bbc.in/2w3PUbv', Twitter post, 13 March, 2020, 5:40 PM, https://twitter.com/BBCWorld/status/1238507690537730048

@IOMchief, 'All migrants, regardless of their migratory status, must be included in our response if we are to curb the spread of #COVID19. Only together, we will overcome this global crisis', Twitter post, 14 April, 2020, 3:57 PM, https://twitter.com/IOMchief/status/1250060674564337664

Agence France-Presse in Athens. 'Fire Wrecks Greek Refugee Camp after Unrest over Woman's Death', *The Guardian*, 19 April 2020, https://www.theguardian.com/world/2020/apr/19/fire-wrecks-greek-migrant-camp-after-iraqi-death-sparks-unrest.

Bulman, May. 'Charities and MPs Warn Undocumented Migrants Are Dying of Coronavirus Because They're Too Afraid to Seek Help', *The Independent*, 17 April 2020, https://www.independent.co.uk/news/uk/home-news/coronavirus-undocumented-migrants-deaths-cases-nhs-matt-hancock-a9470581.html.

Carretero, Leslie. 'France: Migrants Left out in Fight against Coronavirus', *InfoMigrants*, March 20 2020, https://www.infomigrants.net/en/post/23522/france-migrants-left-out-in-fight-against-coronavirus.

Carretero, Leslie. 'Belgian Government Is Doing Nothing to Protect Migrants from Coronavirus, NGOs', *InfoMigrants*, 1 April 2020, https://www.infomigrants.net/en/post/23804/belgian-government-is-doing-nothing-to-protect-migrants-from-coronavirus-ngos.

D'Alessandro, Jaime. 'Shoshana Zuboff: 'Le App per Il Controllo Della Pandemia Possono Essere Obbligatorie Come i Vaccini'', *La Repubblica*, 09 April 2020, https://rep.repubblica.it/pwa/intervista/2020/04/09/news/shoshana_zuboff_altro_che_privacy_le_app_per_il_controllo_della_pandemia_devono_essere_obbligatorie_come_i_vaccini_-253587046/?ref=RHPPTP-BH-I253595676-C12-P4-S3.4-T1.

Eligon, John Audra D. S. Burch, Dionne Searcey and Richard A. Oppel Jr.. 'Black Americans Face Alarming Rates of Coronavirus Infection in Some States', *The New York Times*, 14 April 2020, https://www.nytimes.com/2020/04/07/us/coronavirus-race.html.

Gelatt, Julia. Immigrant Workers: Vital to the U.S. COVID-19 Response, Disproportionately Vulnerable, *Migration Policy Institute*, March 2020, https://www.migrationpolicy.org/research/immigrant-workers-us-covid-19-response.

Hirsch, Afua. 'If Coronavirus Doesn't Discriminate, How Come Black People Are Bearing the Brunt?', *The Guardian*, 8 April 2020, https://www.theguardian.com/commentisfree/2020/apr/08/coronavirus-black-people-ethnic-minority-deaths-pandemic-inequality-afua-hirsch.

Keith, Katie. 'Unpacking The Coverage Provisions In The House Coronavirus Bill', *HealthAffairs*, 16 March 2020, https://www.healthaffairs.org/do/10.1377/hblog20200316.471367/full/.

Kliff, Sarah and Julie Bosman. 'Official Counts Understate the U.S. Coronavirus Death Toll', *The New York Times*, 7 April 2020, https://www.nytimes.com/2020/04/05/us/coronavirus-deaths-undercount.html.

Kovacevic, Danijel. 'No Coronavirus Cases Found Yet Among Migrants, Refugees in Bosnia', *Balkan Insight*, 6 April 2020, https://balkaninsight.com/2020/04/06/no-coronavirus-cases-found-yet-among-migrants-refugees-in-bosnia/.

Löfgren, Emma. 'No Coronavirus Legislation Planned for Work Permit Holders in Sweden', *The Local*, 26 March 2020, https://www.thelocal.se/20200326/no-coronavirus-legislation-planned-for-work-permit-holders.

McIntyre Niamh and Pamela Duncan. 'Care Homes and Coronavirus: Why We Don't Know the True UK Death Toll', *The Guardian*, 14 April 2020, https://www.theguardian.com/world/2020/apr/14/care-homes-coronavirus-why-we-dont-know-true-uk-death-toll.

Milan, Stefania and Emiliano Treré. 'A Widening Data Divide: COVID-19 and the Global South', in Stefania Milan, Emiliano Treré and Silvia Masiero (eds) *COVID-19 from the Margins. Pandemic Invisibilities, Policies and Resistance in the Datafied Society*, Institute of Network Culture, Amsterdam, 2021, pp. 24-28.

Narea, Nicole. 'The Missing Piece in the Coronavirus Stimulus Bill: Relief for Immigrants', *Vox*, 1 April 2020, https://www.vox.com/2020/4/1/21197017/immigrants-coronavirus-stimulus-relief-bill.

Pallister-Wilkins, Polly. 'Hotspots and the Geographies of Humanitarianism.' *Environment and Planning D: Society and Space*, 2020; 38(6): 991-1008. doi:10.1177/0263775818754884"

Pelizza, Annalisa. 'Processing Alterity, Enacting Europe: Migrant Registration and Identification as Co-Construction of Individuals and Polities', *Science, Technology, & Human Values*,c45, 2: 262–88.

Roberts, Hannah. 'Italy's Coronavirus Farmworker Shortage Fuels Debate on Illegal Migration', *POLITICO*, 13 April 2020, https://www.politico.eu/article/italy-seasonal-migrant-farm-workers-coronavirus-covid-19/.

Salvatori, Pietro. 'L'Italia chiude i porti', *Huffington Post*, 8 April 2020, https://www.huffingtonpost.it/entry/litalia-chiude-i-porti_it_5e8d89f2c5b6e1d10a6c2671.

Wallis, Emma. 'UK Charities Demand Urgent Steps for Migrants during Covid-19 Pandemic', *InfoMigrants*, 26 March 2020, https://www.infomigrants.net/en/post/23653/uk-charities-demand-urgent-steps-for-migrants-during-covid-19-pandemic.

10. DISRUPTING "BUSINESS AS USUAL": COVID-19 AND PLATFORM LABOUR[1]

NIELS VAN DOORN, EVA MOS & JELKE BOSMA

Things are bad right now and they will probably get worse in the future. Once the global pandemic caused by COVID-19 is finally under control, the afterlife of this public health crisis is likely to have a devastating impact on our national and local economies for years to come. But not everyone will be affected in the same way and to the same extent. We have already witnessed how the pandemic has brought long-standing inequalities with respect to income and wealth distribution into sharp relief. Some social groups have access to the resources (e.g. time, space, capital, influence) necessary to weather this crisis, or even make a profit from it, while many others scramble to protect their lives and livelihoods. In many ways, COVID-19 intensifies and accelerates these inequalities and will ultimately push them to a breaking point, a point that even conservative governments have been trying to steer clear of by introducing economic rescue plans.

Importantly, the ongoing platformization of labour and livelihoods embodies a similar logic of intensification and acceleration. While the term "disruption" has been overused—and poorly describes the economic and social impacts that platforms like Uber, Airbnb, or Deliveroo are having—we nevertheless think it is safe to say that these impacts are significant. Platform companies are reorganizing how people work and make a living, and how citizens and their governments manage and take care of others. Emerging in the wake of the 2008 recession, they have exacerbated the unequal distribution of opportunities and risks along lines of class, gender, race, and nationality—even when they claim to empower working people.

Over the past few weeks it has become clear that things are no longer 'business as usual' for these companies, as they are not only facing new challenges but seizing opportunities that have arisen from the current crisis. Meanwhile, we are seeing new local platform-based initiatives springing up, driven by networks of citizens as well as private organizations aiming to assist the most vulnerable members of their communities.

Various news outlets have reported that the popularity of on-demand delivery services has grown massively in cities across the globe, especially in large metropolitan areas now dealing with increasingly severe lockdowns.[2] In New York City, for instance, couriers for food delivery

2 Tyler Sonnemaker, 'Instacart Plans to Add 300,000 Additional Workers as Demand Surges for Online Delivery', *Business Insider*, 23 March 2020, https://www.businessinsider.com/instacart-to-add-300000-shoppers-as-online-grocery-delivery-surges-2020-3; Sean Captain, 'What It's like to Be a Delivery Worker in the COVID-19 Era', *FastCompany*, 24 march 2020, https://www.fastcompany.com/90480629/what-its-like-to-be-a-delivery-worker-during-the-covid-19-pandemic; Alina Selyukh, 'From Grocery Stores To Pizza Delivery, Some Companies Are On A Hiring Spree', *NPR.org*, 24 March 2020, https://www.npr.org/2020/03/24/820624379/from-grocery-stores-to-pizza-delivery-some-companies-are-on-a-hiring-spree.

platforms like *DoorDash* and *Caviar* are facing an ambivalent situation. Whilst workers realize that their services are more needed than ever, at the same time they are worried about their health and safety because these platform companies offer no proper protections or insurances to independent contractors.[3] While many workers take pride in their job and half-jokingly praise the empty streets in Manhattan, they also feel they should not have to invest in protective gear. Quite a few couriers warn that social distancing is often impossible when waiting at a restaurant with other delivery workers.

Although most delivery companies have by now arranged their own financial assistance programs for couriers who get infected or are required to self-quarantine, these initiatives generally offer relief up to just 14 days and require them to submit documentation that is difficult to obtainin times of crisis.[4] With such high application thresholds, it is unclear how many couriers have gained access to these emergency funds, which appear to be little more than a public relations strategy.

Beyond these limited reactive measures, which force couriers to keep working until they are physically or legally unable to work, companies like *Uber*, *DoorDash*, and *Deliveroo* continue to disavow responsibility for their workforce by fighting reclassification legislation that would force them to provide a more comprehensive safety net. Instead, *Uber*'s CEO has recently petitioned the US Federal government to step in and provide the protections America's new first responders now need more than ever.[5] In fact, he recently got what he wanted, which may have negative implications in the future.

The abovementioned companies, in tandem with *Amazon*, are primarily focused on expanding their delivery markets by further rolling out and diversifying their outsourced logistical services. NYC's ride-hailing industry is taking a big hit due to COVID-19, which is also wreaking havoc on the restaurant and hospitality industry.[6] In response, drivers and restaurant workers are turning to delivery platforms to salvage part of their income, while Uber and Amazon are exploring the possibility of delivering test kits in the near future.[7] *Uber* and *Lyft* are also trying to capitalize on an increased need for the private transportation

3 Kate Conger, Adam Satariano and Mike Isaac, 'Pandemic Erodes Gig Economy Work', *The New York Times*, 4 April 2020, https://www.nytimes.com/2020/03/18/technology/gig-economy-pandemic.html.

4 Dara Kerr, 'Gig Workers Say Sick Pay for Coronavirus Is Hard to Come By', *CNET*, 26 March 2020, https://www.cnet.com/features/gig-workers-with-covid-19-symptoms-say-its-hard-to-get-sick-leave-from-uber-lyft-instacart/.

5 Edward Ongweso Jr, 'Uber Asks US Government to Give Its Workers Health Insurance', *Vice*, 23 March 2020, https://www.vice.com/en/article/8847qb/uber-asks-us-government-to-give-its-workers-health-insurance.

6 Sean Captain, 'What It's like to Be a Delivery Worker in the COVID-19 Era', *FastCompany*, 24 march 2020, https://www.fastcompany.com/90480629/what-its-like-to-be-a-delivery-worker-during-the-covid-19-pandemic; Austa Somvichian-Clausen, 'How NYC's Restaurant Industry Is Surviving amid Coronavirus Closures', *TheHill*, 20 March 2020, https://thehill.com/changing-america/respect/accessibility/488670-how-nycs-restaurant-industry-is-surviving-amid.

7 Sarah Emerson, 'Amazon and Uber Suggest Delivering Coronavirus Testing Kits. Gig Workers Are Worried', *Medium*, 20 March 2020, https://onezero.medium.com/amazon-and-uber-suggest-delivering-coronavirus-testing-kits-gig-workers-are-worried-2c7b550604e1.

of vulnerable people and critical goods through their Uber Health and LyftUp initiatives, respectively.[8]

Meanwhile, *DoorDash* is partnering with NYC's government to deliver food to "medically fragile students," and has also launched a "package of commission relief and marketing support" for new and existing partner restaurants.[9] *DoorDash* is investing heavily in COVID-induced market growth. The company allows new restaurants to sign up for free and pay no commissions for 30 days, and it creates priority access for restaurant workers looking to start as Dashers. Across the Atlantic, the situation in Amsterdam and Berlin looks a bit different. While delivery companies in these cities are also signing up scores of restaurants that have had to close their doors to dining customers, couriers working for *Deliveroo*, *TakeAway*, and/or *Uber Eats* are not yet seeing a similarly high boost in orders. Neither are they getting the tips or bonus incentives one may hope for during this crisis.

In Amsterdam, couriers who have a financial buffer are staying home as much as possible, particularly students for whom the pay-outs are not worth the risk. Still, the streets continue to fill with food delivery workers, many of whom are immigrants with little choice but to keep working regardless of how bad the circumstances get. Other sources of income have mostly been discontinued and, like their peers in NYC, they are only receiving standard emails and notifications from platform companies warning them to keep their distance and fulfil the logistical promise of contact-free delivery. That this promise is a fantasy becomes painfully clear when picking up an order at an otherwise closed McDonald's restaurant, where more than a handful of waiting couriers converge around the door each time it opens wide enough to push the next bag of fast food through.

Another thing we are not yet seeing in European cities is the kind of crisis-driven service diversification and public-private partnerships that platform companies are currently experimenting with in the US This might soon change, however, as *Deliveroo*, *JustEat*, and *Uber* are allegedly all in conversation with the British Government about providing delivery support to elderly and vulnerable people.[10] Due to the conjunction of an increased public need for logistical solutions and a decreased demand for ride-hailing services across Europe, *Uber* may be looking for similar ways to reallocate its drivers in other countries.

8 'Uber Considers Med Delivery As Riders Plummet', *PYMNTS.Com*, 20 March 2020, https://www.pymnts.com/news/ridesharing/2020/uber-considers-med-delivery-as-ridership-plummets/; 'Supporting Our Community', *Lyft*, 20 March, 2020, https://www.lyft.com/blog/posts/supporting-our-community.

9 @NYCMayor, 'We're also partnering with @DoorDash to get food to the homes of medically fragile students. No child will go hungry. Not on our watch.', Twitter post, 21 March, 1:22 AM, https://twitter.com/NYCMayor/status/1241158218396708865; Tony Xu, 'Supporting Local Businesses and Communities in a Time of Need,' *DoorDash*, 17 March 2020, https://blog.doordash.com/supporting-local-businesses-and-communities-in-a-time-of-need-41c0742fbc03.

10 Rowland Manthorpe, 'Coronavirus: Takeaway Firms JustEat and Deliveroo in Talks with Government on Providing Care Packages to Elderly,' *Sky News*, 16 March 2020, https://news.sky.com/story/coronavirus-takeaway-firms-justeat-and-deliveroo-in-talks-with-government-on-providing-care-packages-to-elderly-11958494.

Ride-hailing is not the only segment of the gig economy to be negatively impacted by COVID-19. Due to mandatory social distancing and home quarantine measures, domestic cleaners working through platforms such as *Handy* and *Helpling* are losing most of their income. In the Netherlands, for instance, *Helpling* bookings are down 40% and the cancellation rate is expected to rise to 50-60%.[11] Cleaners in Amsterdam—mostly immigrants—are facing difficult times, since most of their clients have asked them to stay away until further notice. One cleaner said she lost about 1,200 euros over the last two weeks and is now fully dependent on her partner's income. When asked whether she had checked her eligibility for financial assistance—which the Dutch government recently made available to independent contractors hit by the COVID-19 crisis—she admitted having no idea such a rescue program existed, let alone if she would qualify. Her response highlights the vulnerability of migrant gig workers, who often do not master the native language and have trouble accessing information pertinent to their livelihood. Even when access is obtained, navigating the red tape in a foreign bureaucracy can be exceedingly difficult.

In conclusion, the pandemic is impacting the gig economy in two significant ways. First, it accelerates the ascendency of on-demand delivery as the dominant and most rapidly expanding service market, at the expense of ride-hailing and domestic cleaning. Secondly, it intensifies gig platforms' experimentation with public-private partnerships and forms of service provision that cater to special needs populations. By seeking new ways to support the social reproduction of vulnerable consumer groups during a time of crisis, while continuing to discard the reproductive struggles of their workforce, platform companies are leveraging this public health crisis in a bid to become increasingly infrastructural. That is, COVID-19 generates a state of exception that offers companies a window of opportunity to test-drive their desired scenario of becoming privatized digital utilities that control and monetize critical data flows.[12] The question that remains is, to what extent will this state of exception become the rule?

References

'Supporting Our Community', Lyft, 20 March, 2020, https://www.lyft.com/blog/posts/supporting-our-community.

'Uber Considers Med Delivery As Riders Plummet', *PYMNTS.com*, 20 March 2020, https://www.pymnts.com/news/ridesharing/2020/uber-considers-med-delivery-as-ridership-plummets/.

@NYCMayor, 'We're also partnering with @DoorDash to get food to the homes of medically fragile students. No child will go hungry. Not on our watch.', Twitter post, 21 March, 1:22 AM, https://twitter.com/NYCMayor/status/1241158218396708865

Captain, Sean. 'What It's like to Be a Delivery Worker in the COVID-19 Era', *FastCompany*, 24 march 2020, https://www.fastcompany.com/90480629/what-its-like-to-be-a-delivery-worker-during-the-covid-19-pandemic.

11 Hella Hueck, 'De Werkster Is Ineens Niet Meer Nodig', *The Financial Times*, 23 February 2020, https://fd.nl/ondernemen/1338913/de-werkster-is-ineens-niet-meer-nodig?fbclid=IwAR2olf3-H5mzafmgS4hgx2WJU77JLdlQhLnoG3AlJTWIbjSUe9qQCpdAcZs.

12 Julie Yujie Chen and Jack Linchuan Qiu, 'Digital Utility: Datafication, Regulation, Labor, and DiDi's Platformization of Urban Transport in China,' *Chinese Journal of Communication* 12, 3 (July 3, 2019).

Chen, Julie Yujie and Jack Linchuan Qiu. 'Digital Utility: Datafication, Regulation, Labor, and DiDi's Platformization of Urban Transport in China,' *Chinese Journal of Communication* 12, 3 (July 3, 2019): 274–89.

Conger, Kate, Adam Satariano and Mike Isaac. 'Pandemic Erodes Gig Economy Work', *The New York Times*, 4 April 2020, https://www.nytimes.com/2020/03/18/technology/gig-economy-pandemic.html.

Emerson, Sarah. 'Amazon and Uber Suggest Delivering Coronavirus Testing Kits. Gig Workers Are Worried', *Medium*, 20 March 2020, https://onezero.medium.com/amazon-and-uber-suggest-delivering-coronavirus-testing-kits-gig-workers-are-worried-2c7b550604e1.

Hueck, Hella. 'De Werkster Is Ineens Niet Meer Nodig', *The Financial Times*, 23 February 2020, https://fd.nl/ondernemen/1338913/de-werkster-is-ineens-niet-meer-nodig?fbclid=IwAR2oIf3-H5mzafmgS4hgx2WJU77JLdlQhLnoG3AlJTWIbjSUe9qQCpdAcZs.

Kerr, Dara. 'Gig Workers Say Sick Pay for Coronavirus Is Hard to Come By', *CNET*, 26 March 2020, https://www.cnet.com/features/gig-workers-with-covid-19-symptoms-say-its-hard-to-get-sick-leave-from-uber-lyft-instacart/.

Manthorpe, Rowland. 'Coronavirus: Takeaway Firms JustEat and Deliveroo in Talks with Government on Providing Care Packages to Elderly', *Sky News*, 16 March 2020, https://news.sky.com/story/coronavirus-takeaway-firms-justeat-and-deliveroo-in-talks-with-government-on-providing-care-packages-to-elderly-11958494.

Ongweso Jr, Edward. 'Uber Asks US Government to Give Its Workers Health Insurance', *Vice*, 23 March 2020, https://www.vice.com/en/article/8847qb/uber-asks-us-government-to-give-its-workers-health-insurance.

Selyukh, Alina. 'From Grocery Stores To Pizza Delivery, Some Companies Are On A Hiring Spree', *NPR.org*, 24 March 2020, https://www.npr.org/2020/03/24/820624379/from-grocery-stores-to-pizza-delivery-some-companies-are-on-a-hiring-spree.

Somvichian-Clausen, Austa.'How NYC's Restaurant Industry Is Surviving amid Coronavirus Closures', *TheHill*, 20 March 2020, https://thehill.com/changing-america/respect/accessibility/488670-how-nycs-restaurant-industry-is-surviving-amid.

Sonnemaker, Tyler. 'Instacart Plans to Add 300,000 Additional Workers as Demand Surges for Online Delivery', *Business Insider*, 23 March 2020, https://www.businessinsider.com/instacart-to-add-300000-shoppers-as-online-grocery-delivery-surges-2020-3.

Xu, Tony. 'Supporting Local Businesses and Communities in a Time of Need', *DoorDash*, 17 March 2020, https://blog.doordash.com/supporting-local-businesses-and-communities-in-a-time-of-need-41c0742fbc03

11. THE ROLE OF A GIG-WORKER DURING CRISIS: CONSEQUENCES OF COVID-19 ON FOOD DELIVERY WORKERS IN SOUTH INDIA

SHYAM KRISHNA

As the COVID-19 crisis unfolds in India, it is clear that the country's largely informal workforce is facing the brunt of the impact. The workers in the growing Indian gig-economy, particularly food-delivery workers, are heavily affected. Confronting severely reduced income, they face the danger of possible exposure to infection during their daily work. In the early part of this year as the impact of COVID-19 was barely surfacing globally, I was working as a food delivery worker in south India while conducting a self-ethnographic research project.[1] Based on both my experience working in food delivery and my continuing engagement with workers who are currently active, in this chapter I explore the impact on the gig-workers, and reflect on some of the consequences of the crisis.

Even in normal times, food delivery workers assume enormous risk on behalf of both restaurants and the customers. They are constantly exposed to risks such as dangerous road traffic and harsh weather conditions. These risks have been compounded by the current crisis, in which some measures taken to protect the general public adversely affect the workers. Under isolation efforts, safety is paramount, and 'contactless' deliveries[2] are becoming the norm. But this means that the workers themselves continue to take on risk during this crisis and are seen by companies and governments as a potential solution for delivering help to those affected by COVID-19. In these extraordinary times, the government has also encouraged the'citizen' use[3] of food delivery platforms. Both as a rhetoric and as a policy, this is a problematic nexus between the state and digital platforms that neglects to support workers. The unfortunate counterintuitive impact of governmental controls, such as lowering the number of operating hours for restaurants and shops, is that without due protection, such controls force the food delivery workers to queue up in the short time the busy locations operate. This heightens the workers' risk of social contact and infections, which they shoulder for customers. One of the workers I interviewed sums this dynamic up by saying that this crisis highlights the absence of actual care and accountability for the workers that was

1 'Between Digital Platforms and the Deep Sea, Social Justice Implications of Digital Platforms on Marginality in Coastal South India', *Not-Equal Network+*, https://not-equal.tech/portfolio/between-digital-platforms-and-the-deep-sea/.

2 Aditi Shrivastava, 'Foodtech: Food Delivery Firms Reassure Customers with Contactless Delivery, Body Temperature Checks', *The Economic Times*, 02 April 2020, https://economictimes.indiatimes.com/internet/food-delivery-firms-reassure-customers-with-contactless-delivery-body-temperature-checks/articleshow/74952432.cms.

3 Nandini Ganguly, 'From Delivering Food Home to Feeding the Needy, the F&B Industry Has Risen to the Challenge in These Tough Times', *The Telegraph*, 09 April 2020, https://www.telegraphindia.com/business/from-delivering-food-home-to-feeding-the-needy-the-f-b-industry-has-risen-to-the-challenge-in-these-tough-times/cid/1763527.

expected of digital platforms and the state. They report that efforts taken to provide personal protective equipment to workers are inadequate. Many reportedly continue to purchase their own masks and gloves. Such efforts to improve worker safety have not been made mandatory or provisioned by the state, and similar stories are emerging from cities across India.[4]

Food delivery workers report that the 60% reduction in volume of orders reported on food delivery platforms has greatly reduced their income.[5] On top of unfair work conditions, the workers report that platforms continue to control them algorithmically by imposing daily targets with lowered rewards, forcing the few active workers to embark on longer delivery trips.[6] These trips may now be of more than 10 kms, double their driving distance during normal times. But now, riding across the city on a scooter also means navigating road blockades and encountering police, with whom interactions can be very risky.[7] Further, in responding to the current crisis, digital platforms, encouraged by the government, have taken to introducing or ramping up delivery of medicines and groceries using the same set of workers.[8] These newer services are both untested and demand increased effort from workers, who continue to be compensated only at the same level as for regular food delivery. As one worker mentions, queuing up and picking up groceries can take 2 hours, but they are paid the same as a food order delivery that used to take as little as 15 minutes. Especially in a crisis, this situation is ripe for state intervention to impose the digital platforms to guarantee a "per hour pay" structure for these workers and with mandated perks for additional risk efforts like queueing up and long-distance rides.

While a structured response that guarantees pay and protection to workers is still yet to be announced, digital platforms have resorted to donation- or charity-driven responses, even as they seek governmental bailout.[9] The largesse of the platforms is performed by asking the customers to provide tips and donations to affected workers. Funds are also collected by platforms which are raised by future facing subscriptions that lock customers to platforms. In

4 Simiran Lalvani and Bhavani Seetharaman, 'The Personal and Social Risks That India's Food Delivery Workers Are Taking During COVID-19', *The Wire*, 12 April 2020, https://thewire.in/business/covid-19-food-delivery-workers.

5 'Coronavirus Impact: Swiggy, Zomato Orders Drop 60%', *Business Today*, 16 April 2020, https://www.businesstoday.in/current/corporate/coronavirus-impact-swiggy-zomato-orders-drop-60/story/399268.html.

6 'Ratings', *Fairwork*, https://fair.work/ratings/?lang=en&location=India&y=39.

7 Sanchita Dash, 'Amazon Delays Orders, Flipkart Suspends Services, a Medicine Delivery Agent Gets Beaten up by the Police', *Business Insider*, 25 March 2020, https://www.businessinsider.in/business/ecommerce/news/amazon-delays-orders-flipkart-suspends-services-a-medicine-delivery-agent-gets-beaten-up-by-the-police-day-1-of-lockdown/articleshow/74804781.cms.

8 T. Ramakrishnan, 'Chennai Residents Can Now Order Vegetables, Fruits on Swiggy, Other Apps', *The Hindu*, 8 April 2020, https://www.thehindu.com/news/cities/chennai/chennai-residents-can-now-order-vegetables-fruits-on-swiggy-other-apps/article31290503.ece.

9 Aman Rawat, '#StartupsVsCovid19: Swiggy, Zomato Take New Measures As Startups Seek Relief Package On Lockdown Day 8', *Inc42 Media*, 2 April 2020, https://inc42.com/buzz/swiggy-zomato-take-new-measures-as-startups-seek-relief-package-on-lockdown-day-8/; Manish Singh, 'Startups, VCs in India Request 'Relief Package' from the Government to Fight Coronavirus Disruption', *TechCrunch*, 10 April 2020, https://social.techcrunch.com/2020/04/10/startups-vcs-in-india-request-relief-package-from-the-government-to-fight-coronavirus-disruption/.

either case, the commercial nature of the platform and the relationship of these workers to the platforms does not see any intervention. In fact, the workers feel efforts such as ramping up subscription services, introducing grocery deliveries without changing the pay, and efforts of charity meant for workers will only ensure the commercial future of the platforms and not the future of the workers themselves. They point to actions such as the platforms deducting money for loan repayments even amidst these extraordinary times as evidence digital platforms and their pay structure continue to be extractive. Because these loans are governed by private sector partnership contracts, they fall under a regulatory void. For example, the response to COVID-19 by the Indian government only mandates deferment being granted on repayments schedules for loans given by many public entities.[10]

Ultimately, the absence of regulation within the gig-economy, particularly its labour practices during the COVID-19 crisis, is compounded by efforts of the state and digital platforms that do not go far enough to help workers. This leaves the gig-worker to be treated as a general-purpose solution for supporting the local community, even when their own livelihood is left to be governed by extractive terms set by digital platforms and their marketisation efforts. In the absence of any state-mandated social safety, such as employment protection and guaranteed wages, gig-workers face an unfortunate choice of either depending on charity or placing themselves at risk. The state continues to engage with digital platforms either as a utility provider for last-mile logistics, or as if they were a charity. Their response ignores the actual responsibility of the platforms as employers, and signals a need to question the underlying assumptions of the gig-economy and the way it treats an already vulnerable workforce who have now become first responders to the COVID-19 crisis.

References

'Between Digital Platforms and the Deep Sea, Social Justice Implications of Digital Platforms on Marginality in Coastal South India', *Not-Equal Network+*, https://not-equal.tech/portfolio/between-digital-platforms-and-the-deep-sea/.

'Coronavirus Impact: Swiggy, Zomato Orders Drop 60%', *Business Today*, 16 April 2020, https://www.businesstoday.in/current/corporate/coronavirus-impact-swiggy-zomato-orders-drop-60/story/399268.html.

'COVID-19 Regulatory Package for Retail Loans', *RBL Bank*, Accessed October 22, 2020. https://www.rblbank.com/static-pages/covid-19-moratorium.

'Ratings', Fairwork, https://fair.work/ratings/?lang=en&location=India&y=39.

Dash, Sanchita. 'Amazon Delays Orders, Flipkart Suspends Services, a Medicine Delivery Agent Gets Beaten up by the Police', *Business Insider*, 25 March 2020, https://www.businessinsider.in/business/ecommerce/news/amazon-delays-orders-flipkart-suspends-services-a-medicine-delivery-agent-gets-beaten-up-by-the-police-day-1-of-lockdown/articleshow/74804781.cms.

Ganguly, Nandini. 'From Delivering Food Home to Feeding the Needy, the F&B Industry Has Risen to the Challenge in These Tough Times', *The Telegraph*, 09 April 2020, https://www.telegraphindia.com/business/from-delivering-food-home-to-feeding-the-needy-the-f-b-industry-has-risen-to-the-challenge-in-these-tough-times/cid/1763527.

10 'COVID-19 Regulatory Package for Retail Loans', *RBL Bank*, Accessed October 22 2020, https://www.rblbank.com/static-pages/covid-19-moratorium.

Lalvani, Simiran and Bhavani Seetharaman. 'The Personal and Social Risks That India's Food Delivery Workers Are Taking During COVID-19', *The Wire*, 12 April 2020. https://thewire.in/business/covid-19-food-delivery-workers.

Ramakrishnan, T.. 'Chennai Residents Can Now Order Vegetables, Fruits on Swiggy, Other Apps', *The Hindu*, 8 April 2020, https://www.thehindu.com/news/cities/chennai/chennai-residents-can-now-order-vegetables-fruits-on-swiggy-other-apps/article31290503.ece.

Rawat, Sman. '#StartupsVsCovid19: Swiggy, Zomato Take New Measures As Startups Seek Relief Package On Lockdown Day 8', *Inc42 Media*, 2 April 2020, https://inc42.com/buzz/swiggy-zomato-take-new-measures-as-startups-seek-relief-package-on-lockdown-day-8/.

Shrivastava, Aditi. 'Foodtech: Food Delivery Firms Reassure Customers with Contactless Delivery, Body Temperature Checks', *The Economic Times*, 02 April 2020, https://economictimes.indiatimes.com/internet/food-delivery-firms-reassure-customers-with-contactless-delivery-body-temperature-checks/articleshow/74952432.cms.

Singh, Manish.'Startups, VCs in India Request 'Relief Package' from the Government to Fight Coronavirus Disruption', *TechCrunch*, 10 April 2020, https://social.techcrunch.com/2020/04/10/startups-vcs-in-india-request-relief-package-from-the-government-to-fight-coronavirus-disruption/

12. GERENCIANDO INCERTEZAS ÀS PRÓPRIAS CUSTAS: MOTORISTAS UBER SOB A PANDEMIA NO BRASIL

ANA GUERRA

Managing Uncertainties at Your own Cost: Brazilian Uber Drivers in the Pandemic

Brazil has rapidly become a hotspot for COVID-19. Brazilian Uber drivers must now choose between putting their well-being at risk and giving up their main source of income. But is there anything new about this difficult trade-off? We interviewed three Uber drivers in Belo Horizonte to understand how they have responded to the pandemic.

O Brasil é o maior mercado da Uber fora dos Estados Unidos, com mais de um milhão de "parceiros". Recentemente, o país bateu outro recorde como a pior eclosão de COVID-19 no mundo depois dos Estados Unidos, com 772.416 casos confirmados e mais de 39.000 mortes até 11 de junho.[1] Este artigo explora o impacto da pandemia em uma população social e economicamente marginalizada: motoristas Uber. Ele traz à tona preocupações que povoam seu cotidiano enquanto circulam pelas ruas de Belo Horizonte, a sexta cidade mais populosa do Brasil.

Por Dentro dos Modelos Preditivos da Uber

A plataforma transnacional, que opera em 63 mercados nacionais pelo mundo, é conhecida como um exemplo da economia sob-demanda, ou "economia de bicos". Se por um lado ela confere um certo grau de independência aos trabalhadores, por outro, não os fornece estabilidade ou qualquer tipo de proteção. Trabalhando sob um regime de trabalho altamente datificado os motoristas se veem em meio a rotinas exaustivas e privados de direitos trabalhistas, já que não são classificados como empregados formais.

Como esse modelo funciona? A plataforma emprega uma série de técnicas de gerenciamento algorítmico da força de trabalho dos motoristas a partir da combinação entre um ideal de livre mercado autorregulado e análise preditiva, o que costuma ser apresentado como um modo de minimizar incertezas e ajudar os motoristas a tomarem decisões mais lucrativa. Tal modelo só se torna possível graças à contínua coleta e processamento de dados sobre padrões de trânsito e localização e comportamentos de passageiros e motoristas. Os esforços tanto de desenvolvimento, quanto retóricos da empresa evidenciam a ambição de gerenciar e mitigar incertezas. Isso é ilustrado pelas soluções de forecasting da plataformas, voltadas para a

1 'Sao Paulo Reopens After Lockdown Despite Brazil's Surging Covid-19 Death Toll', *France 24*, 11 June 2020, https://www.france24.com/en/20200611-sao-paulo-re-opens-after-lockdown-despite-brazil-s-surging-covid-19-death-toll.

predição e o gerenciamento das dinâmicas espaço-temporais do que é chamado de "mundo real", conforme é visível em publicações no blog de engenharia da Uber e em aplicações de patente, por exemplo.[2] O desejo de antecipar dinâmicas futuras por meio de dados também é evidenciada pelo que Rosenblat and Stark chamam "trabalho algorítmico" dos motoristas Uber.[3]

A Uber é um caso paradigmático de precarização do trabalho pelo que é conhecido como "economia de bicos" ou "economia de compartilhamento". De certa forma, não surpreende que este processo seja frequentemente chamado de "uberização do trabalho". A incorporação de modelos preditivos à rotina dos motoristas reverbera o que Adrian Mackenzie identifica como uma generalização da predição na vida cotidiana, ou seja, a presença crescente da ordenação algorítmica de preferências e recomendações, reconhecimento de padrões e previsão de demanda voltados à estabilização de resultados e ações futuros.[4]

A mistura perigosa de performances datificadas, precarização e informalização do trabalho, e pobreza é particularmente tóxica durante uma pandemia que vem se caracterizando pela incerteza que impregna todas as esferas da vida social.

Gerenciando a Incerteza em uma Pandemia

Desde que a COVID-19 passou a tomar conta dos nossos pensamentos e afetos, o mundo real parece estar se tornando ainda mais real, e nossa relação com a predição, um pouco mais íntima. O mundo como o conhecemos está se transformando rapidamente, e às vezes é difícil acompanhar os números que nos dizem o que está acontecendo hoje e o que esperar do amanhã: quantos casos? Quantos mortos? Quantos dias até voltarmos ao "normal"? A resposta muda dia após dia. O novo coronavírus distorceu nossa experiência de tempo e espaço. Um agente invisível, que podemos ou não estar carregando dentro de nossas células ou na superfície de nossas roupas, rapidamente perturbou as referências sólidas em torno das quais nos acostumamos a organizar nossas rotinas Enquanto uma ampla variedade de dados, modelos preditivos, projeções e representações visuais tentam tornar seus efeitos um pouco mais inteligíveis, o desconhecido continua encontrando modos de nos confrontar por ângulos inesperados. Qualquer lampejo de certeza rapidamente se prova efêmero e nenhuma projeção ou infográfico animado dá conta de amenizar isso. De certa forma, nossa narrativa dataísta que privilegia ideais de verdade datificados e orientados para a predição é progressivamente desestabilizada. A noção de "dataísmo", como explica José van Dijck, é oriunda de uma crença na "objetividade da quantificação" potencializada pela datificação do comportamento e da socialidade humana em plataformas de mídias digitais.[5] É verdade que

2 Franziska Bell and Slawek Smyl, 'Forecasting at Uber: An Introduction', *Uber*, 6 September 2018, https://eng.uber.com/forecasting-introduction/.

3 Alex Rosenblat and Luke Stark, 'Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers', *International Journal of Communication* 10, 27, 2016.

4 Alex Rosenblat and Luke Stark, 'Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers'.

5 José van Dijck, 'Datafication, dataism and dataveillance: Big Data between scientific paradigm and ideology', *Surveillance & Society* 12, 2, 2014.

continuamos contando—contando pacientes, contando leitos, contando corpos, contando os dias—mas nosso ritmo mudou.

Apesar da sensação globalizada de incerteza, alguns lugares parecem mais incertos do que outros. Aqui no Brasil, o novo epicentro da COVID-19, o "mundo real" encontra pitadas de realismo fantástico.[6] Entre subnotificações, falta de testes, infindáveis conflitos entre os posicionamentos de autoridades de saúde e os do presidente Jair Bolsonaro[7], notícias sobre valas coletivas[8] e notícias falsas sobre caixões cheios de pedra[9], os brasileiros se vêem em um cenário no mínimo caótico. Enquanto isso, o número de mortes segue aumentando à medida que as camadas mais pobres da população são afetadas pelo vírus e por um sistema econômico e social colapsado.

Entre aqueles apanhados pelo desamparo estão muitos dos motoristas Uber no Brasil. O país é o segundo maior mercado da Uber fora dos Estados Unidos. Desde que chegou por aqui em 2014, a plataforma rapidamente se posicionou como uma solução de mobilidade para comunidades mais pobres e menos assistidas pelo transporte público, forjando um papel quase infraestrutural. Ela chega onde muitos taxistas se recusam a ir e onde o transporte público é deficitário, como em favelas e periferias. Além disso, "pegar um uber" pode ser mais tão barato quanto pegar um ônibus, e, em geral, muito mais rápido. Para além disso, a Uber também sustenta uma posição ambígua e privilegiada como uma salvadora em meio a altas taxas de desemprego, e muitos motoristas dependem da plataforma como principal fonte de renda. Neste momento, no entanto, os motoristas são forçados a desacelerar. Alguns relatam uma queda de 90% no movimento no movimento.[10]

Lidando com Tempos Incertos: Respostas da Uber vs. Experiências dos Motoristas

As respostas da Uber à pandemia fazem pouco para apaziguar a sensação de incerteza. Dentro do pacote de "recursos"[11] direcionado a motoristas brasileiros, a plataforma anunciou

6 Luis Barrucho, 'Brasil: o Novo Epicentro da Pandemia de Coronavírus?', *BBC News*, 20 May 2020, https://www.bbc.com/portuguese/brasil-52732620.

7 'Bolsonaro Ameaça Retirar Brasil da OMS, a Exemplo dos EUA', *UOL*, 5 June 2020, https://noticias.uol.com.br/ultimas-noticias/reuters/2020/06/05/bolsonaro-ameaca-retirar-brasil-da-oms-a-exemplo-dos-eua.htm.

8 Flávio Costa and Aiuri Rebello, 'Após Boom em Enterros, Manaus Abre Covas Coletivas Para Vítimas de COVID-19', *UOL*, 21 April 2020, https://noticias.uol.com.br/saude/ultimas-noticias/redacao/2020/04/21/apos-boom-em-enterros-manaus-abre-covas-coletivas-para-vitimas-de-covid-19.htm.

9 Vinícius Lemos, 'A Farsa dos Caixões Vazios Usados Para Minimizar Mortes por COVID-19', *Terra*, 8 May 2020, https://www.terra.com.br/noticias/coronavirus/a-farsa-dos-caixoes-vazios-usados-para-minimizar-mortes-por-covid-19,0322d635a96efa01decd61cb0daccea1ocu3lmr1.html.

10 Gabriel Ribeiro, 'Motoristas de Apps Como Uber Perdem até 90% das Corridas e Querem Taxa Zero', *UOL*, 31 March 2020, https://www.uol.com.br/tilt/noticias/redacao/2020/03/31/motoristas-de-apps-como-uber-perdem-ate-90-das-corridas-e-querem-taxa-zero.htm.

11 'Sem Máscara. Sem Viagem', Uber, https://www.uber.com/br/pt-br/coronavirus/.

um "auxilio financeiro"[12] com duração de até 14 dias para "parceiros" diagnosticados com COVID-19 ou classificados como casos suspeitos ou parte de grupos de risco. Sua elegibilidade deve ser atestada por documentos oficiais de autoridades de saúde contendo informações detalhadas. A assistência não tem um valor fixo, comum a todos os motoristas assistidos. Ao invés disso, a quantia a ser recebida é calculada com base nos rendimentos médios do motorista nos últimos três meses, estando intimamente vinculada à performance individual de cada um. A própria política que informa a assistência é efêmera e, parece incerta e de curto prazo, já que a plataforma indica que podem ser atualizadas em pouco tempo. As regras descritas acima foram atualizadas no dia 17 de abril e eram válidas até o dia 8 de maio, tendo sido posteriormente estendidas até o dia 8 de junho. Tudo isso é exacerbado pelo tratamento paradoxal da noção de "risco". Quando um motorista solicita a assistência, sua conta é automaticamente desativada, por motivos de segurança. Isso não garante, no entanto, que ele será contemplado com tal assistência. O motorista é assim colocado em uma posição dúbia: ao mesmo tempo em que ele representa um risco, e portanto não pode trabalhar, ele não está em risco, e, por isso, não receberá nenhuma assistência.

Para conhecer melhor a perspectiva dos motoristas, entrevistei Giacomo, Antônio e Verón, três motoristas que trabalham na região metropolitana de Belo Horizonte, cidade populosa com mais de 2.5 milhões de habitantes e capital do estado de Minas Gerais. Também analisei mais de 50 comentários deixados em uma postagem no YouTube publicada por Samuel, um motorista e YouTuber que compartilhou minhas perguntas com seus seguidores.[13] No momento da escrita deste artigo, todos os três entrevistados continuam trabalhando. Enquanto dirigem, o Sars-Cov-2 pode estar dando uma volta em seu banco de trás, um risco agravado pelo falta de cuidado de alguns passageiros. Giacomo estima que de dez passageiros por ele transportados, dois teriam usado máscara. A esposa de Antônio é diabética, grupo de risco para a COVID-19. Ela precisa de uma dieta balanceada, e ele decidiu continuar trabalhando para que possam pagar por isso. Para se proteger, comprou máscaras e álcool em gel, e embora pudesse requerer um único reembolso no valor de R$20,00 (cerca de EUR 3) oferecido pela Uber para aquisição de produtos de higiene, ele se optou por não fazê-lo. "Uma ajuda irrisória", diz o entrevistado, "é um desaforo". Os motoristas compartilham a sensação de que o movimento se afrouxou, o que significa ficar algumas horas parado dentro do carro esperando (e, portanto, "sem ganhar"). O trabalho ficou um pouco mais solitário. Após ter o filho de 19 anos assassinado, Verón relata ter ficado parado por mais de dois anos, "e aí eu conheci os aplicativos". Desde então, ele vê dirigir para a Uber como um tipo de terapia e uma oportunidade para conhecer novas pessoas. Ele nota que desde o início da pandemia, os passageiros se tornaram menos inclinados a conversar durante as corridas.

A maior parte dos motoristas que responderam à postagem de Samuel parece terem desistido de dirigir por enquanto. Medo e segurança figuram como as principais razões para isso: "eu já andava com medo antes, imagina agora", escreve um deles. Trabalhando ou não, os motoristas

12 'Novidades Sobre a Assistência Financeira em Razão da COVID-19', Uber, 16 April 2020, https://www.uber.com/pt-BR/blog/auxilio-financeiro/.

13 'Falando de Uber', YouTube post, May 2020, *https://www.youtube.com/channel/UCIk8Z7iVqvf4H7rcyb9Ph3g*.

logo sentiram as consequências financeiras da pandemia. Muitos estão devolvendo os carros alugados (cerca de 160 mil, segundo informações de locadoras).[14] Outros ainda não sabem como pagarão a próxima parcela do veículo que comparam precisamente para trabalharem como motoristas de aplicativo. Muitos recorreram ao auxílio emergencial do governo, no valor de R$ 600,00 (cerca de EUR 93) mensais. Algumas das solicitações foram aceitas, outras recusadas. A maioria dos motoristas segue encarando a mensagem "em análise" na tela de seus celulares e computadores, acompanhada da recomendação ambígua, com doses de cinismo, para "tentar novamente amanhã"—alguns deles vem "tentando novamente amanhã" há mais de um mês. Quanto à assistência da Uber, a grande parte dos motoristas não é elegível. Prevalece um sentimento geral de descrédito na "mãe Uber", como alguns costumam se referir à plataforma, por vezes ironicamente, mas nem sempre: "a Uber não faz nada por nós".

Mas há Algo Realmente sob o Sol?

Quando lhes peço para descrever o atual momento em uma palavra, motoristas transitam entre "incerteza", "medo", "frustração" e "resiliência", "perseverança", "aprendizado". Mas o que isso significa? Seriam estes sentimentos novos? Olhar para como a pandemia afetou motoristas Uber pode ser mais produtivo pelo que ela torna visível do que pelo que traz de novo. As circunstâncias em que nos encontramos nos convidam a desfamiliarizar um estado de precariedade recentemente atualizado, mas há muito naturalizado. Como sugere Judith Butler, quando perguntamos sobre as condições dos motoristas Uber sob a pandemia, "nós também estamos perguntando sobre as condições de vida e morte que sustentam a organização social do trabalho".

A incerteza não é nenhuma novidade. Tanto quanto estão acostumados a serem "contados"—trabalhando sob um regime altamente datificado, sendo continuamente atrelados às métricas de suas performances—os motoristas Uber também estão acostumados a contabilizar. Tentar estimar seus ganhos diários enquanto lidam com a taxa de serviço variável cobrada pela Uber ao fim de cada corrida, calcular gastos com combustível e manutenção, planejar o pagamento do aluguel ou das parcelas do carro, tudo isso é parte de sua rotina. Eles também dedicam tempo e energia à criação de estratégias e metas para otimizar sua produtividade. A vida como motorista Uber é marcada por uma orientação precária de à preditibilidade de curto prazo, enquanto o futuro continua obscuro.

Quando trazemos o risco de volta à equação, as condições de vida e morte se tornam ainda mais evidentes. Butler pergunta: "Quem arrisca vida enquanto trabalha? Quem trabalha até morrer?". "Trabalhar até morrer" é uma metáfora um tanto comum para os motoristas. Como um dito motorista que entrevistei em 2018, pouco tempo após um dano causado a seu carro o impedir de trabalhar por mais de 20 dias, "agora é a hora que eu entro na Uber pra gastar. Enquanto o corpo aguentar, eu vou indo". Infelizmente, a

14 Cleide Silva, '160 Mil Motoristas de Aplicativos Devolvem Carros, e Locadoras já Alugam por R $10', *UOL*, 17 May 2020, https://economia.uol.com.br/noticias/estadao-conteudo/2020/05/17/sem-servico-160-mil-motoristas-devolvem-carros-locadoras-ja-alugam-por-r-10.htm.

presença da morte vai além da metáfora. O medo da violência é um forte componente de experiência compartilhada dos motoristas que se veem vulneráveis a assaltos, sequestros e assassinatos.[15] Não é raro nos depararmos com notícias sobre corpos de motoristas Uber encontrados algum tempo depois de serem reportados como desaparecidos.

Assim, enquanto o modelo de negócios e o desenvolvimento tecnológico da Uber gira em torno da mitigação de incertezas por meio de processamento de dados e modelos preditivos, os motoristas, por outro lado, estão bastante acostumados a gerenciar incertezas às próprias custas. A diferença reside na escala. A Uber quer estabilizar o mundo real, prever a demanda, gerenciar o trabalho e racionalizar a dinâmica das cidades pelo mundo. No caso dos motoristas, a incerteza os atinge ainda mais de perto. Trata-se de pagar as contas do mês e sobreviver por mais um dia. Trata-se de sentimentos de medo, desamparo, esperança, resiliência, orgulho e cansaço.

Já faz tempo que os motoristas estão cientes de como a precariedade constitui seu cotidiano, e lutam para fazer a diferença, organizando-se em associações, organizando protestos e buscando conversa e tanto com representantes do poder público, quanto levando propostas à propria Uber. Tarifas mais altas e mais segurança estão no topo de sua lista de demandas. Por enquanto, não enxergam nenhum sinal de melhores condições no horizonte do retorno à "normalidade". Alguns argumentam que este é, na verdade, o momento certo para fazerem com que suas vozes sejam escutadas—"mas tem gente que é cega e continua trabalhando se arriscando por esmolas", lamenta um motorista na publicação de Samuel. Enquanto a incerteza se agiganta, a urgência parece falar mais alto. Ao Perguntar a Giacomo qual a maior necessidade dos motoristas no momento, sem hesitação, ele esclarece: "o que precisamos é de corridas. Precisamos de corridas".

References

'Bolsonaro Ameaça Retirar Brasil da OMS, a Exemplo dos EUA', *UOL*, 5 June 2020, https://noticias.uol.com.br/ultimas-noticias/reuters/2020/06/05/bolsonaro-ameaca-retirar-brasil-da-oms-a-exemplo-dos-eua.htm.

'Falando de Uber', YouTube post, May 2020, https://www.youtube.com/channel/UCIk8Z7iVqvf4H7r-cyb9Ph3g.

'Sao Paulo Reopens After Lockdown Despite Brazil's Surging Covid-19 Death Toll', *France 24*, 11 June 2020, https://www.france24.com/en/20200611-sao-paulo-re-opens-after-lockdown-despite-brazil-s-surging-covid-19-death-toll.

Barrucho, Luis. 'Brasil: o Novo Epicentro da Pandemia de Coronavírus?', *BBC News*, 20 May 2020, https://www.bbc.com/portuguese/brasil-52732620.

Bell, Franziska and Slawek Smyl. 'Forecasting at Uber: An Introduction', *Uber*, 6 September 2018, https://eng.uber.com/forecasting-introduction/.

15 Gabriel Ribeiro, 'Insegurança: as Táticas que Motoristas de Apps Como Uber Usam Contra Crimes', *UOL*, 14 November 2019, https://www.uol.com.br/tilt/noticias/redacao/2019/11/14/inseguranca-as-taticas-que-motoristas-de-apps-como-uber-usam-contra-crimes.htm.

Costa, Flávio and Aiuri Rebello. 'Após Boom em Enterros, Manaus Abre Covas Coletivas Para Vítimas de COVID-19', *UOL*, 21 April 2020, https://noticias.uol.com.br/saude/ultimas-noticias/redacao/2020/04/21/apos-boom-em-enterros-manaus-abre-covas-coletivas-para-vitimas-de-covid-19.htm.

Lemos, Vinícius. 'A Farsa dos Caixões Vazios Usados Para Minimizar Mortes por COVID-19', *Terra*, 8 May 2020, https://www.terra.com.br/noticias/coronavirus/a-farsa-dos-caixoes-vazios-usados-para-minimizar-mortes-por-covid-19,0322d635a96efa01decd61cb0daccea1ocu3lmr1.html

Ribeiro, Gabriel. 'Insegurança: as Táticas que Motoristas de Apps Como Uber Usam Contra Crimes', *UOL*, 14 November 2019, https://www.uol.com.br/tilt/noticias/redacao/2019/11/14/inseguranca-as-taticas-que-motoristas-de-apps-como-uber-usam-contra-crimes.htm.

Ribeiro, Gabriel. 'Motoristas de Apps Como Uber Perdem até 90% das Corridas e Querem Taxa Zero', *UOL*, 31 March 2020, https://www.uol.com.br/tilt/noticias/redacao/2020/03/31/motoristas-de-apps-como-uber-perdem-ate-90-das-corridas-e-querem-taxa-zero.htm.

Rosenblat, Alex and Luke Stark. 'Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers', *International Journal of Communication*, 10 (27), 2016: 3758–3784.

Silva, Cleide. '160 Mil Motoristas de Aplicativos Devolvem Carros, e Locadoras já Alugam por R $10', *UOL*, 17 May 2020, https://economia.uol.com.br/noticias/estadao-conteudo/2020/05/17/sem-servico-160-mil-motoristas-devolvem-carros-locadoras-ja-alugam-por-r-10.htm.

van Dijck, José. 'Datafication, dataism and dataveillance: Big Data between scientific paradigm and ideology', *Surveillance & Society* 12 (2), 2014: 197-208.

'Novidades Sobre a Assistência Financeira em Razão da COVID-19', *Uber*, 16 April 2020, https://www.uber.com/pt-BR/blog/auxilio-financeiro/

'Sem Máscara. Sem Viagem', *Uber*, https://www.uber.com/br/pt-br/coronavirus/

13. COVID-19 AND ITS IMPACT ON MARGINALISED COMMUNITIES IN SINGAPORE, SOUTH KOREA, INDONESIA, AND THE PHILIPPINES

IRENE POETRANTO & JUSTIN LAU

Countries around the world have taken different steps to mitigate the spread of COVID-19. The more developed economies of Singapore and South Korea have utilized technology to help trace, test, and isolate cases at a greater extent compared to emerging economies like Indonesia and the Philippines. Even though variations in measures undertaken exist, they share one thing in common: a disproportionate impact on marginalised groups. This article examines COVID-19 strategies implemented by these countries, and outlines their consequences on vulnerable groups, including migrant workers, the LGBT community, and rural and Indigenous peoples.

Outbreak Among Singapore's Migrant Workers

With only 266 cases and zero deaths by March 2020, Singapore was seen as a model for other countries to follow in responding to the COVID-19 pandemic.[1] Its success in curbing the coronavirus' spread was attributed to lessons-learned from the 2003 Severe Acute Respiratory Syndrome (SARS) outbreak[2] and the fact that the city-state is technologically advanced. The Singaporean government launched an app[3] to determine if potential carriers of the coronavirus have been in close proximity with other people, used a robot "dog"[4] to patrol parks and ensure physical distancing, implemented a digital check-in system[5], and is giving out wearable tracking devices for reporting health conditions and tracing proximity between users.[6]

Despite its high-tech profile, Singapore's exceptionalism ended in early May 2020 when 23,000 COVID-19 cases were reported—90% of which were linked to crowded migrant

1 Dale Fisher, 'Why Singapore's Coronavirus Response Worked – and What We Can All Learn', *The Conversation*, 18 March 2020, http://theconversation.com/why-singapores-coronavirus-response-worked-and-what-we-can-all-learn-134024.

2 Valerie Chew, 'Severe Acute Respiratory Syndrome (SARS) Outbreak, 2003', *Infopedia*, February 2020, https://eresources.nlb.gov.sg/infopedia/articles/SIP_1529_2009-06-03.html.

3 TraceTogether, https://www.tracetogether.gov.sg.

4 Associated France Press, 'Robot Dog on Covid-19 Patrol in Singapore Park', *NST Online*, 22 May 2020, https://www.nst.com.my/world/world/2020/05/594547/robot-dog-covid-19-patrol-singapore-park.

5 'COVID-19: SafeEntry Digital Check-in System Deployed to More than 16,000 Venues', *Channel News Asia*, 09 May 2020, https://www.channelnewsasia.com/news/singapore/covid-19-safe-entry-digital-checkin-deployed-16000-venues-12717392.

6 Aaron Holmes, 'Singapore Will Give Residents Wearable 'tokens' That Track the People They Interact with in a New Effort to Contain COVID-19', *Business Insider*, 9 June 2020, https://www.businessinsider.com/singapore-rolls-out-wearable-tokens-contact-tracing-covid-19-spread-2020-6.

workers' dormitories.[7] Researchers and activists had warned for years that low-wage migrant workers, who play an integral role in Singapore's booming economy but live on the fringes of society in precarious conditions, suffer disproportionately from environmental, health, and safety risks.[8] Yet they were largely ignored until COVID-19 cases spread rampantly.[9] This development revealed the dangers of overlooking marginalised groups during a health crisis. Singapore is now seen once again as a model, only this time for other countries *not* to follow.

The Itaewon Cluster and South Korea's Anti-Gay Backlash

The backlash against South Korea's LGBT community also illustrates the impact of COVID-19 on marginalised groups that are vulnerable to discrimination. South Korea uses a contact tracing regime that involves surveillance camera footage, cell phone location data, GPS tracking from both cars and phones, QR code entry logs, and credit card purchase records.[10] But as part of tracing efforts, it has disclosed online the personal information of COVID-19 patients, including age, gender, nationality, and occupation, which are also sent to residents via cell phone alerts.[11]

Online attacks and offline harassment[12] against LGBT persons increased when COVID-19 cases that resulted from a man who visited nightspots in Seoul's Itaewon district, including several popular in the gay community, were made public.[13] Contact tracing in this instance was also problematic, as people in this conservative country were afraid to be associated with the LGBT community or to have their sexuality outed, or both.[14] Excessive disclosure

7 Eileen Ng, 'Singapore's Foreign Workers Blind Spot during COVID-19 Response', *CTV News*, 11 May 2020, https://www.ctvnews.ca/health/coronavirus/singapore-s-foreign-workers-blind-spot-during-covid-19-response-1.4933621.

8 Migrating out of Poverty Research Programme Consortium, 'Migration and Precarious Work: Negotiating Debt, Employment, and Livelihood Strategies Amongst Bangladeshi Migrant Men Working in Singapore's Construction Industry', http://www.migratingoutofpoverty.org/files/file.php?name=wp26-baey-yeoh-2015-migration-and-precarious-work.pdf&site=354.

9 Mohan J. Dutta, 'CARE White Paper Issue 8: Structural constraints, voice infrastructures, and mental health among low-wage migrant workers in Singapore: Solutions for addressing COVID19', *CARE*, 8 April 2020, https://www.massey.ac.nz/~wwcare/2020/04/22/care-white-paper-issue-8-structural-constraints-voice-infrastructures-and-mental-health-among-low-wage-migrant-workers-in-singapore-solutions-for-addressing-covid19/.

10 David Cox, 'South Korea's Second Infection Spike Leads to Homophobic Discrimination', *Privacy International*, 26 May 2020, http://privacyinternational.org/examples/3878/south-koreas-second-infection-spike-leads-homophobic-discrimination.

11 Mark Zastrow, 'South Korea Is Reporting Intimate Details of COVID-19 Cases: Has It Helped? ', *Nature*, 18 March 2020, https://www.nature.com/articles/d41586-020-00740-y.

12 Ryan Thoreson, 'Covid-19 Backlash Targets LGBT People in South Korea', *Human Rights Watch*, 13 May 2020, https://www.hrw.org/news/2020/05/13/covid-19-backlash-targets-lgbt-people-south-korea; Kim Se-Jeong, 'Expats Suffer Workplace Discrimination amid Itaewon Outbreak', *Korea Times*, May 13 2020, http://www.koreatimes.co.kr/www/nation/2020/10/119_289498.html.

13 Ryan Thoreson, 'Covid-19 Backlash Targets LGBT People in South Korea', *Human Rights Watch*, 13 May 2020, https://www.hrw.org/news/2020/05/13/covid-19-backlash-targets-lgbt-people-south-korea.

14 Jason Strother, 'South Korea's Coronavirus Contact Tracing Puts LGBTQ Community under Surveillance, Critics Say', *The World from PRX*, 22 May 2020, https://www.pri.org/stories/2020-05-22/south-korea-s-

of personal information combined with stigma around LGBT issues may prevent individuals exposed to the virus from getting tested, which compromises public health measures.[15]

Health and Security Concerns in Papua

The impact of COVID-19 is even more pronounced for marginalised communities with inadequate healthcare services. Indonesia's Papua region is double the size of Great Britain with roughly four million people, yet only has five hospitals designated to treat COVID-19 patients, and only two isolation rooms available that meet the World Health Organization's standards.[16] More than 300 of its Indigenous tribes have small populations, which are threatened with extinction when faced with a pandemic.[17] Papuans lack access to clean water and basic healthcare even though the largest copper and gold mine in the world, called "Grasberg," is in their resource-rich territory. Run by the US-based mining company Freeport-McMoran, Grasberg, like other mines, initially did not restrict operations even as workers tested positive for the coronavirus. Mine sites have thus become a vector for the spread of COVID-19, with the risk of infecting local communities and Indigenous peoples.[18] When Grasberg became one of Papua's worst COVID-19 clusters with 150 cases in mid-May, it finally reduced its workforce size to prevent further infections.[19]

The conflict in Papua complicates the COVID-19 response. The Netherlands controlled Papua until 1962 and Papua was temporarily transferred to Indonesia until an act of "self-determination" was completed. Approximately 1,000 Indonesian government-selected participants voted in the referendum, who unanimously opted for Papua to remain with Indonesia. The illegitimacy of the vote, the often violent and arbitrary crackdowns by Indonesian security forces, as well as media restrictions and internet shutdowns help explain Papuans' demands for secession. This conflict has been ongoing for over five decades, and in May 2020, an armed group allegedly shot members of a local COVID-19 response team.[20]

---

coronavirus-contact-tracing-puts-lgbtq-community-under-surveillance.

15 Gyuwon Jung, Hyynsoo Lee, Auk Kim and Uichin Lee, 'Too Much Information: Assessing Privacy Risks of Contact Trace Data Disclosure on People With COVID-19 in South Korea', *Frontiers in Public Health*, 2020, https://doi.org/10.3389/fpubh.2020.00305.

16 Basten Gokkon, 'Indigenous Papuans Initiate Own Lockdowns in Face of COVID-19', *Mongabay Environmental News*, 6 April 6 2020, https://news.mongabay.com/2020/04/indigenous-papuans-initiate-own-lockdowns-in-face-of-covid-19/.

17 Oleh Acep Saepudin, 'Masyarakat Adat Desak Pemerintah Lockdown Seluruh Papua', *TrenAsia*, 30 March 2020, https://www.trenasia.com/masyarakat-adat-desak-pemerintah-lockdown-seluruh-papua.

18 'Statement: Global Solidarity with Communities, Indigenous Peoples and Workers at Risk from Mining Pandemic Profiteers', *deCOALonize*, 3 June 2020, https://www.decoalonize.org/statement-global-solidarity-with-communities-indigenous-peoples-and-workers-at-risk-from-mining-pandemic-profiteers/.

19 Fathin Ungku and Wilda Asmarini, 'Freeport Cuts Workforce at Grasberg Mine as Coronavirus Cases in Area Rise', *Reuters*, 18 May 2020, https://www.reuters.com/article/us-health-coronavirus-indonesia-freeport-idUSKBN22U05B.

20 'Papuan Armed Group Accused of Shooting COVID-19 Team Members', *The Jakarta Post*, 04 May 2020, https://www.thejakartapost.com/news/2020/05/24/papuan-armed-group-accused-of-shooting-covid-19-team-members.html.

Mining Operations in the Philippines

Resource-rich areas in the Philippines are also increasingly under threat. Considered the most dangerous place in the world for land and environmental defenders, the Philippines had the highest number of murdered defenders of any country in 2018 and environmental protection remains challenging.[21] The Nueva Vizcaya Province, for example, is the site of a dispute with a mining company, OceanaGold, a Canadian-Australian public company that has been accused of human rights violations.[22] OceanaGold's permit to run the gold and copper mine known as "Didipio" had expired in June 2019. The local government wants the mine shut due to environmental concerns, yet it continues to operate.[23]

In April 2020, locals opposed to the Didipio mine erected a "peoples' barricade," but they were violently dispersed by the police for violating COVID-19 lockdown measures.[24] Meanwhile, despite a province-wide lockdown covering Homonhon Island, the central government allowed a China-bound ship to dock there to load chromite ore.[25] This incident was in defiance of local authorities who denied its entry for fear of COVID-19 infections, as Homonhon has no health facility, no sea ambulance, and no functioning community hospital.

Similarities and Differences Between the Four Countries

Singapore, South Korea, Indonesia, and the Philippines have faced different challenges in responding to the pandemic, but they share commonalities. Singapore's and South Korea's technologically-driven solutions have sparked national and global debates on balancing public health and the right to privacy. Singapore's launch of a wearable device that may be issued to every resident has resulted in fears of surveillance and privacy violations. South Korea's pervasive collection of personal data has also surfaced privacy concerns and social stigma concerns that are feared more than the disease itself.[26]

21 'Enemies of the State? ' *Global Witness*, 30 July 2019, https://www.globalwitness.org/en/campaigns/environmental-activists/enemies-state/.

22 Human Rights Council, 'Situation of human rights in the Philippines', 29 June 2020, https://www.ohchr.org/Documents/Countries/PH/Philippines-HRC44-AEV.pdf.

23 'ATM Statement on the Expired Mining Contract of Oceana Gold Philippines, Inc. (OGPI) ', *MiningWatch*, 20 June 2020, https://miningwatch.ca/news/2020/6/20/atm-statement-expired-mining-contract-oceana-gold-philippines-inc-ogpi.

24 Mong Palatino, 'Philippine Police Dismantle Anti-Mining Barricade amid COVID-19 Lockdown', *Global Voices*, 10 April 2020, https://globalvoices.org/2020/04/10/philippine-police-dismantle-anti-mining-barricade-amid-covid-19-lockdown/.

25 'Residents Protest as Chinese-Bound Ship Allegedly Resumed Mining on Homonhon Island', *GMA News Online*, 24 April 2020, https://www.gmanetwork.com/news/news/nation/735380/chinese-resume-mining-at-homonhon-island-amid-quarantine/story/.

26 Helen Chan, 'Pervasive Personal Data Collection at the Heart of South Korea's COVID-19 Success May Not Translate', *Thomson Reuters*, 26 March 2020, https://blogs.thomsonreuters.com/answerson/south-korea-covid-19-data-privacy/.

Unlike Singapore and South Korea, Indonesia and the Philippines have weak healthcare systems and rely on security-heavy strategies. Indonesia's COVID-19 task force chief[27] is an Army lieutenant general and the Indonesian military and police have been ordered to enforce physical distancing[28], while in the Philippines, the Defense Secretary heads the national task force on COVID-19 and has sought full military and police support to implement its pandemic plan.[29] Indonesia[30] and the Philippines[31] have also launched contact-tracing apps that use the centralised model and have been criticised for providing insufficient data protection.[32] Trust issues have thus impeded the widespread adoption of the government's official contact-tracing app in both countries.

Conclusion

Despite the four countries' varied approaches to COVID-19, they nevertheless disproportionately and negatively impact marginalised communities. It is clear that, although the virus does not discriminate, its consequences do. Therefore, as governments around the world strive to tackle the pandemic, it is imperative that they do so in a transparent and rights-respecting manner, and in ways that are inclusive of local communities.

References

'ATM Statement on the Expired Mining Contract of Oceana Gold Philippines, Inc. (OGPI) ', *MiningWatch*, 20 June 2020, https://miningwatch.ca/news/2020/6/20/atm-statement-expired-mining-contract-oceana-gold-philippines-inc-ogpi.

'COVID-19: SafeEntry Digital Check-in System Deployed to More than 16,000 Venues', *Channel News Asia*, 09 May 2020, https://www.channelnewsasia.com/news/singapore/covid-19-safe-entry-digital-checkin-deployed-16000-venues-12717392.

'Enemies of the State? ' *Global Witness*, 30 July 2019, https://www.globalwitness.org/en/campaigns/environmental-activists/enemies-state/.

27 Kamis, 'Ketua Gugus Tugas Covid-19 Letjen TNI Doni Monardo Persilakan KPK Sadap Teleponnya', *Tribun Banten*, 18 July 2020, https://banten.tribunnews.com/2020/06/18/ketua-gugus-tugas-covid-19-letjen-tni-doni-monardo-persilakan-kpk-sadap-teleponnya.

28 Selasa. 'Kasus Corona Naik, Jokowi Mulai Gunakan Kekuatan Militer dan Polisi Disiplinkan Masyarakat Saat PSBB', *Pos Kupang*, 26 May 2020, https://kupang.tribunnews.com/2020/05/26/kasus-corona-naikjokowi-mulai-gunakan-kekuatan-militer-dan-polisi-disiplinkan-masyarakat-saat-psbb.

29 JC Gotinga, 'Lorenzana Seeks Full Military, Police Support in Enforcing Gov't Plan vs Coronavirus', *Rappler*, 26 March 2020, https://www.rappler.com/nation/lorenzana-seeks-military-police-support-enforcing-government-plan-coronavirus.

30 'Aplikasi Lacak Pasien Corona RI Diminta Lindungi Data Pribadi', *CNN Indonesia*, 1 April 2020, https://www.cnnindonesia.com/teknologi/20200331170631-185-488803/aplikasi-lacak-pasien-corona-ri-diminta-lindungi-data-pribadi.

31 Darryl John Esguerra, 'Palace Surprised with Rio's Claims on StaySafe.Ph; Assures Users' Protection', *Inquirer*, 9 June 2020, https://newsinfo.inquirer.net/1288595/palace-surprised-with-rios-claims-on-staysafe-ph-assures-users-protection.

32 Cristina Criddle and Leo Kelion, 'Coronavirus Contact-Tracing: World Split between Two Types of App', *BBC News*, 7 May 2020, https://www.bbc.com/news/technology-52355028.

'Papuan Armed Group Accused of Shooting COVID-19 Team Members', *The Jakarta Post*, 04 May 2020, https://www.thejakartapost.com/news/2020/05/24/papuan-armed-group-accused-of-shooting-covid-19-team-members.html.

'Residents Protest as Chinese-Bound Ship Allegedly Resumed Mining on Homonhon Island', *GMA News Online*, 24 April 2020, https://www.gmanetwork.com/news/news/nation/735380/chinese-resume-mining-at-homonhon-island-amid-quarantine/story/.

Associated France Press. 'Robot Dog on Covid-19 Patrol in Singapore Park', *NST Online*, 22 May 2020, https://www.nst.com.my/world/world/2020/05/594547/robot-dog-covid-19-patrol-singapore-park.

Chan, Helen. 'Pervasive Personal Data Collection at the Heart of South Korea's COVID-19 Success May Not Translate', *Thomson Reuters*, 26 March 2020, https://blogs.thomsonreuters.com/answerson/south-korea-covid-19-data-privacy/.

Chew, Valerie. 'Severe Acute Respiratory Syndrome (SARS) Outbreak, 2003', *Infopedia*, February 2020, https://eresources.nlb.gov.sg/infopedia/articles/SIP_1529_2009-06-03.html.

Cox, David. 'South Korea's Second Infection Spike Leads to Homophobic Discrimination', *Privacy International*, 26 May 2020, http://privacyinternational.org/examples/3878/south-koreas-second-infection-spike-leads-homophobic-discrimination.

Criddle, Cristina and Leo Kelion. 'Coronavirus Contact-Tracing: World Split between Two Types of App', BBC News, 7 May 2020, https://www.bbc.com/news/technology-52355028.

Dutta, Mohan J.. 'CARE White Paper Issue 8: Structural constraints, voice infrastructures, and mental health among low-wage migrant workers in Singapore: Solutions for addressing COVID19', *CARE*, 8 April 2020, https://www.massey.ac.nz/~wwcare/2020/04/22/care-white-paper-issue-8-structural-constraints-voice-infrastructures-and-mental-health-among-low-wage-migrant-workers-in-singapore-solutions-for-addressing-covid19/.

Esguerra, Darryl John. 'Palace Surprised with Rio's Claims on StaySafe.Ph; Assures Users' Protection', *Inquirer*, 9 June 2020, https://newsinfo.inquirer.net/1288595/palace-surprised-with-rios-claims-on-staysafe-ph-assures-users-protection.

Fisher, Dale. 'Why Singapore's Coronavirus Response Worked – and What We Can All Learn', *The Conversation*, 18 March 2020, http://theconversation.com/why-singapores-coronavirus-response-worked-and-what-we-can-all-learn-134024.

Gokkon, Basten. 'Indigenous Papuans Initiate Own Lockdowns in Face of COVID-19', *Mongabay Environmental News*, 6 April 2020, https://news.mongabay.com/2020/04/indigenous-papuans-initiate-own-lockdowns-in-face-of-covid-19/.

Gotinga, JC. 'Lorenzana Seeks Full Military, Police Support in Enforcing Gov't Plan vs Coronavirus', *Rappler*, 26 March 2020, https://www.rappler.com/nation/lorenzana-seeks-military-police-support-enforcing-government-plan-coronavirus.

Holmes, Aaron. 'Singapore Will Give Residents Wearable 'tokens' That Track the People They Interact with in a New Effort to Contain COVID-19', *Business Insider*, 9 June 2020, https://www.businessinsider.com/singapore-rolls-out-wearable-tokens-contact-tracing-covid-19-spread-2020-6.

Human Rights Council. 'Situation of human rights in the Philippines', 29 June 2020, https://www.ohchr.org/Documents/Countries/PH/Philippines-HRC44-AEV.pdf.

Kamis. 'Ketua Gugus Tugas Covid-19 Letjen TNI Doni Monardo Persilakan KPK Sadap Teleponnya', *Tribun banten*, 18 July 2020, https://banten.tribunnews.com/2020/06/18/ketua-gugus-tugas-covid-19-letjen-tni-doni-monardo-persilakan-kpk-sadap-teleponnya.

Migrating out of Poverty Research Programme Consortium. 'Migration and Precarious Work: Negotiating Debt, Employment, and Livelihood Strategies Amongst Bangladeshi Migrant Men Working in

Singapore's Construction Industry', http://www.migratingoutofpoverty.org/files/file.php?name=wp26-baey-yeoh-2015-migration-and-precarious-work.pdf&site=354.

Ng, Eileen. 'Singapore's Foreign Workers Blind Spot during COVID-19 Response', *CTV News*, 11 May 2020, https://www.ctvnews.ca/health/coronavirus/singapore-s-foreign-workers-blind-spot-during-covid-19-response-1.4933621.

Palatino, Mong. 'Philippine Police Dismantle Anti-Mining Barricade amid COVID-19 Lockdown', *Global Voices*, 10 April 2020, https://globalvoices.org/2020/04/10/philippine-police-dismantle-anti-mining-barricade-amid-covid-19-lockdown/.

Rabu, 'Aplikasi Lacak Pasien Corona RI Diminta Lindungi Data Pribadi', *CNN Indonesia*, 01 April 2020, https://www.cnnindonesia.com/teknologi/20200331170631-185-488803/aplikasi-lacak-pasien-corona-ri-diminta-lindungi-data-pribadi.

Saepudin, Oleh Acep. 'Masyarakat Adat Desak Pemerintah Lockdown Seluruh Papua', *TrenAsia*, 30 March 2020, https://www.trenasia.com/masyarakat-adat-desak-pemerintah-lockdown-seluruh-papua.

Kim, Se-Jeong. 'Expats Suffer Workplace Discrimination amid Itaewon Outbreak', *Korea Times*, 13 May 2020, http://www.koreatimes.co.kr/www/nation/2020/10/119_289498.html.

Selasa. 'Kasus Corona Naik, Jokowi Mulai Gunakan Kekuatan Militer dan Polisi Disiplinkan Masyarakat Saat PSBB', *Pos Kupang*, 26 May 2020, https://kupang.tribunnews.com/2020/05/26/kasus-corona-naikjokowi-mulai-gunakan-kekuatan-militer-dan-polisi-disiplinkan-masyarakat-saat-psbb.

Strother, Jason. 'South Korea's Coronavirus Contact Tracing Puts LGBTQ Community under Surveillance, Critics Say', *The World from PRX*, 22 May 2020, https://www.pri.org/stories/2020-05-22/south-korea-s-coronavirus-contact-tracing-puts-lgbtq-community-under-surveillance.

Thoreson, Ryan. 'Covid-19 Backlash Targets LGBT People in South Korea', *Human Rights Watch*, 13 May 2020, https://www.hrw.org/news/2020/05/13/covid-19-backlash-targets-lgbt-people-south-korea.

TraceTogether, https://www.tracetogether.gov.sg.

Ungku, Fathin and Wilda Asmarini. 'Freeport Cuts Workforce at Grasberg Mine as Coronavirus Cases in Area Rise', *Reuters*, 18 May 2020, https://www.reuters.com/article/us-health-coronavirus-indonesia-freeport-idUSKBN22U05B.

Zastrow, Mark. 'South Korea Is Reporting Intimate Details of COVID-19 Cases: Has It Helped?', *Nature*, 18 March 2020, https://www.nature.com/articles/d41586-020-00740-y

14. FUERA DE ALCANCE: EDUCACIÓN A DISTANCIA EN ZONAS RURALES PERUANAS DURANTE LA PANDEMIA

KARLA ZAVALA BARREDA

Out of Reach: Distance Learning in Peruvian Rural Areas During the Pandemic

This blog post aims to analyze the actions carried out by the Peruvian government regarding distance education and contrast them with the uses and practices of technology in Andean rural communities. Likewise, it problematizes digital inclusion and exclusion that is reflected through the digital divide: who is included and who is excluded from the Peruvian public school in the 'new normal' setting.

La cuarentena y las medidas de distanciamiento social han afectado el desenvolvimiento de las actividades escolares a nivel nacional. En marzo, luego de aplazar el inicio del año escolar por dos semanas, el Ministerio de Educación desplegó el plan de enseñanza a distancia 'Aprendo en Casa'. La estrategia, a través de señal televisa y radial abierta, busca reemplazar la educación presencial a través de sesiones de aprendizajes adaptadas a dichos medios. La difusión del contenido también se apoya de las radios comunitarias. No obstante, esta estrategia no incluye a los centros poblados, donde hay un nivel muy bajo de conectividad, y donde se encuentran comunidades que están fuera del alcance de la señal de los medios masivos y de la cobertura de internet.

En el Perú, la educación rural tiene un modelo de alternancia donde los estudiantes asisten intermitentemente a clases. Luego del anuncio del inicio de la cuarentena obligatoria, dichos estudiantes regresaron a sus hogares, los cuales en muchos casos no cuentan con medios o conectividad para acceder a los contenidos de Aprendo en Casa. Cabe preguntar entonces, ¿cuál es el estado de los estudiantes en comunidades rurales en el país que ha implementado una de las cuarentenas más estrictas a nivel mundial?

Educación a Distancia en Zonas Rurales

Frente a esta problemática de acceso al contenido escolar, se anunció la adquisición de un millón de tabletas a ser repartidas a los estudiantes y maestros de áreas rurales clasificadas en los quintiles 1 y 2 de pobreza. En este contexto, cabe recordar que el gobierno peruano ha implementado desde hace treinta años programas de compra equipos informáticos en el sector educación, tales como Una Laptop por Niño, proyecto Huascarán, Jornada Escolar Completa, entre otros. Sin embargo, estas adquisiciones no ayudaron a amortiguar la necesidad de educación a distancia que emergió durante esta crisis sanitaria, convirtiéndose así en el gran elefante blanco del que poco se ha discutido.

Asimismo, la solución ofrecida para acortar la brecha de conectividad de las zonas rurales es la inclusión de tabletas con chip y cargadores solares. Pero sin señal satelital de internet en el área donde usarán la tableta, el chip no podrá conectarse a ningún lado. Esta coyuntura es un recordatorio de la materialidad de la infraestructura digital. Depende de cables, de satélites, de proveedores y operadores para que la señal llegue a quienes están fuera de alcance. La brecha digital entre zonas urbanas y rurales es abismal. La conectividad en áreas rurales no alcanza más del 20%, a esto se suma que el servicio ofrecido es de baja calidad, y la velocidad de conexión es lenta.

Al implementar el aislamiento social obligatorio, las zonas rurales fueron expuestas a un grado mayor de vulnerabilidad al no contar con infraestructura y conectividad en sus hogares. Esta situación se agrava en un país donde el gobierno apenas conoce a la realidad de la población. Mientras el Ministerio de Educación señala que el 94% de los estudiantes escolares está accediendo a los contenidos de Aprendo en Casa, la Defensoría del Pueblo –institución nacional que defiende y promueve los derechos de las personas y la comunidad– indica que en provincias el poco acceso a educación durante la pandemia ha incrementado el número de deserción escolar.[1] Por ejemplo, en Cerro de Pasco, más de 7000 estudiantes no acceden a la educación a distancia.[2] Situación similar ocurre en una de las regiones más pobres del país, Huánuco, donde más del 30% de escolares tampoco cuenta con acceso.

Prácticas desde la Periferia

A casi dos meses de la clausura del año escolar, las tabletas aún no llegan a los destinatarios. Y aunque llegaran, la distribución de dichos dispositivos no resolverá las dificultades de conectividad y acceso a información. Es en este escenario donde acciones como las del alcalde de Corani, localidad de Puno, al sur de país, llaman la atención, no solo porque contrató la instalación antenas satelitales para brindar conexión a cinco comunidades rurales en extrema pobreza, sino por el razonamiento detrás de esta acción: proveer acceso libre a internet.[3] Mientras los sistemas digitales continúen absorbiendo y embebiendo actividades sociales, la infraestructura de conexión efectivamente determina y restringe cómo los usuarios se comunican y acceden a información. Es por estas razones que el acceso a internet se ha declarado como un derecho humano, ya que no solo ayuda a difundir contenidos educativos sino también a acceder a servicios del estado sin necesidad de desplazamiento geográfico, y conocer los derechos.

1 Gobierno de Perú, Defensoría del Pueblo, 'Defensoría del Pueblo: se Requiere Crear una Sala Situacional de Educación Durante Crisis Sanitaria', 26 August 2020, https://www.defensoria.gob.pe/defensoria-del-pueblo-se-requiere-crear-una-sala-situacional-de-educacion-durante-crisis-sanitaria/.

2 Gobierno de Perú, Defensoría del Pueblo, 'Defensoría del Pueblo: más de 7000 estudiantes no acceden a clases virtuales', 21 July 2020, https://www.defensoria.gob.pe/defensoria-del-pueblo-mas-de-7000-estudiantes-no-acceden-a-clases-virtuales/.

3 Alcalde de Corani Instaló Internet Gratis en sus 5 Comunidades y Otorga Subvención Económica Mensual a los Universitarios', *Pachamama Radio*, 7 May 2020, https://www.pachamamaradio.org/regional/carabaya/alcalde-de-corani-instalo-internet-gratis-en-sus-5-comunidades-y-otorga-subvencion-economica-mensual-a-los-universitarios-2.

Al optar por la transmisión de sesiones de aprendizaje a través de medios de comunicación e internet, el gobierno peruano no garantiza el derecho de acceso a la educación a quienes no cuenten con los medios necesarios para acceder a dicho contenido. Al condicionar dicho acceso, se incrementa la vulnerabilidad de poblaciones rurales en extrema pobreza. En contraste, lo sucedido en Corani no solo beneficia a los estudiantes, sino también a los miembros de la comunidad, que pueden acceder a información respecto a los bonos repartidos durante la pandemia, y también a los estudiantes universitarios o de carreras técnicas, que gracias a este servicio pueden conectarse a sus clases virtuales.

A la vez, se hace frente a una problemática que pasa desapercibida: la compra de paquetes de datos móviles. Durante la cuarentena, miembros de comunidades rurales adquieren semanalmente paquetes de datos para que sus hijos puedan acceder a la educación a distancia. Imágenes de niños buscando señal en la cima de las montañas se han compartido en las redes sociales sin cuestionar quién cubre el costo de esa conexión. En otras palabras, la educación que antes era gratuita se constituye como un costo adicional al estar mediada.

Por otro lado, nuevamente la materialidad de los contenidos digitales necesita ser abordada. Internet no está compuesta de solo bits y señales que fluyen de manera invisible en el aire. El contenido audiovisual demanda el uso muchos datos móviles, y a su vez esta transmisión de datos depende de infraestructura que provea conexión. Si contrastamos la penetración de celulares se puede observar que más de un 85% de hogares rurales cuenta con un dispositivo móvil. Sin embargo, solo un 5.9% tiene acceso a internet. Poniendo este dato en el contexto actual y los retos que el distanciamiento social presenta, cabe cuestionar qué tanto se toman en consideración los celulares en la difusión, diseño, y desarrollo de la educación a distancia. Por ejemplo, si el ancho de banda no es óptimo, ¿hay versiones lite (bajo uso de datos, poco uso de imágenes, etc.) de las páginas y apps educativas? ¿Por qué no se toma política de mobile-first como en otros países?

Estos interrogantes abren el diálogo para dejar de privilegiar la adquisición de tecnología de punta y el uso de nuevos medios en estrategias nacionales sin tomar en cuenta el ensamblaje socio-técnico que permite la conexión a Internet. En el Perú hay muchas áreas que siguen fuera de alcance, y no es coincidencia que sean los mismos espacios geográficos donde se encuentran las comunidades rurales. Por otro lado, decisiones como la compra de tabletas sin una propuesta íntegra hace evidente la falta de planes sostenibles en el tiempo para la implementación de iniciativas tecnológicas, que si bien buscan cerrar las brechas digitales, no parecen tomar en cuenta la realidad de las diferentes regiones del país.

References

Alcalde de Corani Instaló Internet Gratis en sus 5 Comunidades y Otorga Subvención Económica Mensual a los Universitarios', *Pachamama Radio*, 7 May 2020, https://www.pachamamaradio.org/regional/carabaya/alcalde-de-corani-instalo-internet-gratis-en-sus-5-comunidades-y-otorga-subvencion-economica-mensual-a-los-universitarios-2.

Gobierno de Perú, Defensoría del Pueblo, 'Defensoría del Pueblo: se Requiere Crear una Sala Situacional de Educación Durante Crisis Sanitaria', 26 August 2020, https://www.defensoria.gob.pe/defensoria-del-pueblo-se-requiere-crear-una-sala-situacional-de-educacion-durante-crisis-sanitaria/.

Gobierno de Perú, Defensoría del Pueblo, 'Defensoría del Pueblo: más de 7000 Estudiantes No Acceden a Clases Virtuales', 21 July 2020, https://www.defensoria.gob.pe/defensoria-del-pueblo-mas-de-7000-estudiantes-no-acceden-a-clases-virtuales/.

15. COVID-19 IN THE UK: THE EXACERBATION OF INEQUALITY AND A DIGITALLY-BASED RESPONSE

MASSIMO RAGNEDDA & MARIA LAURA RUIU

The consequences of the COVID-19 outbreak—in social, economic, psychological and health terms—are still unclear, since the effects of the containment measures could last for years. However, something seems to be quite clear: vulnerable people and vulnerable communities are those who suffer the most from this outbreak. This is not surprising, since both social and medical studies have repeatedly shown an interaction between social environment and health status.

In this essay, we specifically focus on the UK (even though similar arguments could be applied to other countries in the Global North) where some social groups are suffering more than others from the outbreak. Black, Asian or minority ethnic background (BAME communities) and elderly and marginalized citizens are affected the most by the pandemic. The COVID-19 crisis has, indeed, triggered inequality by exposing more vulnerable groups to higher risks of experiencing the most severe symptoms of the disease.

BAME Communities are the Most Affected in the UK

Despite the fact that there is no link between genetic predispositions to the virus and racial groups, BAME communities are the most affected in the UK.[1] There are, indeed, several social factors that influence a higher frequency of death from coronavirus among vulnerable communities in the UK. First of all, BAME communities make up a large share of professions considered indispensable in tackling the virus. Many of these jobs are public-facing, so they are potentially more exposed to the virus. Secondly, on average, BAME groups in Western societies, due to longstanding social inequalities, suffer from generally worse health conditions. The link between socioeconomic factors and health status is well known. An emphasis on social aspects rather than a biological or genetic predisposition, underlines that the ways in which societies are organised tend to penalise already disadvantaged communities and citizens, therefore further reinforcing social inequalities.

Digital Inequalities Exacerbate Social and Health Inequalities

There is also a third element, often under-evaluated, which highlights how socially discriminated people suffer the most from the COVID-19 pandemic: digital inequalities. COVID-19 outbreak has shown, among many other things, how digital skills, high-speed internet, and reliable hardware and software are essential conditions not only for social

1 'Covid-19 Tracing Apps: Ensuring Privacy and Data Protection', *National Institute for Health Research*, 5 June 2020, https://www.europarl.europa.eu/news/en/headlines/society/20200429STO78174/covid-19-tracing-apps-ensuring-privacy-and-data-protection.

wellbeing, but also for everyday life. The digital divide, in fact, does not only include uneven access to resources and knowledge, but also limited human connections and unequal access to opportunities and health services. Being digitally excluded also affects the ability to manage the coronavirus-related drawbacks. In a time where one-third of the world population is locked down, an exclusion from the digital arena also means a potential exclusion from essential online services, such as health services, e-learning, accurate and trustworthy information related to COVID-19 and purchase of essentials online. In a collective academic effort, we developed the COVID-19 exposure risk profiles (CERPs),[2] which show that "All else equal, individuals who can more effectively digitize key parts of their lives enjoy better CERPs than individuals who cannot digitize these life realms".

The digital divide is a real and thoughtful threat that requires tangible and future-proof solutions. This suggests that tackling inequalities not only means providing access to ICTs, but also skills and literacy to ensure an adequate digital experience. In the UK, for instance, 11.7 million people lack essential digital skills.[3] This number suggests that 22% of the UK population have difficulty in accessing online information and updates about COVID-19.[4] Both elderly people (especially from ethnic minorities)[5] and people with disabilities tend to have limited capacity to access ICTs and an elementary digital competence.[6] This suggests that self-isolation might be particularly challenging because the lack of access and skills contribute towards increasing loneliness by limiting people's contact with relatives or friends.[7]

Tackling Digital Inequalities to Reduce COVID-19's Effects

Access to the internet is a new civil right and a public utility. In this sense, bridging the digital divide means treating internet access as an essential service. For this reason, during the COVID-19 pandemic, several public and private initiatives around the world were promoted to tackle the digital divide and support digitally excluded people. In the UK, for instance, some organisations such as "Future dot now UK" launched an initiative named #DevicesDotNow that provides digital devices to help the most vulnerable to access to the digital realm. The purpose of this initiative is to enable the digitally excluded to access online services, support and information needed during the pandemic. However, access alone is not enough to ensure the success of the digital experience. In a time where more

2 Laura Robinson, Jeremy Schulz, Aneka Khilnani, Hiroshi Ono, Shelia R. Cotten, Noah McClain, Lloyd Levine, et al., 'Digital Inequalities in Time of Pandemic: COVID-19 Exposure Risk Profiles and New Forms of Vulnerability.' *First Monday*, June 20, 2020, https://firstmonday.org/ojs/index.php/fm/article/view/10845/9563.

3 Lloyds Bank UK Consumer Digital Index 2020, https://www.lloydsbank.com/assets/media/pdfs/banking_with_us/whats-happening/lb-consumer-digital-index-2020-report.pdf.

4 'Fix the Digital Divide', *Good Things Foundation*, https://www.goodthingsfoundation.org/fix-the-digital-divide.

5 Lloyds Bank UK Consumer Digital Index 2020.

6 Richard Armitage and Laura B Nellums, 'COVID-19 and the Consequences of Isolating the Elderly', *The Lancet Public Health* 5, 5 (May 2020: e256), https://doi.org/10.1016/S2468-2667(20)30061-X.

7 William J. Chopik, 'The Benefits of Social Technology Use Among Older Adults Are Mediated by Reduced Loneliness', *Cyberpsychology, Behavior, and Social Networking* 19, 9 (September 2016): 551.

than 11 million people in the UK lack digital skills, the possession of devices alone does not guarantee digital inclusion. For this reason, the Goodthing Foundation created a suite of resources to support the most vulnerable in using the internet during the COVID-19 pandemic. These initiatives included a suite of resources to help people find trustworthy health advice from reliable sources or more practical advice such as how to use apps to call their doctors. Furthermore, the literature shows that giving the possibilities to keep in touch with family and friends to the most vulnerable people (especially when they are required to stay at home) helps reduce the negative effects of social isolation and loneliness.

Evidently, digital inequalities cannot be bridged overnight, but these initiatives are particularly useful in time of crisis. More specifically, these initiatives are useful in tackling digital inequalities, because they look at the digital divide not only in terms of inequalities in access (first level of digital divide) but also in terms of uneven digital skills (second level) and uneven tangible outcomes people get from accessing and using the internet (third level). In fact, by providing devices to access ICTs, these initiatives are reducing the first level, while providing basic digital skills to tackle the second level of digital divide. Overall these initiatives reduce also the third level of digital divide, by providing tangible and externally measurable outcomes (calling doctors, shopping and banking online) that improve people's life chances.[8] Therefore, the COVID-19 shows the importance of bridging digital inequalities to facilitate social relationships, global functions/interconnections and ordinary activities.

Lessons Learned

Social and digital inequalities highlighted how specific subgroups are significantly more vulnerable to exposure to COVID-19, compared to their privileged counterparts. The crisis shows that social and digital solutions can be quickly implemented when necessary, but they need continuity to be effective. The lesson learned concerns the ability of policymakers to provide long-term strategies (as well as emergency plans) to tackle social and digital challenges. In fact, during a moment of crisis, the effects produced by social inclusion and digital-enhancing initiatives can only be limited because of the impossibility of tackling all the different levels of social and digital inequalities at the same time. In time of crisis, only a select group of people will be able to access the benefits provided by the emergency solutions in action. It is therefore necessary to consider social and digital inequalities as part of the same problem and promote initiatives to foster social and digital equity.

In conclusion, we may reiterate what we have tried to say throughout this essay: the COVID-19 virus does not discriminate, but exacerbates existing social discrimination. It cannot be addressed as the sole cause of inequalities, but it brings to light the vulnerability of our unequal social assets. The COVID-19 might teach us that, despite our social adaptation capacity, being socially and digitally equipped can help mitigate the effects of global crises.

8 Massimo Ragnedda, *The Third Digital Divide: A Weberian Approach to Digital Inequalities*. London: Routledge, 2018.

References

'Covid-19 Tracing Apps: Ensuring Privacy and Data Protection', *National Institute for Health Research*, 5 June 2020, https://www.europarl.europa.eu/news/en/headlines/society/20200429STO78174/covid-19-tracing-apps-ensuring-privacy-and-data-protection.

'Fix the Digital Divide', *Good Things Foundation*, https://www.goodthingsfoundation.org/fix-the-digital-divide.

Armitage, Richard and Laura B Nellums. 'COVID-19 and the Consequences of Isolating the Elderly', *The Lancet Public Health* 5, 5 (May 2020: e256), https://doi.org/10.1016/S2468-2667(20)30061-X.

Chopik, William J. 'The Benefits of Social Technology Use Among Older Adults Are Mediated by Reduced Loneliness', *Cyberpsychology, Behavior, and Social Networking* 19, 9 (September 2016): 551–56.

Lloyds Bank UK Consumer Digital Index 2020, https://www.lloydsbank.com/assets/media/pdfs/banking_with_us/whats-happening/lb-consumer-digital-index-2020-report.pdf.

Ragnedda, Massimo. *The Third Digital Divide: A Weberian Approach to Digital Inequalities*. London: Routledge, 2018.

Robinson, Laura, Jeremy Schulz, Aneka Khilnani, Hiroshi Ono, Shelia R. Cotten, Noah McClain, Lloyd Levine, et al. 'Digital Inequalities in Time of Pandemic: COVID-19 Exposure Risk Profiles and New Forms of Vulnerability.' *First Monday*, June 20, 2020, https://firstmonday.org/ojs/index.php/fm/article/view/10845/9563

16. AFRICA'S RESPONSES TO COVID-19: AN EARLY DATA SCIENCE VIEW

VUKOSI MARIVATE, ELAINE NSOESIE & HERKULAAS MVE COMBRINK

COVID-19 is a unique event that has shaken the world. It has disrupted the way we live, how we work, and what we think. Across Africa, the arrival of COVID-19 also drew attention to the continent. We have had to live through grim forecasts of how "badly" the continent was going to respond to the virus, or whether the continent was different and we would not feel the impact. Given that we are still in the midst of the pandemic, we have a hard task of sifting through the opinions and reports to get to a better understanding of what has happened. We have to deal both with trying to better measure impact[1] or contemplate if natural remedies would prevent spread.[2] As data scientists, we believe that what is measured obscures shortcomings that otherwise might enlighten us on how we can better deal with such situations in the future.

Africa has significant experience dealing with infectious disease epidemics. For example, countries in West and Central Africa have responded over the decades to Ebola outbreaks[3], and Southern Africa has had HIV/AIDS to deal with.[4] The experiences gained from these epidemics have prepared African health systems to respond to the pandemic. We are likely to see many research papers in the coming years dissecting what impact this preparedness may have had. In this article, we focus on how Africa worked to track COVID and what that might mean for data scientists in the future. What should we learn? Where did things go well? Where did things fail? How do we improve?

When we Measure the Spread

As the pandemic spread across the Northern Hemisphere, throughout the African continent questions formed about the potential impact of COVID-19 on different African countries. In many countries, COVID working groups were set up. These working groups were typically made up of government and external experts who planned to look at different factors in the responses to COVID-19. In many instances, these groups used data to track COVID-19 and assist in modelling and data-driven decision making. One would have noticed the proliferation

1 Warwicx J. McKibbin and Roshen Fernando, 'The global macroeconomic impacts of COVID-19: Seven scenarios, *Brookings*, 2 March 2020, https://www.brookings.edu/research/the-global-macroeconomic-impacts-of-covid-19-seven-scenarios/.

2 'Expert panel endorses protocol for COVID-19 herbal medicine clinical trials', World Health Organization, 19 September 2020, https://www.afro.who.int/news/expert-panel-endorses-protocol-covid-19-herbal-medicine-clinical-trials.

3 'WHO: Lessons from Ebola helping Africa's COVID-19 response', *YouTube*, 3 April 2020, https://www.youtube.com/watch?v=0nOsIKJIPD0.

4 'HIV and AIDS in South Africa', *Avert*, 15 April 2020, https://www.avert.org/professionals/hiv-around-world/sub-saharan-africa/south-africa.

of country-led dashboards or infographics on the COVID-19 spread.[5] In some countries, numbers were difficult to track and understand, because of low numbers of tests. The tracking of COVID-19 spread required a pipeline that could test, report, and aggregate information in a meaningful way for epidemiological and clinical surveillance.

Challenges in Reporting

We have seen international challenges to the free, transparent, and open reporting on the severity of COVID-19. Some African countries had these challenges as well, from denying the pandemic exists[6] to refusing to release information on testing and confirmed cases.[7] These challenges cannot be explained by simplistic reasons such as political pandering, but likely indicate challenges in resources available to respond to the pandemic. Countries have been stretched thin in a short period of time, and systems may not have the capacity to change direction this quickly. In this environment, how do you compile statistics and share meaningful information with both the public and policy stakeholders?

COVID-19 Will Still be With us

No one should underplay how COVID-19 will ultimately impact African countries. Its impact will not only be on healthcare; many sectors of society will likely be reeling from the sustained effects of the pandemic. There is already looming evidence about the adverse and secondary damage to other sectors such as education, crime, healthcare, and the economy.[8] Decisions on border and business closures made during the early stages of the outbreak may also have lasting effects on countries in Africa.

Tracking More than Health

COVID-19 has affected more than just health, and the effects will be with us for some time. As we move into second waves in some countries, we are now deciding how to rehabilitate economies, the education systems, and tourism. All of these decisions require data that crosses between national statistics offices and stakeholders. To better plan recoveries and interventions, organisations and states are working to use data to make choices about which interventions might be best. This process extends the need for data beyond the healthcare system toward a coordinated response driven by the public, private and non-governmental

5 Teodoro Alamo, Daniel G. Reina, Martina Mammarella and Alberto Abella. 'COVID-19: Open-Data Resources for Monitoring, Modeling, and Forecasting the Epidemic', *Electronics*, *9*(5), 2020; https://doi.org/10.3390/electronics9050827.

6 Khalifa Said, 'A Problem of Denial: Why Tanzania Could Lose the War Against COVID-19, *The Elephant*, 29 May 2020, https://www.theelephant.info/features/2020/05/29/a-problem-of-denial-why-tanzania-could-lose-the-war-against-covid-19/.

7 Aanu Adeoye, Simon Allison, Amindeh Blaise Atabong and Abdul S. Brima, 'Crisis, what crisis? How not to handle a pandemic', *Mail & Guardian*, 27 April 2020, https://mg.co.za/africa/2020-04-27-crisis-what-crisis-how-not-to-handle-a-pandemic/.

8 'Impact of COVID-19 on Children's Education in Africa', Human Rights Watch, 26 August 2020, https://www.hrw.org/news/2020/08/26/impact-covid-19-childrens-education-africa.

institutions. Data and data related issues are the ultimate reflection of people and capacity issues present within a system. If we are to combat negative outcomes, we should all work toward capacitating our nations to prepare for the future.

Lessons we Must Learn

Counting is hard. It requires will, cooperation and resources that together improve policy. We need to learn how to set up the data infrastructure so that counting can catalyze data practices in the future. Yet, setting up a data infrastructure requires money and human capacity. Across the global population, we will have more emergencies to deal with. As such, governments must prepare adequately during the "peace times." If we do not prepare, we will not get ahead to manage future crisis and crisis situations better. Investing in capacity and building the required skills to disseminate information in a more reliable way helps prepare us for the future. We should never sway away from training, innovation and incentivising education for the purpose of growth and improvement. Technical skills across all sectors—especially within healthcare—have served vital roles during the pandemic and will continues to do so. Capacitating the healthcare system with the technical skills to manage information, actively strive for excellence, and innovate still remains the foundation of preparedness, and drives the proactive strategies we need to be successful as a society.

References

'Expert panel endorses protocol for COVID-19 herbal medicine clinical trials', World Health Organization, 19 September 2020, https://www.afro.who.int/news/expert-panel-endorses-protocol-covid-19-herbal-medicine-clinical-trials.

'Impact of COVID-19 on Children's Education in Africa', Human Rights Watch, 26 August 2020, https://www.hrw.org/news/2020/08/26/impact-covid-19-childrens-education-africa.

'HIV and AIDS in South Africa', *Avert*, 15 April 2020, https://www.avert.org/professionals/hiv-around-world/sub-saharan-africa/south-africa.

'WHO: Lessons from Ebola helping Africa's COVID-19 response', *YouTube*, 3 April 2020, https://www.youtube.com/watch?v=0nOslKJIPD0.

Adeoye, Aanu, Simon Allison, Amindeh Blaise Atabong and Abdul S. Brima, 'Crisis, what crisis? How not to handle a pandemic', *Mail & Guardian*, 27 April 2020, https://mg.co.za/africa/2020-04-27-crisis-what-crisis-how-not-to-handle-a-pandemic/.

Alamo, Teodoro, Daniel G. Reina, Martina Mammarella and Alberto Abella. 'COVID-19: Open-Data Resources for Monitoring, Modeling, and Forecasting the Epidemic', *Electronics*, 9(5), 2020; https://doi.org/10.3390/electronics9050827.

McKibbin, Warwicx J. and Roshen Fernando. 'The global macroeconomic impacts of COVID-19: Seven scenarios, *Brookings*, 2 March 2020, https://www.brookings.edu/research/the-global-macroeconomic-impacts-of-covid-19-seven-scenarios/.

Said, Khalifa. 'A Problem of Denial: Why Tanzania Could Lose the War Against COVID-19, *The Elephant*, 29 May 2020, https://www.theelephant.info/features/2020/05/29/a-problem-of-denial-why-tanzania-could-lose-the-war-against-covid-19/.

17. SILENT SILENCING: A SURVIVOR'S REFLECTION ON DOMESTIC VIOLENCE DURING COVID-19

ANONYMOUS

On September 17, 2020, the policy blog *Ideas for India* published a study on rates of domestic violence during India's lockdown, which started on March 23.[1] It showed that domestic violence complaints had increased by 131% in May 2020 in districts with the strictest lockdown rules ("red zone"). It also reported data from a survey that asked men and women whether "a husband is justified in hitting or beating his wife in a number of circumstances, including neglect of the house or children, improper cooking, disrespect for in-laws, and refusal to have sex." Results show that "red zone" districts where a greater proportion of husbands reported that hitting or beating his wife is justified experienced greater increases in domestic violence complaints in April and May 2020 relative to "green zone" districts. Such results align with scholarship on the effects of lockdown on domestic violence and their measurability, calling for inclusive data visualisation.[2]

As activists on domestic violence are aware, we leverage data to pass clear, effective messages to our audiences. Domestic violence statistics, as well as femicide data, offer a powerful synopsis of the horror of living with abuse, and of the tragic culmination of situations where abuse is not addressed. Narrating abuse is hard not only for the narrator but also for the listener. By way of example, in multiple occasions the author of this chapter had persons asking her to "stop" or to "refrain from talking about abuse." And still, for those survivors and others involved in helping people recognise the signs of abuse, statistics provide a numeric anchor to start sensitisation, to prevent people from turning a blind eye. So in that respect, statistics serve as a tool for sensitisation and awareness-raising.

But for us survivors, the limits of statistics still remain.

The Twisted Meaning of Domestic Violence Statistics

Statistics are merely about *reported* abuse. We know, in some national/institutional environments more than others, that reporting of certain forms of domestic violence is discouraged depending on context. In societies across the world, abuse is stigmatised, silenced, and blamed on the victim. As someone notified in a seminar recently, "you will never put your name and face on such a claim." The author of this chapter, a survivor from a southern European country, has been actively advised not to report her abuser, for fears of

1 Saravana Ravindran and Manisha Shah, 'Covid-19: 'Shadow pandemic' and violence against women, *Ideas for India*, 17 September 2020, https://www.ideasforindia.in/topics/social-identity/covid-19-shadow-pandemic-and-violence-against-women.html.

2 Nalini Gulati, 'Covid-19: Lockdown and domestic abuse', *Ideas for India*, 19 April 2020, https://www.ideasforindia.in/topics/social-identity/covid-19-lockdown-and-domestic-abuse.html.

retaliation and triggering memories. We report, if we really want to. But we are also ignored, laughed at, scorned, and discouraged when we do so. As a result, many of us do not report domestic abuse.

Can you see now why we are so confident in arguing that domestic violence statistics, as powerful as they are, are likely to seriously underrepresent the phenomenon?

Silent Silencing

But nobody will openly admit to silencing a domestic violence survivor. Nobody will ever openly tell you "it is not acceptable to talk about survival." Silencing, as we experience it in our everyday existence, is in itself… silent. Nobody says "do not talk about it." They will say, "not here. This is not the place, not the right occasion." Do not talk about it to colleagues, it will undermine your position of power. Do not talk about it in social occasions, it is inappropriate. Do not talk about it to the extended family, you will make them worried without a reason. In a nutshell, overall, survive if you can, but do not tell us about it.

We survive, those of us who do. But the product of survival—us—is not socially accepted. As I mentioned above, one month after reporting my abuser, a close family member told me to "lower my voice" while talking about it in a social occasion. We are allowed to survive, if we manage to. But then, we are forbidden to talk.

I spend substantial time collecting the most accurate statistics and reports to talk about survival. Statistics go beyond grabbing the listener's attention, and offer a photograph of the issue that numerically is the most accurate we have. But when it is our life, we are silently silenced. We are encouraged to stay put, and lower our voice. Because it is fine to survive. But it is not professionally or socially acceptable to live as a survivor.

Read statistics and use them in your work. Build on them to bring the ongoing, pandemic-induced rise in domestic violence to the world's attention, to break the silence that still dominates most parts of the world. But when you read statistics, just recognize that many of us live in silence with the responsibility of being the voice of those whose abusers have silenced forever. We cannot put our names and faces to these voices, for the safety of our own loved ones and our very selves. And we cannot talk, because it is not "socially acceptable." So please do use statistics. But when you do, remember that our silenced voices lie behind them.

References

Gulati, Nalini. 'Covid-19: Lockdown and domestic abuse', *Ideas for India*, 19 April 2020, https://www.ideasforindia.in/topics/social-identity/covid-19-lockdown-and-domestic-abuse.html.

Ravindran, Saravana and Manisha Shah. 'Covid-19: 'Shadow pandemic' and violence against women, *Ideas for India*, 17 September 2020, https://www.ideasforindia.in/topics/social-identity/covid-19-shadow-pandemic-and-violence-against-women.html.

DATAFIED SOCIAL POLICIES

THEME III

18. BEYOND TOUCHSCREENS: THE PERILS OF BIOMETRIC SOCIAL WELFARE IN LOCKDOWN

SILVIA MASIERO

Over the last several years, India has gradually introduced biometric identification of users in most of its social welfare schemes. One of its main schemes is the Public Distribution System (PDS), the nation's largest food security programme, which provides rationed subsidized commodities to the nation's poor through a network of shops. Biometric access to the PDS is largely operated through Aadhaar, the world's largest digital identification scheme, which provides enrolees with a 12-digit number and captures biometric credentials (ten fingerprint scans and iris scans) for recognition. While modalities of identification and authentication differ through the country, states that adopted an Aadhaar-enabled PDS required recipients to authenticate through a biometric point-of-sale machine to receive rations.

As a consequence of the COVID-19 crisis, biometric authentication in ration shops has been suspended in several Indian states. A commonly given reason for the suspension is the risk of disease transmission[1] associated to users' fingerprint contact with the machine, which falls under the broader remit of social distancing measures taken within the ongoing pandemic. The Indian case epitomises, however, a global trend of anti-poverty programmes transitioning to biometric identification in programmes that—in the light of very serious effects of the COVID-19 crisis on vulnerable groups—are now more crucial to their recipients than ever. In the context of COVID-19, what perils are involved in the perpetuated subordination of social welfare access to biometric identification?

The Trade-Offs of Digital Identity

With reference to the use of biometrics in India's social welfare system, many researchers have highlighted the distance the anti-leakage rationale and exclusionary effects yielded by such technologies. Most recently, it has been reported on a large-scale experiment conducted in Jharkhand[2], a state where deaths by starvation due to failed Aadhaar-enabled authentication of PDS beneficiaries were previously reported.[3] The results of the study revealed a 10% reduction in benefits for recipients (23% of the total) who had not linked Aadhaar credentials to benefit rolls, with 3% receiving no benefits at all. Such exclusionary effects mirror previous studies

1 M Shrinivasa, 'Biometric authentication for ration shops suspended in Karnataka', *Times of India*, 25 March 2020, https://timesofindia.indiatimes.com/city/mysuru/biometric-authentication-for-ration-shops-suspended-in-karnataka/articleshow/74801409.cms.

2 Karthik Muralidharan, Paul Niehaus and Sandip Sukhtankar. 'Balancing corruption and exclusion. Incorporating Aadhaar into PDS', *Ideas for India*, 17 April 2020, https://www.ideasforindia.in/topics/poverty-inequality/balancing-corruption-and-exclusion-incorporating-aadhaar-into-pds.html.

3 Shiv Sahay Sinh, 'Death by digital exclusion?: On faulty public distribution system in Jharkhand', *The Hindu*, 13 July 2019, https://www.thehindu.com/news/national/other-states/death-by-digital-exclusion/article28414768.ece.

of the Aadhaar-based PDS in the same state. Other studies reported on the anxiety brought in poor people's lives by the uncertainties of biometrically-enabled foodgrain distribution.[4]

The policy vision behind biometric anti-poverty schemes can be summarized in terms of two different types of error being tackled. In targeted welfare schemes, an *exclusion error* means the exclusion of genuinely entitled subjects, while an *inclusion error* refers to the erroneous inclusion of non-entitled subjects into provision. By matching biometric records (collected through databases such as Aadhaar) with records of recipients' entitlements, biometric anti-poverty schemes promise to maximize the affordance of proper targeting, offering credentials to the excluded and preventing access to the erroneously included. This rationale is used as the basis of their ever-increasing incorporation in anti-poverty programmes, of which the Aadhaar-enabled Indian system is a notable example.

But the reality revealed by extant research, including our previous work on the Karnataka PDS, differs from the orthodoxy of good targeting.[5] First, as illustrated most recently by other authors, requiring biometric identification at the ration shop does not prevent diversion, because the system affords the recording of successful disbursement even if rations are not provided as per eligibility.[6] Second, there is a trade-off between anti-leakage affordances, in the form of accurate recognition at the point of sale, and the repeated exclusions of entitled beneficiaries. Reasons given range from machines malfunctioning to the unreliability of fingerprint readability among the elderly and manual labourers. In the Aadhaar-enabled PDS, the need for multiple fragile technologies to work at the same time, as highlighted by Jean Drèze, poses a systemic problem of practical feasibility, which impacts those parts of the country most subjected to infrastructural issues.[7] While inclusion errors are (at least in principle) targeted by the rationale of biometrics, exclusions keep happening, and raise questions about how a social welfare system should cover the most vulnerable groups.

COVID-19: A Reshuffling of Priorities

In the midst of the ongoing crisis, many studies are being conducted on the effects of COVID-19 on health infrastructures and economic vulnerabilities in the Global South. Studies of factory workers, gig-workers, and low-income households all point in the same direction: the economic impact brought by national lockdowns is disproportionally affecting the poor and vulnerable,

4 Jean Drèze, Nazar Khalid, Reetika Khera and Anmol Somanchi, 'Aadhaar and food security in Jharkhand: Pain without gain?', *Economic and Political Weekly*, 52, 50, 2017, https://www.epw.in/journal/2017/50/special-articles/aadhaar-and-food-security-jharkhand.html.

5 Silvia Masiero and Suomyo Das, 'Datafying anti-poverty programmes: implications for data justice', *Information, Communication & Society* 22, 7.

6 Hartej Singh Hundal, AP Janani and Bidisha Chaudhuri, 'A Conundrum of Efficiency And Inclusion: Aadhaar and Fair Price Shops', *Economic & Political Weekly*, 3 April 2020, https://www.epw.in/engage/article/conundrum-efficiency-and-inclusion-aadhaar-and.

7 Jean Drèze, 'Even if Aadhaar is deemed inevitable there are many ways of using it some more helpful or harmful than others', *LSE Blog*, 28 July 2016, https://blogs.lse.ac.uk/southasia/2016/07/28/even-if-aadhaar-is-deemed-inevitable-there-are-many-ways-of-using-it-some-more-helpful-or-harmful-than-others-jean-dreze/.

large proportions of whom are recipients of social welfare systems.[8] Where such systems have limited reach or are not available, measures of immediate assistance are invoked, such as the provision of universal basic income or emergency social safety nets.[9] In the Indian PDS, the promise of doubling foodgrain rations along with providing extra commodities increases the scheme's importance.[10] This is particularly important during a pandemic, when new vulnerabilities, such as migrant workers being exposed to distress and food insecurity, have emerged in the wake of lockdown.[11]

In these times of heightened crisis, severely affecting the users of anti-poverty schemes, the exclusion errors induced by mandatory biometric access are a risk that social protection schemes cannot afford to take. While the incorporation of biometrics is purposefully designed to improve targeting, the crisis challenges us to adapt systems in such a way that biometric recognition is, at the very least, suspended. While the problem of touchscreen-induced disease transmission is in itself a valid reason for suspending the program, the inclusion-exclusion trade-off illustrated here poses an equal problem that needs consideration. As systems are adapted to coping with the COVID-19 crisis, the need for assisting the affected should prevail over the stringent adoption of biometric credentials.

References

'We're daily wagers, how will it be okay? Modi isn't going to come here, feed us', *Counterview*, April 2020, https://www.counterview.net/2020/04/were-daily-wagers-how-will-it-be-okay.html.

De Neve, Geert. 'COVID-19 in Tamil Nadu: textile livelihoods under threat', *Culture and Capitalism*, 20 April 2020, https://cultureandcapitalismblog.wordpress.com/2020/04/20/covid-19-in-tamil-nadu-textile-livelihoods-under-threat/

Drèze, Jean, Nazar Khalid, Reetika Khera and Anmol Somanchi. 'Aadhaar and food security in Jharkhand: Pain without gain?', *Economic and Political Weekly*, 52, 50, 2017, https://www.epw.in/journal/2017/50/special-articles/aadhaar-and-food-security-jharkhand.html.

Drèze, Jean. 'Even if Aadhaar is deemed inevitable there are many ways of using it some more helpful or harmful than others', *LSE Blog*, 28 July 2016, https://blogs.lse.ac.uk/southasia/2016/07/28/even-if-aadhaar-is-deemed-inevitable-there-are-many-ways-of-using-it-some-more-helpful-or-harmful-than-others-jean-dreze/.

8 Geert De Neve, 'COVID-19 in Tamil Nadu: textile livelihoods under threat', *Culture and Capitalism*, 20 April 2020, https://cultureandcapitalismblog.wordpress.com/2020/04/20/covid-19-in-tamil-nadu-textile-livelihoods-under-threat/; Shyam Krishna, 'The role of a gig-worker during the crisis: Consequences of COVID19 on food delivery workers in south India', *IFIP 9.4 Blog*, 13 April 2020, https://ifip94.wordpress.com/2020/04/13/the-role-of-a-gig-worker-during-crisis-consequences-of-covid19-on-food-deliver-workers-in-south-india/; Jean Drèze, 'The perils of an all-out lockdown', *The Hindu*, 23rd of March 2020, www.thehindu.com/opinion/lead/the-perils-of-an-all-out-lockdown/article31136890.ece.

9 Kevin P. Donovan and Robert Mwanyumba, 'Kenyans need a Universal Basic Income', *The Star*, 3 April 2020, https://www.the-star.co.ke/siasa/2020-04-03-kenyans-need-a-universal-basic-income/.

10 'We're daily wagers, how will it be okay? Modi isn't going to come here, feed us', *Counterview*, 28 April 2020, https://www.counterview.net/2020/04/were-daily-wagers-how-will-it-be-okay.html.

11 Yogesh Suri and Satwik Mishra, 'COVID-19 outbreak: Immediate framework needed for reaching out to distressed migrant workers', *Financial Express*, 22 April 2020, https://www.financialexpress.com/opinion/covid-19-outbreak-immediate-framework-needed-for-reaching-out-to-distressed-migrant-workers/1935791/.

Drèze, Jean. 'The perils of an all-out lockdown', *The Hindu*, 23 March 2020, https://www.thehindu.com/opinion/lead/the-perils-of-an-all-out-lockdown/article31136890.ece.

Donovan, Kevin P. and Robert Mwanyumba. 'Kenyans need a Universal Basic Income', *The Star*, 3 April 2020, https://www.the-star.co.ke/siasa/2020-04-03-kenyans-need-a-universal-basic-income/.

Hundal, Hartej Singh, AP Janani and Bidisha Chaudhuri. 'A Conundrum of Efficiency And Inclusion: Aadhaar and Fair Price Shops', *Economic & Political Weekly*, 3 April 2020, https://www.epw.in/engage/article/conundrum-efficiency-and-inclusion-aadhaar-and.

Shyam Krishna. 'The role of a gig-worker during crisis: Consequences of COVID-19 on food delivery workers in South India', *Ifip 9.4 blog*, 13 April 2020, https://ifip94.wordpress.com/2020/04/13/the-role-of-a-gig-worker-during-crisis-consequences-of-covid19-on-food-deliver-workers-in-south-india/.

Masiero, Silvia and Soumyo Das 'Datafying anti-poverty programmes: implications for data justice', *Information, Communication & Society* 22, 7 (2019): 916-933.

Muralidharan, Karthik, Paul Niehaus and Sandip Sukhtankar. 'Balancing corruption and exclusion. Incorporating Aadhaar into PDS', *Ideas for India*, 17 April 2020, https://www.ideasforindia.in/topics/poverty-inequality/balancing-corruption-and-exclusion-incorporating-aadhaar-into-pds.html.

Sinh, Shiv Sahay. 'Death by digital exclusion?: On faulty public distribution system in Jharkhand', *The Hindu*, 13 July 2019, https://www.thehindu.com/news/national/other-states/death-by-digital-exclusion/article28414768.ece.

Shrinivasa, M. 'Biometric authentication for ration shops suspended in Karnataka', *Times of India*, 25 March 2020, https://timesofindia.indiatimes.com/city/mysuru/biometric-authentication-for-ration-shops-suspended-in-karnataka/articleshow/74801409.cms.

Suri, Yogesh and Satwik Mishra. 'COVID-19 outbreak: Immediate framework needed for reaching out to distressed migrant workers', *Financial Express*, 22 April 2020, https://www.financialexpress.com/opinion/covid-19-outbreak-immediate-framework-needed-for-reaching-out-to-distressed-migrant-workers/1935791/

19. ON NOT BEING VISIBLE TO THE STATE: THE CASE OF PERU

DIEGO CERNA ARAGÓN

The World Health Organization recently declared that South America is the new epicenter of the COVID-19 pandemic[1]. Peru has the second largest overall number of registered infections in the region, only behind Brazil, which has almost seven times the population of Peru.[2] Initially, the Peruvian government was lauded for its swift response and for implementing strict measures to halt the transmission of the virus.[3] More recently, however, the country has been featured on the international press as a place where the expansion of the disease simply cannot be contained, despite the early harsh restrictions. Stories of inner massive displacements and testimonies of the employment of Venezuelan immigrants to pick up dead bodies give an idea of how Peru is currently dealing with the pandemic.[4]

Targeting in the Midst of a Pandemic

On March 19, 2020, three days after decreeing a national state of emergency and quarantine, the Peruvian government announced that it was going to distribute a 380-sole subsidy (approximately 110 USD) to vulnerable households.[5] The idea behind this plan was to offer economic relief to people who had to stop working given the emergency measures. In a country where over 70% of the labor force is in the informal sector—meaning these workers are not included in any state or company payrolls, and rely on self-employment and casual gigs—enforcing a quarantine meant that the majority of the working population had to give up their daily income and way of life.[6]

---

1 Will Feuer, 'South America is a new epicentre of the coronavirus pandemic WHO says', *CNBC*, 22 May 2020, https://www.cnbc.com/2020/05/22/south-america-is-a-new-epicenter-of-the-coronavirus-pandemic-who-says.html.

2 France 24 English, 'Peru becomes second Latin American country after Brazil to reach 100,000 coronavirus cases' (You Tube, 21st of May 2020). Available from: https://www.youtube.com/watch?v=zGi5eoSI1BA.

3 'Martín Vizcarra: Aprobación del mandatario se ubica en 87%, según Ipsos', *Canal N (Peru),* 22 March 2020, https://canaln.pe/actualidad/martin-vizcarra-aprobacion-presidente-se-ubica-87-segun-encuesta-ipsos-n408998.

4 Dan Collins, 'Peru: riot police block highway as people attempt to flee amid lockdown', *The Guardian*, 20 April 2020, https://www.theguardian.com/world/2020/apr/20/peru-riot-police-highway-teargas-coronavirus-lockdown; Franklin Briceño and Rodrigo Abd, 'As virus swamps Peru, Venezuelan migrants collect the dead', *Associated Press*, 21 May 2020, https://apnews.com/c8988768299f792ffab2c8fa8409d0a3.

5 @MidisPeru, 'Con respecto a la entrega del subsidio monetario #YoMeQuedoEnCasa anunciado por el Gobierno, el Ministerio de Desarrollo e Inclusión Social informa lo siguiente #PerúEstáEnNuestrasManos' Twitter post, 19 March 2020, https://twitter.com/MidisPeru/status/1240725830029971457.

6 'Informalidad laboral de Perú bajó apenas un punto porcentual el 2019 y llegó a 72%', *Gestión*, 19 January 2020, https://gestion.pe/economia/informalidad-laboral-de-peru-bajo-apenas-un-punto-

The database from which the vulnerable household information was retrieved is in the hands of the Household Targeting System (SISFOH). Because it was originally used to target poor and extremely poor households for the provision of social welfare benefits, state officials deemed this database as capable of providing accurate information about which households would need financial assistance during the quarantine. Quickly, the public debate gravitated towards economic definitions: what is the meaning of being vulnerable? Who should be included in the registry to receive government assistance? As part of a well-disciplined neoliberal state, Peruvian national government agencies always strive to streamline social spending. Yet, as days went by, it became clear that the more than two million households initially targeted were not the only ones requiring assistance. Consequently, the government announced a new subsidy on March 26th, this time targeting "independent workers". [7]

The SISFOH database has one defining characteristic: it usually works under an on-demand logic. Unless a household requests to be evaluated to receive social welfare benefits, the system assigns them a default socioeconomic classification based on cross-referencing information from other databases, such as census, property registry, and electricity consumption. Under normal circumstances, households in urban areas that do not request an evaluation are not included among the recipients of social welfare benefits. In cases where a household requests to be evaluated, on the other hand, incertitude is the rule.[8] Neither the applicants nor the local bureaucrats who work for the system know exactly how it operates; the classification algorithm is opaque to them. According to technocrats from the national government, this feature is intended to curb possible attempts to game the system. In the exceptional context of the pandemic, however, the government decided to test the accuracy of the database to target households in need. Unfortunately, it failed to provide a sufficiently broad safety net. Later on, the government realized its mistake and the Minister of Development and Social Inclusion (MIDIS) announced that eventually it would have to change methods and start actively evaluating households.[9]

The government's failure to provide a lifeline to people in need did not go without consequences. By mid-April, a month after the quarantine began, people started leaving Lima, Peru's capital and most populated city, because they had not received any state assistance in the last month.[10] They had depleted their savings, could no longer pay their rents, and were evicted

porcentual-el-2019-y-llego-a-72-noticia/.

7 @MTPE_Peru 'Estas son las nuevas medidas anunciadas por el Gobierno para contener la propagación del COVID-19: #PerúEstáEnNuestrasManos #YoMeQuedoEnCasa, Twitter post, 26 March 2020, https://twitter.com/MTPE_Peru/status/1243266959476654080.

8 Diego Cerna Aragón, 'They do it like a computer, there are no feelings: Algorithmic systems for socioeconomic classification in Peru', *MIT Global Media*, 30 September, 2019, https://globalmedia.mit.edu/2019/09/30/they-do-it-like-a-computer-there-are-no-feelings-algorithmic-systems-for-socioeconomic-classification-in-peru/.

9 Government of Peru, 'El Presidente Martín Vizcarra […]' Facebook update, March 2020, https://www.facebook.com/200505530012627/videos/633377157244561/.

10 Ralph Zapata, Geraldine Santos, Magali Estrada, Alicia Tovar, Yanua Atamaín, Karin Chacón, Jorge Carrillo, Claudia Chávez, Gustavo Callapiña and Clarys Cárdenas, 'La dura travesía de los más pobres: pandemia y desempleo expulsan a miles de migrantes', *Ojo Público*, 26 April 2020, https://ojo-publico.com/1786/desplazados-por-la-pandemia-la-travesia-de-los-mas-pobres.

by their landlords. Without anywhere to sleep or money to buy food, many Peruvians started walking back to their hometowns in the countryside, given that all long-distance transportation was banned due to the emergency measures.

Additionally, another critical issue surfaced related to subsidy distribution. Given that less than 40% of the adult population is in the Peru's banking system, a large portion of people could not receive the subsidy in a bank account.[11] Instead, people had to go to bank offices to receive the subsidy in cash. Furthermore, many were confused about the multiple subsidy announcements made by the government.[12] Driven by confusion, people went to the banks simply to inquire if they were going to receive subsidies. As later recognized by the government, the concentration of people in banks proved to be a major transmission vehicle for the novel coronavirus.[13]

After repeated demands in social media[14], the government announced a new "universal" subsidy on April 23, 2020.[15] Despite the name, the subsidy was not really universal. As President Martin Vizcarra explained, the distribution of this subsidy would be determined through "reverse targeting."[16] Still relying on the SISFOH database, this subsidy was projected to reach every household that did not have a member on state or company payrolls—a total of 6.8 million households. Instead of acknowledging the limitations of targeting and opting for an actual universal subsidy, the government insisted on streamlining its social spending. On May 25—32 days after the announcement of the universal subsidy and 71 days after the quarantine started—the government indicated that 3.4 million households had received a subsidy, only half of their 6.8 million goal.[17]

The main problem with the Peruvian government is not the availability of funding. Every time authorities announce a new subsidy, they commit to increasing their spending. The main problem, this article argues, is its leaders' determination to address the consequences of a public health crisis using technologies devised for poverty-alleviating programs. Targeting technologies are designed to restrain spending and filter people. Moreover, in the case of the

11 'MEF anuncia que también subastará tasas de interés para el FAE-MYPE', *Gestión*, 29 April 2020, https://gestion.pe/economia/coronavirus-peru-mef-anuncia-que-tambien-subastara-tasas-de-interes-para-el-fae-mype-reactiva-peru-nndc-noticia/.

12 Ani Lu Torres, 'Luis Alberto Arias Minaya: Se anuncian bonos pero sin coordinar con los bancos', *La República*, 12 May 2020, https://larepublica.pe/economia/2020/05/11/luis-alberto-arias-minaya-se-anuncian-bonos-pero-sin-coordinar-con-los-bancos/.

13 Government of Peru, "El Presidente Martín Vizcarra […]', Facebook update, April 2020, https://www.facebook.com/200505530012627/videos/552204828769315/.

14 @ParoColectiva, "HOY 7 p.m. Cacerolazo virtual contra las medidas del Gobierno, que sigue dando facilidades al empresariado y deja con hambre al pueblo. #BonoUniversalYa #QuePaguenLosRicos #SuspensionPerfectaNO", Twitter post, 24 April, https://twitter.com/parocolectiva/status/1253470570034933773?s=20.

15 Jimena de la Quintana, 'El presidente de Perú anuncia la entrega de un bono universal a las familias', *CNN en Español*, 23 April 2020, https://cnnespanol.cnn.com/2020/04/23/alerta-peru-el-presidente-vizcarra-anuncia-entrega-de-bono-universal-a-las-familias/.

16 Government of Peru, "El Presidente Martín Vizcarra […]', Facebook update, April 2020, https://www.facebook.com/200505530012627/videos/231928104791731/.

17 Government of Peru, "El Presidente Martín Vizcarra […]', Facebook update, May 2020, https://www.facebook.com/200505530012627/videos/452163502314475/.

weak Peruvian state, they rely on irregular practices of information collection. Even before the pandemic, applicants to social welfare benefits and local bureaucrats complained about the stringent reasoning of the system and how its tools (e.g., forms) failed to grasp the material precarious experience of the citizens.[18] The technocratic asset of a rigorous algorithmic system brought woe to those in need. These technologies, by design and implementation, render people invisible.

Being Visible in the Global South

Creative minds in the Western cultural industry have been prolific producers of dystopian fictions where state-like actors know every little detail about every member of the population. The case of Peru is quite the opposite; it is a state which barely knows its population. What we have witnessed—"invisible" people who do not receive any assistance from the state, walking for days to return to their hometowns without having something to eat, without knowing if they are carriers of a deadly virus—seems like a real-life dystopian scenario.[19]

Liberal anxieties in the Global North—sometimes rapidly adopted by educated elites in developing countries—have focused academic attention on issues of privacy. What terrifies them is being identified by state actors, probably because they do not want to be treated as their governments regularly treat minorities in their countries. We already hear warnings on how everyone should be afraid of a "Chinese model" of surveillance[20], as if China was the only country to surveil its citizens[21]. We will probably never see a protest sign reading "We want to be visible to the state!" And yet, millions of people worldwide belong to the informal sector, a limbo-like domain where individuals participate in daily social and economic activities while not being completely integrated. This may function precariously, as long as the economy keeps running. But as soon as it stops, like during COVID-19 quarantine, the downfall is catastrophic. Without being part of a state registry, the help cannot arrive in an adequate and timely fashion. In an era when many of the deaths remain unofficial, while people cannot eat because they are not counted, being visible to the state is a privilege.

References

'Informalidad laboral de Perú bajó apenas un punto porcentual el 2019 y llegó a 72%', *Gestión*, 19th of January 2020, https://gestion.pe/economia/informalidad-laboral-de-peru-bajo-apenas-un-punto-porcentual-el-2019-y-llego-a-72-noticia/.

'MEF anuncia que también subastará tasas de interés para el FAE-MYPE', *Gestión*, 29th of April 2020, https://gestion.pe/economia/coronavirus-peru-mef-anuncia-que-tambien-subastara-tasas-de-interes-para-el-fae-mype-reactiva-peru-nndc-noticia/.

18 Diego Cerna Aragón, 'They do it like a computer', *MIT Global Media*.

19 Channel 4 News, 'Mother and kids' jungle journey to escape COVID-19' Facebook update, 20 May 2020, https://www.facebook.com/watch/?v=379828092949791.

20 Han Byung-Chul Han, 'La emergencia viral y el mundo de mañana. Byung-Chul Han, el filósofo surcoreano que piensa desde Berlín', *El País*, 22 March 2020, https://elpais.com/ideas/2020-03-21/la-emergencia-viral-y-el-mundo-de-manana-byung-chul-han-el-filosofo-surcoreano-que-piensa-desde-berlin.html.

21 Universitetet i Oslo, Global surveillance, https://tinyurl.com/no21984.

Ministerio de Desarrollo e Inclusión Social del Perú @MidisPeru, 'Con respecto a la entrega del subsidio monetario #YoMeQuedoEnCasa anunciado por el Gobierno, el Ministerio de Desarrollo e Inclusión Social informa lo siguiente #PerúEstáEnNuestrasManos' Twitter post, 19th of March 2020, https://twitter.com/MidisPeru/status/1240725830029971457.

Ministerio de Trabajo del Perú @MTPE_Peru, 'Estas son las nuevas medidas anunciadas por el Gobierno para contener la propagación del COVID-19: #PerúEstáEnNuestrasManos #YoMeQuedoEnCasa, Twitter post, 26th of March 2020, https://twitter.com/MTPE_Peru/status/1243266959476654080.

@ParoColectiva "HOY 7 p.m. Cacerolazo virtual contra las medidas del Gobierno, que sigue dando facilidades al empresariado y deja con hambre al pueblo. #BonoUniversalYa #QuePaguenLos-Ricos #SuspensionPerfectaNO" Twitter post, 24th of April, https://twitter.com/parocolectiva/status/1253470570034933773?s=20.

Briceño, Franklin and Rodrigo Abd. 'As virus swamps Peru, Venezuelan migrants collect the dead', *Associated Press*, 21 May 2020, https://apnews.com/c8988768299f792ffab2c8fa8409d0a3.

Canal N (Peru). 'Martín Vizcarra: Aprobación del mandatario se ubica en 87%, según Ipsos', 22 March 2020, https://canaln.pe/actualidad/martin-vizcarra-aprobacion-presidente-se-ubica-87-segun-encuesta-ipsos-n408998.

Cerna Aragón, Diego. 'They do it like a computer, there are no feelings: Algorithmic systems for socioeconomic classification in Peru', *MIT Global Media*, 30 September, 2019, globalmedia.mit.edu/2019/09/30/they-do-it-like-a-computer-there-are-no-feelings-algorithmic-systems-for-socioeconomic-classification-in-peru/.

Channel 4 News, 'Mother and kids' jungle journey to escape COVID-19*',* Facebook update, 20 May 2020, https://www.facebook.com/watch/?v=379828092949791.

Collins, Dan. 'Peru: riot police block highway as people attempt to flee amid lockdown', *The Guardian*, 20 April 2020, https://www.theguardian.com/world/2020/apr/20/peru-riot-police-highway-tear-gas-coronavirus-lockdown.

de la Quintana, Jimena. 'El presidente de Perú anuncia la entrega de un bono universal a las familias', *CNN en Español*, 23 April 2020, https://cnnespanol.cnn.com/2020/04/23/alerta-peru-el-presidente-vizcarra-anuncia-entrega-de-bono-universal-a-las-familias/.

Feuer, Will. 'South America is a new epicentre of the coronavirus pandemic WHO says', *CNBC*, 22 May 2020, https://www.cnbc.com/2020/05/22/south-america-is-a-new-epicenter-of-the-coronavirus-pandemic-who-says.html.

France 24 English. *Peru becomes second Latin American country after Brazil to reach 100,000 coronavirus cases* (You Tube, 21 May 2020). Available from: https://www.youtube.com/watch?v=zGi5eoSI1BA.

Government of Peru. "El Presidente Martín Vizcarra […]', Facebook update, April 2020, https://www.facebook.com/200505530012627/videos/552204828769315/.

Government of Peru. "El Presidente Martín Vizcarra […]', Facebook update, April 2020, https://www.facebook.com/200505530012627/videos/231928104791731/.

Government of Peru. "El Presidente Martín Vizcarra […]', Facebook update, May 2020, https://www.facebook.com/200505530012627/videos/452163502314475/.

Government of Peru. 'El Presidente Martín Vizcarra […]', Facebook update, May 2020, https://www.facebook.com/200505530012627/videos/633377157244561/.

Han, Byung-Chul. 'La emergencia viral y el mundo de mañana. Byung-Chul Han, el filósofo surcoreano que piensa desde Berlín', *El País*, 22 March 2020, https://elpais.com/ideas/2020-03-21/la-emergencia-viral-y-el-mundo-de-manana-byung-chul-han-el-filosofo-surcoreano-que-piensa-desde-berlin.html.

Torres, Ani Lu. 'Luis Alberto Arias Minaya: Se anuncian bonos pero sin coordinar con los bancos', *La República*, 12 May 2020, https://larepublica.pe/economia/2020/05/11/luis-alberto-arias-minaya-se-anuncian-bonos-pero-sin-coordinar-con-los-bancos/.

Universitetet i Oslo, *Global surveillance,* 5th of May 2016, https://tinyurl.com/no21984.

Zapata, Ralph, Geraldine Santos, Magali Estrada, Alicia Tovar, Yanua Atamaín, Karin Chacón, Jorge Carrillo, Claudia Chávez, Gustavo Callapiña and Clarys Cárdenas, 'La dura travesía de los más pobres: pandemia y desempleo expulsan a miles de migrantes', *Ojo Público*, 26 April 2020, https://ojo-publico.com/1786/desplazados-por-la-pandemia-la-travesia-de-los-mas-pobres.

20. THE CASE OF THE SOLIDARITY INCOME IN COLOMBIA: THE EXPERIMENTATION WITH DATA ON SOCIAL POLICY DURING THE PANDEMIC

JOAN LOPÉZ

Colombian social policy since the 1990s can be understood as liberal, because it was based on targeting resources on people below the poverty line. The Colombian state has created mechanisms to identify the poor people and bring the limited resources available to them. How is this approach evolving during the pandemic, and what is the role of "big data" in this process?

Different Programs

The System of Possible Beneficiaries of Social Programs (known as *Sisbén* in Spanish) has appeared as the main instrument to target social assistance. This system rates people with scores from 0 to 100 in terms of household prosperity. To grasp the difference between Solidarity Income and more traditional social policies, we should understand how data was used to identify the beneficiaries of social benefits. *Sisbén's* targeted social programs examined the conditions of each household, conscripting citizens as actors in data production. The score emerged from an institutional effort to virtually search for vulnerable populations through surveys of impoverished areas. Depending on the score received, families were made eligible for social programs implemented by different state agencies.

The Solidarity Income system, set up in response to the pandemic, has changed the relationship between the data used to assign a benefit and the participation of people in the system. This experiment involved using as much data as possible to find people who needed the subsidy but were not yet receiving other social programs. The program built a new Master Information Database, in which the National Development Office (NDO) "mixed" different administrative records using data collected for diverse purposes and managed by private and public actors.[1] These databases have varying quality levels, and the existence of some was unknown even for many Colombians.

The experiment ended up opening the "Pandora's box" of the Colombian government information systems and showing its dependence on the private sector. The Colombian approach has appeared broken from the start; when the NDO published a list of beneficiaries, many citizens reported inclusion errors regarding non-existent and expired ID cards. In response, I argue that the challenge is no longer how to find vulnerable people in the areas affected by poverty, but how to take advantage of the personal data that Colombian citizens provide in their interaction with different institutions.

1 Government of Colombia, 'Manual Operativo Programa Ingreso Solidario', 21 March 2020, https://ingresosolidario.dnp.gov.co/documentos/Manual_Operativo-Ingreso-Solidario.pdf.

The Unilateral Decisions

The NDO's response was to dismantle the database and deliver it to the National Civil Registry in charge of the national ID system for deduplication. This process reportedly[2] resulted in nearly 17,000 records with inconsistencies. After the incident, the NDO assured the public that the errors did not matter because the banks verified the identity of the recipient before making a transaction. Also, in the case of communities with no access to financial services, the public agency used databases of the prisons and the Forensic Medicine Institute[3] to remove IDs that were marked in those databases as duplicate or deceased. This situation revealed that the state registries have serious quality problems and exposed an approach to public policy that indiscriminately exploited databases.

In addition, these targeting practices imply a form of violence for individuals and families who are left out. We will never know how many people were unfairly excluded in the crosschecks of databases of uneven quality. However, we can analyze the narrative behind the Solidarity Income initiative. The bureaucracy is using these data-intensive solutions to avoid a political discussion that involves deciding who should be eligible for social redistribution in a time of crisis, what are the life consequences for the excluded, and what alternatives they might have. For example, the selection of beneficiaries in the South of the country—based on high levels of poverty, unemployment, informality, and inequality—are the results of arbitrary data-based mechanisms. Why did the NDO draw a line between potential beneficiaries in a pandemic on 8.7 million families when there were 17 million at risk of falling into poverty?[4] This question requires a political discussion that depends on transparency and participation.

Silencing Dissenting Voices Through Data

The design of the Solidarity Income system makes it impossible for citizens to reclaim their rights. People are unable to request that information be corrected, obtain information on decision procedures, and make a claim to challenge the results. What's more, the system does not allow potential beneficiaries to actively participate in the construction of the social policy that gives them agency in an emergency crisis. This is why I contend that the recent initiatives of Colombian state take away people's agency to demand their social rights and actively participate in a political discussion that shapes them. Moreover, Solidarity Income is based on an incorrect assumption. Data does not faithfully correspond to reality, but represents the politics of government. Most importantly, it represents the social inequalities that shape it. Communities in poverty could be easily invisibilized or misrepresented by that system.

Technocrats are hiding behind data and technological solutions to deny people the agency to participate in the state's decisions, claim injustice, and claim the protection of their social

2 'Inconsistencias en base de datos de Ingreso Solidario: Registraduria', *El Tiempo*, 15 April 2020, https://www.eltiempo.com/politica/las-inconsistencias-en-las-bases-de-ingreso-solidario-484754.

3 Government of Colombia, Departamento Nacional de Planeación, 'Programa Ingreso Solidario', 20 April 2020, https://ingresosolidario.dnp.gov.co/documentos/Ingreso_Solidario%20_Plenaria.pdf.

4 Government of Colombia, 'Programa Ingreso Solidario'.

rights. They reportedly dismiss citizens' complaints as "myths" and deny the agency of the citizens.[5] The official line has been that "there are no mistakes."[6] In other words, Colombians are facing a government that unilaterally claims to know the people in need and denies their participation in the process. The government even claims that dissenting voices are abusive; "they are being manipulated" or "they want to skip the line."[7] Technocrats use technologies and data to avoid having political discussions.

In sum, Solidarity Income is an example of the gloomy future of social policy in which people have fewer mechanisms to reclaim their rights vis-a-vis the State. It is also evidence that the real beneficiaries will emerge from the data traces that Colombian citizens are inadvertently leaving, and not from a conscious exercise in active citizenship. The Colombian government might be selling the program as an innovation, but it is nothing more than a large-scale experiment in rolling out a data-intensive social policy scheme that allows the state to "automatically" determine who deserves welfare support. Unfortunately, this is a policy designed to eliminate (so-called) inclusion errors, rather than for including citizens with agency. And this dark system will use as much data as possible to find the fewest possible beneficiaries.

References

'Inconsistencias en base de datos de Ingreso Solidario: Registraduria', *El Tiempo*, 15 April 2020, https://www.eltiempo.com/politica/las-inconsistencias-en-las-bases-de-ingreso-solidario-484754.

Government of Colombia, Departamento Nacional de Planeación. 'Manual Operativo Programa Ingreso Solidario', 21 March 2020, https://ingresosolidario.dnp.gov.co/documentos/Manual_Operativo-Ingreso-Solidario.pdf.

Government of Colombia. 'Programa Ingreso Solidario', Departamento Nacional de Planeación, 20 April 2020, https://ingresosolidario.dnp.gov.co/documentos/Ingreso_Solidario%20_Plenaria.pdf.

Rodríguez Gómez, José David. 'En Usme y Ciudad Bolívar politiqueros quieren presionar: Claudia López', *RCN Radio*, 16 April 2020, https://www.rcnradio.com/bogota/claudia-lopez-responde-polemica-por-contratos-de-alcaldia-en-emergencia.

5 Ibid.

6 Ibid.

7 José David Rodríguez Gómez, 'En Usme y Ciudad Bolívar politiqueros quieren presionar: Claudia López', *RCN Radio*, 16 April 2020, https://www.rcnradio.com/bogota/claudia-lopez-responde-polemica-por-contratos-de-alcaldia-en-emergencia.

21. A PANDEMIA E A NOVA ORDEM SOCIODIGITAL NO SUL GLOBAL: O CASO DE SÃO PAULO

LARISSA G. DE MAGALHÃES

The Pandemic and the New Sociodigital Order in the Global South: The Case of São Paulo

What happens when the digital city encounters large-scale disasters like the COVID-19 pandemic? This case study of São Paulo, Brazil illustrates how the pandemic has exacerbated numerous inequalities. In the largest metropolis in Latin America, the population lives in uneven socioeconomic and cultural conditions. Marginalized groups in the city shoulder the greatest risks of the pandemic, while struggling to access and use the internet. As a result of these precarious conditions, an "inequality virus" has emerged out of the pandemic.

Nas últimas duas décadas, a proliferação de tecnologias digitais apoiou um processo ambicioso de digitalização de ecossistemas urbanos complexos, incluindo as de megacidades como São Paulo, Brasil. Mas o que acontece quando essa tendência se choca com desastres e emergênccias em massa como o COVID-19? Esses momentos de intensa crise representam um ponto de virada na governança dos habitats urbanos, expondo a urgência da capacidade de resposta baseada em dados, apoiada pelos avanços da tecnologia.

Durante situações de crise, ferramentas analíticas e técnicas de aprendizado de dados podem apoiar os tomadores de decisão com grandes quantidades de dados, por exemplo, acionando alertas e ajudando os governos a identificar as principais linhas de frente. No entanto, no mundo em desenvolvimento, grandes setores da população permanecem excluídos da esfera digital, e mesmo projetos de dados abertos liderados pelo governo podem levar à sub-representação de certos grupos.[1] À medida que muitos desses países se tornam cada vez mais ativos on-line, é provável que as desigualdades, incluindo o fosso digital, comprometam as tentativas de usar dados para melhorar a qualidade de vida dos cidadãos. Os padrões de desigualdade das megacidades, em particular, revelam que as desigualdades sociais, econômicas, culturais e digitais ainda são um desafio grave na definição das melhores estratégias para combater crises que afetam toda a população.

Este artigo analisa o caso de São Paulo, Brasil—a cidade mais populosa das Américas, com seus 12 milhões de habitantes—para explorar como as oportunidades de acesso e o uso da internet no centro do projeto da cidade digital seguem o padrão desigualdades

1 Daniel A. Hashimoto, Guy Rosman, Daniela Rus and Ozanan R. Meireles, 'Artificial Intelligence in Surgery: Promises and Perils', *Annuals of Surgery*, July 2018; 268(1)

estruturais, contribuindo, em última análise, para reforçá-las. Essas desigualdades afetam mais severamente os lares e famílias nas áreas mais periféricas e mais pobres da cidade.

Segregação Digital e a Cidade

Durante períodos de emergências, os tomadores de decisão podem ser inundados com dados. De acordo com a OCDE (2019), no entanto, as lacunas de dados causadas pelas desigualdades existentes podem criar problemas para aqueles afetados por políticas criadas por bancos de dados incompletos ou sub-representativos. Outro problema é o uso de sistemas automatizados para coletar dados, especialmente de grupos que podem ter um rótulo menos confiável do que as maiorias, devido à presença "incorporada" na rede.[2]

Como a tomada de decisões com base na falta de dados pode negligenciar as linhas de pobreza traçadas na paisagem urbana, isso pode desencadear custos de sobrevivência mais altos em áreas já marcadas pela segregação social. É durante emergências de larga escala como o COVID-19 que essas lacunas de dados se tornam particularmente problemáticas porque as desigualdades levam os menos privilegiados ao mais alto nível de risco para o vírus, e levam às piores conseqüências socioeconômicas da pandemia.[3]

A geografia digital do país indica um panorama de desigualdades em relação ao uso da internet[4], embora nos últimos 15 anos o acesso à internet tenha atingido 70% dos domicílios.[5] Por um lado, o Brasil avançou na criação de leis, normas, políticas e práticas projetadas para abrir dados[6], como a criação da Infraestrutura Nacional de Dados Abertos[7],a Lei de Acesso à Informação[8], a Estrutura Civil da internet[9], a Política de Dados Abertos[10], Política

2 Elisabeth Beaunoyer, Sophie Dupéré and Matthieu J. Guitton, 'COVID-19 and Digital Inequalities: Reciprocal Impacts and Mitigation Strategies', *Computers in Human Behavior*, 111, 2020,

3 Elisabeth Beaunoyer, Sophie Dupéré and Matthieu J. Guitton, 'COVID-19 and Digital Inequalities: Reciprocal Impacts and Mitigation Strategies', Computers in Human Behavior, 111, 2020,

4 'PNAD Contínua TIC 2018: Internet Chega a 79,1% dos Domicílios do País', *Agência IBGE*, 29 April 2020, https://agenciadenoticias.ibge.gov.br/agencia-sala-de-imprensa/2013-agencia-de-noticias/releases/27515-pnad-continua-tic-2018-internet-chega-a-79-1-dos-domicilios-do-pais.

5 Núcleo de Informação e Coordenação do Ponto BR, 'Desigualdades Digitais no Espaço Urbano: Um Estudo Sobre o Acesso e o Uso da Internet na Cidade de São Paulo', São Paulo: Comitê Gestor da Internet no Brasil, 2019.

6 Núcleo de Informação e Coordenação do Ponto BR, 'Assessing Internet Development in Brazil: Using UNESCO's Internet Universality ROAM-X Indicators', 2020, https://cetic.br/media/docs/publicacoes/8/20200117094619 Assessing_Internet_Development_in_Brazil.pdf.

7 Governo do Brasil, 'Diário Oficial da União', 13 April 2012, https://www.gov.br/governodigital/pt-br/legislacao/InstrucaoNormativaINDA42012.pdf.

8 Presidência da República, 'Lei Nº 12.527', 18 November 2011, http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2011/lei/l12527.htm.

9 Presidência da República, 'Lei Nº 12.965', 23 April 2014, http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2014/lei/l12965.htm.

10 Presidência da República, 'Decreto Nº 8.777', 11 May 2016, http://www.planalto.gov.br/ccivil_03/_Ato2015-2018/2016/Decreto/D8777.htm.

de Governança de Dados[11],Estratégia Digital do Governo[12] e a implementação do 4º Plano Nacional de Parceria com a Parceria Aberta do Governo.[13] Por outro lado, no entanto, continua a haver uma estratificação digital no país que coincide com as desigualdades na distribuição de renda e que se reflete na escassa capacidade de ser parte ativa na economia digital e na produção formal de dados. O custo da "banda larga" é outro fator que afeta as desigualdades de acesso, com as áreas rurais ou periféricas sendo penalizadas. Além disso, os níveis de literacia digital e acessibilidade da internet são baixos.[14]

Na região metropolitana de São Paulo, que conta com 12 milhões de habitantes, a conectividade é superior à média nacional, atingindo 79% dos domicílios.[15] Porém, somente a conectividade, no entanto, não é suficiente para garantir que as pessoas possam se beneficiar da internet. Além disso, a internet é relevante quando as pessoas têm as habilidades e a confiança necessárias para usá-la. Em São Paulo, as oportunidades de acesso e uso da internet aparecem segregadas no território urbano, seguindo o padrão das desigualdades estruturais existentes. Isso sugere que, no caso de São Paulo, as desigualdades relacionadas ao mundo digital são condicionadas pela matriz de vulnerabilidades que afetam famílias e domicílios no território urbano, onde os padrões observados reproduzem desigualdades intra-urbanas.

O "Vírus da Desigualdade"

Nesse cenário, a pandemia exacerba as desigualdades existentes. Um exame mais detalhado da desigualdade e do acesso à internet mostra como os arredores de São Paulo são o epicentro da propagação de outro vírus ao lado do COVID-19, que podemos chamar de "vírus da desigualdade". Dados do grupo de pesquisa independente COVID-19 Observatory indicam que na cidade, as pessoas de cor têm 62% mais chances de morrer do que os brancos.[16] Se olharmos para o mapa de mortes confirmadas ou suspeitas de coronavírus nos distritos de São Paulo, há uma clara sobreposição de desigualdades, ou seja, quanto mais ampla a matriz de vulnerabilidade social, maior a letalidade do vírus. O risco de morte por COVID-19 é maior nas regiões Leste, Norte e parte das regiões Sudeste, onde também são os distritos com maior número de mortes por COVID-19: Brasilândia e Sapopemba, entre os distritos menos desenvolvidos da região na cidade de São Paulo.

Caso contrário, grande parte das regiões Sul (centro expandido), Centro-Oeste e Sudeste, com maior renda per capita, atualmente apresenta taxas de mortalidade padronizadas abaixo

11 Presidência da República, 'Decreto Nº 10.332', 28 April 2020, http://www.planalto.gov.br/ccivil_03/_ato2019-2022/2020/decreto/D10332.htm.
12 Presidência da República, 'Decreto Nº 10.332'.
13 Governo do Brasil, '4º Plano de Ação Brasileiro', 15 September 2020, https://www.gov.br/cgu/pt-br/governo-aberto/a-ogp/planos-de-acao/4o-plano-de-acao-brasileiro.
14 'Tic Domicílios 2019', Cetic.Br, 26 May 2020, https://cetic.br/media/analises/tic_domicilios_2019_coletiva_imprensa.pdf.
15 'Desigualdades Digitais no Espaço Urbano', Cetic.Br, 2019, https://cetic.br/media/docs/publicacoes/7/11454920191028-desigualdades_digitais_no_espaco_urbano.pdf.
16 Observatório COVID-19 BR, https://covid19br.github.io/.

da média municipal.[17] No entanto, as condições de moradia são um fator extremamente relevante, uma vez que os bairros centrais que concentram cortiços, aposentadorias e pessoas em situação de rua têm um número significativo de mortes. Em suma, o endereço residencial contribui para definir o impacto do coronavírus, sua gravidade e letalidade, pois é indicativo de outras desigualdades persistentes e destrutivas.

Segundo a Secretaria Municipal de Saúde, em 30 de abril, houve um aumento de 45% nas mortes nos 20 distritos mais pobres da cidade. O número também pode refletir a distribuição discrepante de unidades de terapia intensiva na cidade, uma vez que 60% dos leitos do Sistema Público de Saúde estão concentrados nas regiões mais ricas e centrais da cidade.

Rumo a um Regime Sociogital pós COVID-19

O que mais o futuro próximo traz para megacidades como São Paulo? Uma nova abordagem à governança baseada em dados, que podemos chamar de regime sociodigital, provavelmente será estendida aos países do sul.[18] A pandemia mostrou como estamos vivendo uma nova ordem social, que combina recursos que facilitam o acesso físico às tecnologias da informação e comunicação – infraestrutura de acesso à internet e habilidades digitais no nível individual. Essas combinações geram capital digital.[19] Como os governos não criam políticas ou incentivos para a infraestrutura de acesso ou a alfabetização digital, há um esvaziamento do capital digital. Esse déficit é impulsionado pelas desigualdades estruturais que caracterizam um regime sociodigital. Em particular, na corrida para criar plataformas de vigilância para epidemias e sistemas de previsão de emergência, os sistemas de inteligência artificial (IA) "produzem" evidências políticas projetadas a partir da agregação dos chamados big data[20] e outras formas de informações produzidas pelo governo.[21] No entanto, os grupos marginalizados e os excluídos digitalmente continuam a sobreviver dentro das margens impostas pelos regimes sócio-digitais. O risco de reproduzir e perpetuar desigualdades nos ambientes altamente tecnológicos do futuro é real e não deve ser subestimado. Grupos marginalizados sobrevivem em uma complexa matriz de vulnerabilidades, variando das dimensões econômica, social e jurídica às dimensões cultural, digital e política. O risco é que dados ausentes ou mesmo dados mal utilizados se tornem mais um subproduto da desigualdade.

17 Observatório COVID-19 BR.

18 Tom Cockburn, 'Emerging Impacts of Sociodigital Technology in the "New Normal" of the Post-COVID19 Resilience, Regrowth and Renewal Period 2020-2021 and Beyond' (Presentation Slides, 23 April 2020), http://dx.doi.org/10.2139/ssrn.3583503.

19 Massimo Ragnedda and Maria Laura Ruiu, 'Digital Capital: A Bourdieusian Perspective on the Digital Divide', Bingley: Emerald, 2020.

20 Quoc-Viet Pham, Dinh C. Nguyen, Thien Huynh-The, Wom-Joo Hwang and Pubudu N. Pathirana, 'Artificial Intelligence (AI) and Big Data for Coronavirus (COVID-19) Pandemic: A Survey on the State-of-the-Arts', Preprints 2020.

21 Mihaela van der Schaar et al., 'How Artificial Intelligence and Machine Learning Can Help Healthcare Systems Respond to COVID-19', 2020, https://www.vanderschaar-lab.com/NewWebsite/covid-19/paper.pdf.

Vários estudos indicam que grupos marginalizados produzem menos dados, pois não estão envolvidos em atividades de geração de dados, não estão representados na economia formal, têm acesso desigual e menor capacidade de se envolver on-line.[22] Portanto, enquanto mais dados estão disponíveis para projetar políticas e soluções, e para que os formuladores de políticas incluam demandas e grupos sociais historicamente excluídos, os dados acabam reproduzindo os padrões de discriminação e exclusão presentes no mundo digital, resultando em políticas públicas potencialmente discriminatórias. Ou seja, ter muitos dados não significa necessariamente que os dados sejam representativos e confiáveis ou que os governos possam usá-los.

Então, o que o padrão de desigualdade observado em megacidades como São Paulo nos diz sobre o futuro dos regimes sociodigitais iminentes? Reduzir as desigualdades nos centros urbanos é um desafio global, especialmente no contexto atual em que dados e tecnologias são combinados com possíveis soluções de emergência resultantes de desenvolvimentos como mudanças climáticas, desastres tecnológicos e pandemias. Mas as desigualdades no acesso e no uso da internet revelam a importância contínua da luta por direitos e acesso a bens, serviços e oportunidades de qualidade.

Embora coexistam múltiplas desigualdades, as luzes lançadas pelas desigualdades digitais refletem a falta de políticas públicas efetivas e eficientes para todos/as. O mundo digital reproduz os modelos de negócios da economia física, reforçando as lacunas existentes no acesso aos benefícios. Espera-se que o fim do isolamento também seja o fim do isolamento dos pobres, negros e desajustados nas cidades. As cidades estão engajadas na construção de soluções para o rescaldo do COVID-19, que nos convida a intervenções em educação, saúde, infraestrutura, participação, colaboração e transparência pública. A construção de capacidades digitais e responsabilidade compartilhada deve ser uma característica duradoura dos governos nas cidades.

References

'PNAD Contínua TIC 2018: Internet Chega a 79,1% dos Domicílios do País', *Agência IBGE*, 29 April 2020, https://agenciadenoticias.ibge.gov.br/agencia-sala-de-imprensa/2013-agencia-de-noticias/releases/27515-pnad-continua-tic-2018-internet-chega-a-79-1-dos-domicilios-do-pais.

Beaunoyer, Elisabeth, Sophie Dupéré and Matthieu J. Guitton. 'COVID-19 and Digital Inequalities: Reciprocal Impacts and Mitigation Strategies', *Computers in Human Behavior*, 111, 2020, https://doi.org/10.1016/j.chb.2020.106424.

Cockburn, Tom. 'Emerging Impacts of Sociodigital Technology in the "New Normal" of the Post-COVID19 Resilience, Regrowth and Renewal Period 2020-2021 and Beyond' (Presentation Slides, 23 April 2020), http://dx.doi.org/10.2139/ssrn.3583503.

Giest, Sarah and Annamarie Samuels. '"For good measure": data gaps in a big data world', *Policy Sciences* 53, 2020: 559–569.

22 Sarah Giest and Annamarie Samuels, '"For good measure": data gaps in a big data world', *Policy Sciences* 53, 2020.

Governo do Brasil. 'Diário Oficial da União', 13 April 2012, https://www.gov.br/governodigital/pt-br/legislacao/InstrucaoNormativaINDA42012.pdf.

Governo do Brasil, '4º Plano de Ação Brasileiro', 15 September 2020, https://www.gov.br/cgu/pt-br/governo-aberto/a-ogp/planos-de-acao/4o-plano-de-acao-brasileiro.

Hashimoto, Daniel A., Guy Rosman, Daniela Rus and Ozanan R. Meireles. 'Artificial Intelligence in Surgery: Promises and Perils', *Annuals of Surgery*, July 2018; 268(1), DOI: 70–76. doi:10.1097/SLA.0000000000002693.

Núcleo de Informação e Coordenação do Ponto BR. 'Assessing Internet Development in Brazil: Using UNESCO's Internet Universality ROAM-X Indicators', 2020, https://cetic.br/media/docs/publicacoes/8/20200117094619 Assessing_Internet_Development_in_Brazil.pdf.

Núcleo de Informação e Coordenação do Ponto BR. 'Desigualdades Digitais no Espaço Urbano: Um Estudo Sobre o Acesso e o Uso da Internet na Cidade de São Paulo', *São Paulo: Comitê Gestor da Internet no Brasil*, 2019.

Pham, Quoc-Viet, Dinh C. Nguyen, Thien Huynh-The, Wom-Joo Hwang and Pubudu N. Pathirana. 'Artificial Intelligence (AI) and Big Data for Coronavirus (COVID-19) Pandemic: A Survey on the State-of-the-Arts', Preprints 2020, 2020040383 (doi: 10.20944/preprints202004.0383.v1).

Presidência da República. 'Lei Nº 12.527', 18 November 2011, http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2011/lei/l12527.htm

Presidência da República. 'Lei Nº 12.965', 23 April 2014, http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2014/lei/l12965.htm

Presidência da República. 'Decreto Nº 8.777', 11 May 2016, http://www.planalto.gov.br/ccivil_03/_Ato2015-2018/2016/Decreto/D8777.htm

Presidência da República. 'Decreto Nº 10.332', 28 April 2020, http://www.planalto.gov.br/ccivil_03/_ato2019-2022/2020/decreto/D10332.htm

Ragnedda, Massimo and Maria Laura Ruiu. Digital Capital: A Bourdieusian Perspective on the Digital Divide, *Bingley: Emerald*, 2020.

van der Schaar, Mihaela et al.. 'How Artificial Intelligence and Machine Learning Can Help Healthcare Systems Respond to COVID-19', 2020, https://www.vanderschaar-lab.com/NewWebsite/covid-19/paper.pdf.

22. COVID-19 DATA ON THE FRINGES: THE SCOTTISH STORY

ANGELA DALY/AINGEAL NÍ DHÁLAIGH

COVID-19 hit at a time when the United Kingdom was vulnerable, reeling from its exit from the European Union and wracked by ongoing issues over the devolved nations, particularly Northern Ireland and Scotland, both of which had voted to remain in the EU during the 2016 referendum. Scotland had its own 2014 referendum on independence from the UK, which was narrowly won by the "No" side. While a pro-Brexit, right-wing Conservative government rules in London, the devolved administration in Edinburgh is led by the center-left Scottish National Party (SNP) government and first minister Nicola Sturgeon.

However, when the pandemic first hit the UK in the early months of 2020, there was no discernible difference in approach between the Scottish government and the UK Government. In March 2020, both Scotland and the wider UK imposed lockdowns later than in other European countries. By mid-March, both had abandoned manual contact tracing around the same time that "Big Tech" firms such as Palantir were invited to meetings with the UK government.[1] Later that month, NHSX (the English public health service unit tasked with setting policy and best practice for digital technologies and data in health) started developing a contact-tracing app amid techno-deterministic claims from the Johnson administration in London that we could digitize our way out of the pandemic.[2]

Health is a devolved power in the UK, so the Scottish government has full responsibility for health policy in Scotland. In May 2020, we began to see divergence between Scotland the wider UK on pathways out of lockdown and also on data, with the publication of the Test, Trace, Isolate, Support policy.[3] This policy signalled the relaunch of Scotland's contact tracing scheme, foregrounding manual contact tracing which may then be supplemented by a "web-based" digital "tool," not an app. But data in the context of COVID-19 is not solely produced by contact tracing and apps, even though they have been the focus of significant debate and advocacy. The data the government releases and restrains about COVID-19 infections and prevalence also vitally informs political debates and personal choices. The situation in Scotland presents a complex picture of the tensions between health, the economy and politics both at the local and global levels.

1 Gian Volpicelli, 'Inside Dominic Cummings' coronavirus meeting with big tech', *Wired*, 12 March 2020, https://www.wired.co.uk/article/dominic-cummings-coronavirus-big-tech.

2 Andrea Downey, 'Timeline: Where are we at with the NHS contact-tracing app', *DigitalHealth*, 28 September 2020, https://www.digitalhealth.net/2020/09/timeline-what-happened-to-the-nhs-contact-tracing-app/.

3 Scottish Government, 'COVID-19 - Test, Trace, Isolate, Support', May 2020, https://tinyurl.com/yawdxwqf.

Contact Tracing and the app

Scotland's (belated) approach to contact tracing is one of the most prominent examples of its divergence with the UK central government on COVID-19 data policy. Since May, Scotland has set up its own contact tracing system to build capacity in its public healthcare service (NHS Scotland). This approach contrasts with the outsourcing of this service to private companies that has occurred in England. The Scottish government has also expressed its reservations about the NHSX app and the lack of consultation with devolved administrations.[4] However, it still came as a surprise in August when the Scottish government announced that it was launching a contact-tracing app and would be adopting the Republic of Ireland's model and software, developed by Irish company Nearform.[5]The Northern Irish administration has also adopted this model which makes sense given political and geographical reasons, principally the land border with the Republic. The Scottish government's decision to adopt the app is more overtly political, since its land border is with England rather than Ireland. However, the Republic of Ireland's app is reasonably privacy-protecting through its adoption of the Google-Apple app protocol. It has decentralized design, is purpose limited, and already has a track record of functioning reasonably well. The same cannot be said of the original NHSX app. Even the NHSX app's current incarnation, released after the Scottish app, still seems to be suffering from malfunctions.[6]

The Scottish overnment may have adopted the Republic of Ireland's app for politically pragmatic reasons, but it leaves the nation in a position where it has followed the lead of another nation-state rather than its own central government in London. This has led to a "Gaelic Fringe" approach to apps and contact tracing across the contested borders of nation-states in the islands of Britain and Ireland.[7] The outcome of this approach may be the establishment of Scotland's digital sovereignty in a similar way to the movement in Catalonia, another separatist region in Spain.[8] This is all the more significant given Scottish Parliament elections in 2021 that the SNP are tipped to win by a landslide, and calls for another independence referendum, in which polls consistently show a pro-independence vote in the lead.

Yet the need to adhere to the Google-Apple protocol in order to create functioning apps does limit political entities' digital sovereignty, both of Scotland and full nation-states which have had to use this protocol for their own apps. The Google-Apple protocol has promoted a measure of privacy protection sorely lacking in the UK Government's initial NHSX app. Still,

4 Scottish Government, 'COVID-19 - Test, Trace, Isolate, Support'.

5 Scottish Government, 'Contact tracing app development', 31 July 2020, https://www.gov.scot/news/contact-tracing-app-development/.

6 Rowland Manthorpe, 'Coronavirus: Some users of NHS tracing app incorrectly given COVID-19 exposure alerts', *Sky News*, 1 October 2020, https://news.sky.com/story/coronavirus-some-users-of-nhs-tracing-app-incorrectly-given-covid-19-exposure-alerts-12086225.

7 Angela Daly and Maurice Mulvenna, 'UK contact tracing apps: the view from Northern Ireland and Scotland', *Ada Lovelace Institute*, 24 September 2020, https://www.adalovelaceinstitute.org/uk-contact-tracing-apps-the-view-from-northern-ireland-and-scotland/.

8 John Biggs, 'Catalonia is moving to achieve digital independence using blockchain', *Coindesk*, 6 February 2020, https://www.coindesk.com/catalonia-is-moving-to-achieve-digital-independence-using-blockchain.

the need to adopt this protocol for a successful app demonstrates and reinforces the power of "Big Tech" firms.

Government Transparency

The Scottish government has undoubtedly been more transparent about its COVID-19 app than its counterparts in London have been about the NHSX app. A series of openDemocracy investigations have demonstrated that "Big Tech" firms provided the UK government with digital infrastructure to manage the pandemic.[9] However, the Scottish government does not have a flawless record on its own transparency during this period. In Scotland, freedom of information (FoI) laws were relaxed at the outbreak of the pandemic in April, allowing government agencies a threefold extension to their deadlines for responding to freedom of information requests. These measures were strongly criticized at the time.[10] Even the UK government did not relax FoI laws to the same extent. The Index on Free Expression criticized the Scottish government, comparing it to Bolsonaro's Brazil for its restrictions of freedom of information rights during the pandemic.[11]

Access to public data and information extends beyond FoI. Who is infected with COVID-19, who has died from it, and where have been key questions to ask in order to understand whether certain groups have been more impacted than others.[12] In England, people from Black and Minority Ethnic (BAME) backgrounds have been more susceptible to infection and death from COVID-19 for reasons including socio-economic circumstances, structural racism, and pre-existing health inequalities.[13] Scotland has a significant minority population of South Asian origin, and there was anecdotal evidence in spring 2020 that this community was experiencing a disproportionate amount of COVID-19 deaths. The Coalition for Racial Equality and Rights (CRER), a Scottish NGO, raised concerns about the lack of data and the poor quality of the data that did exist.[14] Finally, in July the National Records of Scotland published a study on ethnicity and COVID-19 in Scotland which found that South Asian people were nearly twice as likely to die of COVID-19.[15] This finding is in line with outcomes in other parts of the

9 Mary Fitzgerald and Cori Crider, 'Under pressure, UK government releases NHS COVID data deals with big tech', *openDemocracy*, 5 June 2020, https://www.openDemocracy.net/en/under-pressure-uk-government-releases-nhs-covid-data-deals-big-tech/.

10 James McEnaney and Rob Edwards, 'Relief as opposition parties move to restore information rights', *The Ferret*, 15 May 2020, https://theferret.scot/information-rights-opposition-parties-coronavirus/.

11 Mark Frary, 'How FOI laws are being rewritten during the COVID-19 crisis', *Index on Censorship*, 1 May 2020, https://www.indexoncensorship.org/2020/05/how-foi-laws-are-being-rewritten-during-the-covid-19-crisis/.

12 See chapter 15 in this volume (pp. 106-109)

13 Benjamin Butcher and Joel Massey, 'Why are more people from BAME backgrounds dying from coronavirus?', *BBC News*, 19 June 2020, https://www.bbc.co.uk/news/uk-52219070.

14 Jatin Haria, 'COVID-19 and ethnicity in Scotland: Where's the data?', *Coalition for Racial Equality and Rights*, 22 June 2020, https://www.crer.scot/post/2020/06/22/covid-19-and-ethnicity-in-scotland-wheres-the-data.

15 Emily Woods, 'Deaths from COVID-19 almost twice as likely among South Asian people in Scotland', *Holyrood*, 9 July 2020, https://www.holyrood.com/news/view,deaths-from-covid19-almost-twice-as-likely-among-south-asian-people-in-scotland.

UK, but the Scottish data was made available later than elsewhere. CRER is still calling for more and better data to be generated and released on COVID-19 and ethnicity in Scotland.[16]

Data and Marketization

For contact tracing, the Scottish government has followed a less neoliberal and privatized approach to England, where these functions have been outsourced to private companies. However, marketization and privatisation of other public functions have obfuscated what data is available to the public in Scotland. Like elsewhere in the UK and other western countries, care homes for the elderly and disabled have been severely impacted by COVID-19, with many residents dying of the disease. One notorious example is the private Home Farm care home on the Isle of Skye, where ten residents died of the virus. It was run by HC-One, one of the UK's largest care home providers.[17] Care home regulatory bodies in both England and Scotland have refused to make public the numbers of deaths in specific care homes, with part of the justification being that this would negatively affect providers' commercial interests.[18]

While so far not as deadly, marketized universities in Scotland brought students back to campus for the start of the new academic year and have experienced COVID-19 outbreaks in shared student accommodation from September 2020.[19] There has been patchy information about COVID-19 cases among campus communities; some institutions have released this data and others have not, leading to the UniCOVID site being set up by two University of Sussex academics to track developments.[20] It seems that universities are becoming more forthcoming about tracking their own COVID-19 outbreaks and releasing data publicly. However, there is no systematic way to track data, and not every institution is readily providing it. Marketisation of this public service has led to students returning prematurely to campuses and may have contributed to institutions' reticence in compiling and publicising data about COVID-19 cases.

The Scottish digital story demonstrates a different path from that of the UK central government. Notably, the approach to contact tracing remains within the public health service rather than being outsourced to private providers, and also represents a radical alignment with Dublin on the app. Along with the Belfast administration's embrace of the Nearform software, we see a "Gaelic Fringe" approach to contact-tracing apps emerging, which is also in line with European standards more generally, and thus represents further cleavage from the pro-Brexit London

16 Jennifer Galbraith, 'Time for Scottish Government to walk the walk on COVID-19 and ethnicity', Coalition for Racial Equality and Rights, 22 September 2020, https://www.crer.scot/post/time-for-scottish-government-to-walk-the-walk-on-covid-19-and-ethnicity.

17 Severin Carrell, 'Skye care home hit by 10 coronavirus deaths allowed to keep licence', *The Guardian*, 20 May 2020, https://www.theguardian.com/uk-news/2020/may/20/skye-care-home-hit-10-coronavirus-deaths-keep-licence-hc-one-home-farm.

18 Robert Booth, 'Data on Covid care home deaths kept secret to protect commercial interests', *The Guardian*, 27 August 2020, https://www.theguardian.com/world/2020/aug/27/data-covid-care-home-deaths-kept-secret-protect-commercial-interests.

19 Eve Livingston and Donna Ferguson, 'We came all this way to start a new life: the misery of Glasgow's lockdown freshers', *The Guardian*, 26 September 2020, https://www.theguardian.com/uk-news/2020/sep/26/we-came-all-this-way-to-start-a-new-life-the-misery-of-glasgows-lockdown-freshers.

20 UniCovid. Available from https://unicovid.uk/.

government. While the Scottish government may have adopted this approach for pragmatic reasons, in outcome it may be seen as a further step towards Scotland's digital sovereignty.

The worst excesses of the UK government's privatized and digitized COVID-19 response have not been replicated in Scotland, but things have not been perfect either. Transparency, who is counted in data, and what data is available to the public have been influenced negatively by logics of privatisation and marketization in public functions, particularly in care homes. The needs of ethnic minorities to be counted and made visible in data, when COVID-19 has disproportionately affected them, were not adequately addressed and taken account of by the Scottish government. Scotland shows the potential for the margins to forge different paths on data than the cores. However, Scotland also demonstrates the limits of political autonomy in a world of "Big Tech," neoliberal logics, and inequalities. With COVID-19, data is power and data is political—this is as true in Scotland as it is elsewhere.

REFERENCES

Biggs, John. 'Catalonia is moving to achieve digital independence using blockchain', Coindesk, 6 February 2020, https://www.coindesk.com/catalonia-is-moving-to-achieve-digital-independence-using-blockchain.

Booth, Robert. 'Data on Covid care home deaths kept secret to protect commercial interests', The Guardian, 27 August 2020, https://www.theguardian.com/world/2020/aug/27/data-covid-care-home-deaths-kept-secret-protect-commercial-interests.

Butcher, Benjamin and Joel Massey. 'Why are more people from BAME backgrounds dying from coronavirus?', BBC News, 19 June 2020, https://www.bbc.co.uk/news/uk-52219070.

Carrell, Severin. 'Skye care home hit by 10 coronavirus deaths allowed to keep licence', The Guardian, 20 May 2020, https://www.theguardian.com/uk-news/2020/may/20/skye-care-home-hit-10-coronavirus-deaths-keep-licence-hc-one-home-farm.

Daly, Angela and Maurice Mulvenna. 'UK contact tracing apps: the view from Northern Ireland and Scotland', Ada Lovelace Institute, 24 September 2020, https://www.adalovelaceinstitute.org/uk-contact-tracing-apps-the-view-from-northern-ireland-and-scotland/.

Downey, Andrea. 'Timeline: Where are we at with the NHS contact-tracing app', DigitalHealth, 28 September 2020, https://www.digitalhealth.net/2020/09/timeline-what-happened-to-the-nhs-contact-tracing-app/.

Fitzgerald, Mary and Cori Crider. 'Under pressure, UK government releases NHS COVID data deals with big tech', openDemocracy, 5 June 2020, https://www.openDemocracy.net/en/under-pressure-uk-government-releases-nhs-covid-data-deals-big-tech/.

Frary, Mark. 'How FOI laws are being rewritten during the COVID-19 crisis', Index on Censorship, 1 May 2020, https://www.indexoncensorship.org/2020/05/how-foi-laws-are-being-rewritten-during-the-covid-19-crisis/.

Galbraith, Jennifer. 'Time for Scottish Government to walk the walk on COVID-19 and ethnicity', Coalition for Racial Equality and Rights, 22 September 2020, https://www.crer.scot/post/time-for-scottish-government-to-walk-the-walk-on-covid-19-and-ethnicity.

Haria, Jatin. 'COVID-19 and ethnicity in Scotland: Where's the data?', Coalition for Racial Equality and Rights, 22 June 2020, https://www.crer.scot/post/2020/06/22/covid-19-and-ethnicity-in-scotland-wheres-the-data.

Livingston, Eve and Donna Ferguson. 'We came all this way to start a new life: the misery of Glasgow's lockdown freshers', The Guardian, 26 September 2020, https://www.theguardian.com/uk-news/2020/sep/26/we-came-all-this-way-to-start-a-new-life-the-misery-of-glasgows-lockdown-freshers.

Manthorpe, Rowland. 'Coronavirus: Some users of NHS tracing app incorrectly given COVID-19 exposure alerts', Sky News, 1 October 2020, https://news.sky.com/story/coronavirus-some-users-of-nhs-tracing-app-incorrectly-given-covid-19-exposure-alerts-12086225.

McEnaney, James and Rob Edwards. 'Relief as opposition parties move to restore information rights', The Ferret, 15 May 2020, https://theferret.scot/information-rights-opposition-parties-coronavirus/.

Massimo Ragnedda and Maria Laura Ruiu, 'COVID-19 in the UK: The exacerbation of inequality and a digitally-based response', in Stefania Milan, Emiliano Treré and Silvia Masiero (eds) *COVID-19 from the Margins. Pandemic Invisibilities, Policies and Resistance in the Datafied Society,* Institute of Network Culture, Amsterdam, 2021, pp. 106-109.

Scottish Government. 'COVID-19 - Test, Trace, Isolate, Support', May 2020, https://tinyurl.com/yawdx-wqf.

Scottish Government. 'Contact tracing app development', 31 July 2020, https://www.gov.scot/news/contact-tracing-app-development/.

UniCovid. Available from https://unicovid.uk/.

Volpicelli, Gian. 'Inside Dominic Cummings' coronavirus meeting with big tech', Wired, 12 March 2020, https://www.wired.co.uk/article/dominic-cummings-coronavirus-big-tech.

Woods, Emily. 'Deaths from COVID-19 almost twice as likely among South Asian people in Scotland', Holyrood, 9 July 2020, https://www.holyrood.com/news/view,deaths-from-covid19-almost-twice-as-likely-among-south-asian-people-in-scotland.

23. PANDEMIC PATERNALISM: A REFLECTION ON INDIGENOUS DATA FROM AOTEAROA

DONNA CORMACK & TAHU KUKUTAI

There are estimated to be more than 300 million Indigenous people in the world, spanning every continent, each with diverse histories and socio-political contexts.[1] The shared experiences of imperialism and colonialism have profoundly impacted Indigenous peoples' health and well-being, producing enduring disparities in most territories.[2] COVID-19 has sharpened structural inequalities, and Indigenous peoples in many countries have been disproportionately impacted by the pandemic, either directly (through infection and fatalities) or indirectly, by way of economic losses, social disruption, and discrimination.[3] Indigenous peoples have also experienced pandemic-related data injustices. Focusing on Aotearoa (New Zealand), this essay explores how hegemonic knowledge production practices have resulted in inequitable access to data about COVID-19 by Indigenous Māori communities. This inequity is situated within the wider context of ongoing colonialism, epistemic injustice, and the continuing resistance of Indigenous peoples.

As a member of the so-called "Digital 9" network, Aotearoa is considered one of the world's most digitally-advanced nations. Over the last decade, the government has eagerly embraced the use of "big data" in decision-making. Stats NZ, the national statistics office, is home to the world-leading Integrated Data Infrastructure (IDI), which links de-identified microdata about people and households from government datasets. Aotearoa is also one of few countries with a system-wide approach to collecting multiple measures of ethnicity and Indigeneity for use in public policy. Such data are used to monitor the government's obligations to Māori under the country's founding document, the 1840 Treaty of Waitangi.[4] Given these features, one might expect Aotearoa to be an exemplar when it comes to producing high-quality, timely

1 United Nations, *State of the World's Indigenous Peoples*, 2nd edition, 2015, https://www.un.org/development/desa/indigenouspeoples/publications/2015/09/state-of-the-worlds-indigenous-peoples-2nd-volume-health/.

2 Papaarangi Reid, Donna Cormack and Sarah-Jane Paine, 'Colonial histories, racism and health—The experience of Māori and Indigenous peoples', *Public Health* 172 ,2019.

3 Stephanie Carroll Rainie, Desi Rodriguez-Lonebear, Randall Akee, Annita Lucchesi and Jennifer Rai Richards, 'Indigenous data in the COVID-19 pandemic: Straddling erasure, terrorism and sovereignty', *Items*, 11 June 2020, https://items.ssrc.org/covid-19-and-the-social-sciences/disaster-studies/indigenous-data-in-the-covid-19-pandemic-straddling-erasure-terrorism-and-sovereignty/; Joseph Keawe'aimoku Kaholokula, Raynald A. Samoa, Robin E. S. Miyamoto, Neal Palafoxand Sheri-Ann Daniels, 'COVID-19 special column: COVID-19 hits native Hawaiian and Pacific Islander communities the hardest', *Hawaii Journal of Health & Social Welfare*, 79(5), 2020; Tamara Power, Denise Wilson, Odette Best, Teresa Brockie, Lisa Bourque Bearskin, Eugenia Millender and John Lowe, 'COVID-19 and Indigenous Peoples: An imperative for action', *Journal of Clinical Nursing* 29 (15-16), 2020.

4 Papaarangi Reid and Bridget Robson, 'Understanding health inequities' in Briget Robson (ed), *Hauora: Māori standards of Health IV. A study of the years 2000-2005*, Wellington: Te Rōpū Rangahau Hauora a Eru Pomare, 2000, pp. 3-10.

and relevant COVID-19 data about (and for) Indigenous peoples. Unfortunately, this has not been the case.

Early on in the pandemic, it became apparent that ethnicity data was not being routinely collected or reported for all COVID-19 related activities or outcomes,[5] despite ethnicity data collection being mandatory in the health sector for more than 20 years.[6] Initially, no ethnicity data was reported in the Ministry of Health's daily updates. While cases are now reported by ethnicity for the six major ethnic groupings, this granularity has not carried over to other key indicators. Six months on, Māori data are still not reported in a way that readily allows for stratified analysis by other variables such as age and region. A lack of complete data reporting makes it challenging for Māori organisations and providers engaged in the pandemic response to make detailed assessments of how COVID-19 is affecting their communities.

Māori carry an elevated risk of harm, while being excluded from decision-making to mitigate that harm—an all-too familiar situation. There is a long-standing colonial predilection for seeing Indigenous peoples as objects to be known—never as experts in their own right.[7] We should not be surprised that inequitable knowledge production practices are being replayed in the context of COVID-19 data. As Carroll, Rodriguez-Lonebear & Martinez argue, settler colonial governments routinely produce Indigenous data that are not fit to meet the priorities of Indigenous communities.[8] Such data tends to be of lower quality than non-Indigenous data, since they are inconsistently measured, difficult to access, and controlled by non-Indigenous people and systems. All of these issues have prevailed in Aotearoa, to some extent, during COVID-19.

It is also clear that the substantial investment in data linkage and integration, ostensibly to inform government decision-making, has failed to produce reliable data for Māori decision-makers. High-quality, disaggregated Māori and iwi (tribal) data was needed in near real-time to guide immediate responses at local, regional, and national levels. For many iwi and Māori communities this data did not materialize, even as they repeatedly demonstrated innovative modes of distributed leadership and a deep capacity to care for each other. Instead, Māori largely relied on their own local intelligence networks and collective knowledge of kin relations, beyond the purview of government agencies and their data systems.

Issues of trust, control, and authority also bubbled to the surface in the pandemic response. To date, there has been little meaningful engagement with principles of Māori Data Sover-

5 Concerns were raised with the government and in the media about the availability and quality of Māori data in the pandemic response (e.g. https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12323895, https://www.rnz.co.nz/national/programmes/morningreport/audio/2018742129/coronavirus-maori-health-specialists-want-to-see-data).

6 Donna Cormack and Melissa McLeod. *Improving and maintaining quality in ethnicity data collection: issues for the health and disability sector*, Wellington: Te Rōpū Rangahau Hauora a Eru Pomace, 2010.

7 Linda Tuhiwai Smith, *Decolonizing Methodologies: Research and Indigenous People*, 2nd edition, New York: Zed Books, 2012.

8 Stephanie Russo Carroll, Desi Rodriguez-Lonebear and Andrew Martinez, 'Indigenous data governance: strategies from United States Native Nations', *Data Science Journal, 18*(31), 2019.

eignty[9] in decision-making through the data systems for the pandemic response, including the COVID-19 tracer app released by the Ministry of Health.[10] This lack of engagement persists, despite an increasing number of government agencies purporting to support Maori data sovereignty, including a Stats NZ-led initiative to implement a Māori data governance model across the official government data system.[11] In times of crisis, those in positions of power often default to the status quo. State institutions seem to find it difficult to accept that Māori have technical expertise and deep contextual knowledge that would be beneficial to data systems and practices during the pandemic. As we continue to move through the pandemic, the government needs to shift its focus from centralized data systems that aid top-down policy-making to a more nimble and empowering approach that supports Māori-controlled data systems and locally-defined interventions.

The COVID-19 response in Aotearoa has revealed the persistence of forms of epistemic exclusion.[12] Māori knowers and knowledges have been marginalized, and unjust data practices continue to privilege the priorities of the dominant Pākehā (NZ European) population and wilfully ignore Māori data rights.[13] It is an important reminder that systems designed for settler colonial goals will work in service of those goals. There remains an urgent need for Indigenous data governance and community-controlled data infrastructure that will serve broader Māori goals of self-determination.

References

Carroll Rainie, Stephanie, Desi Rodriguez-Lonebear, Akee Randall, Annita Lucchesi and Jennifer Rai Richards. 'Indigenous data in the COVID-19 pandemic: Straddling erasure, terrorism and sovereignty', Items (11 June 2020), https://items.ssrc.org/covid-19-and-the-social-sciences/disaster-studies/indigenous-data-in-the-covid-19-pandemic-straddling-erasure-terrorism-and-sovereignty/.

Cormack, Donna and M. McLeod. Improving and maintaining quality in ethnicity data collection: issues for the health and disability sector, Wellington: Te Rōpū Rangahau Hauora a Eru Pomare, 2010.

9 Māori Data Sovereignty advocates for Māori rights in relation to Māori data, including the conceptualisation, management and control of Māori data in line with Māori practices and protocols. It is an expression of broader Indigenous sovereignty. See https://www.temanararaunga.maori.nz/nga-rauemi and Raymond Lovett, Vanessa Lee, Tahu Kukutai, Donna Cormack, Stephanie Carroll Rainie and Jennifer Walker, 'Good data practices for indigenous data sovereignty and governance', in Angela Daly, S. Kate Devitt and Monique Mann (eds) *Good Data*, Amsterdam: Institute of Network Cultures, 2019, pp. 26–36.

10 See, for example, 'COVID-19 digital contact tracing risky for Māori technologist' (https://www.rnz.co.nz/national/programmes/morningreport/audio/2018745465/covid-19-digital-contact-tracing-risky-for-maori-technologist),'COVID-19 tracer app: what does it mean for Māori?', (https://www.teaomaori.news/covid-19-tracer-app-what-does-it-mean-maori?_ga=2.119788872.1799182084.1590045478-1257874397.1554791431).

11 Stats NZ, 'Aide Memoire to the Minister of Statistics: Meeting with the Data Iwi Leaders Group' (27 February 2020), https://statsnz.contentdm.oclc.org/digital/collection/p20045coll25/id/130.

12 Gaile Pohlaus Jr., 'Varieties of epistemic injustice', in Ian James Kidd, José Medina and Gaile Pohlaus Jr. (eds) *The Routledge Handbook of Epistemic Injustice*, Oxford Routledge, 2017, pp. 13–27.

13 This draws on Nancy Tuana's concept of 'willful ignorance'. See Nancy Tuana, 'The speculum of ignorance: The women's health movement and epistemologies of ignorance', *Hypatia*, 21(4) (2006).

Kaholokula, Joseph Keawe'aimoku, Raynald A. Samoa, Robin E. S. Miyamoto, Neal Palafoxand Sheri-Ann Daniels. 'COVID-19 special column: COVID-19 hits native Hawaiian and Pacific Islander communities the hardest', Hawaii Journal of Health & Social Welfare, 79(5) (2020):144-146.

Lovett, Raymond, Vanessa Lee, Tahu Kukutai, Donna Cormack, Stephanie Carroll Rainie and Jennifer Walker. 'Good data practices for indigenous data sovereignty and governance', in Angela Daly, S. Kate Devitt and Monique Mann (eds) Good Data, Amsterdam: Institute of Network Cultures, 2019, pp. 26–36.

Pohlaus, Gaile Jr. 'Varieties of epistemic injustice', in Ian James Kidd, José Medina and Gaile Pohlaus Jr. (eds) The Routledge Handbook of Epistemic Injustice, Oxford Routledge, 2017, pp. 13–27.

Power, Tamara, Denise Wilson, Odette Best, Teresa Brockie, Lisa Bourque Bearskin, Eugenia Millender and John Lowe. 'COVID-19 and Indigenous Peoples: An imperative for action', Journal of Clinical Nursing 29 (15-16), 2020: 2737-2741.

Reid, Papaarangi, Donna Cormack and Sarah-Jane Paine. 'Colonial histories, racism and health—The experience of Māori and Indigenous peoples', Public Health 172, 2019, pp. 119-124.

Reid, Papaarangi and Bridget Robson. 'Understanding health inequities' in Briget Robson (ed), Hauora: Māori standards of Health IV. A study of the years 2000-2005, Wellington: Te Rōpū Rangahau Hauora a Eru Pomare, 2000, pp. 3-10.

Carroll Rainie, Stephanie, Desi Rodriguez-Lonebear and Andrew Martinez, 'Indigenous data governance: strategies from United States Native Nations', Data Science Journal, 18 (31), 2019: 1-15.

Smith, Linda Tuhiwai. Decolonizing Methodologies: Research and Indigenous People, 2nd edition, New York: Zed Books, 2012.

Stats NZ. 'Aide Memoire to the Minister of Statistics: Meeting with the Data Iwi Leaders Group' (27 February 2020), https://statsnz.contentdm.oclc.org/digital/collection/p20045coll25/id/130.

Tuana, Nancy. 'The speculum of ignorance: The women's health movement and epistemologies of ignorance', Hypatia, 21(4), 2006: 1-19.

United Nations. State of the World's Indigenous Peoples, 2nd edition, 2015, https://www.un.org/development/desa/indigenouspeoples/publications/2015/09/state-of-the-worlds-indigenous-peoples-2nd-volume-health/.

24. 走向渐变的健康码：这是安全，还是控制?

YIRAN ZHAO

When Health Code becomes Health Gradient: Safety or Social Control?

"Please show your Health Code." Almost all public places in China have posted such requests at the entrances nowadays. Health Code, a three color-based application, is rolled out to control people's movements and curb the coronavirus's spread. A local government then proposed a Gradient Health Code to rank citizens based on smoking, sleeping, and medical records.

“请出示你的健康码”，在新冠肺炎大流行的几个月后，中国几乎所有的公共场所的入口都张贴着这样的要求。健康码，一个通过支付宝、微信小程序、各地应用程序等接口，在授权国家政务服务平台获取姓名、身份证号以及手机号码后就可以被分配到的码。绿色代码，意味着自由出行。黄色或红色代码，意味着不同程度的感染新冠病毒的风险。[1]

授权，即可拥有

经过实名认证之后，个人的健康状态码就会在数秒内显示。其基础逻辑是根据旅行历史，在危险区域停留的时间以及与潜在承运人的关系等因素评估人们的传染风险，具体算法仍未公布。[2]

当我们认为社交媒体的人员归类是依靠在个人所填写的资料、兴趣、不断喂养出来的精准个人行为养成时，[3] 健康码呈现出了另一种新的监视状态：你无需任何自主填写和参与。健康码的诞生并不在你授权的那刻，而是在那之前。它的使用环境也并不随着你的行为习惯，而是一种强制性的公民义务：“没有绿码，无法进入。”

福柯把权力技术称之为纪律，[4] 透过设定这种规范和纪律而创造出权力价值。个人隐私和安全的问题辩论至此，当医疗的安全权力对象转移到个人，就驱动了一种全景式的运作模式。除了医院、公共交通外，一些大型的公司，甚至小型的私人派对和论坛，也会启用绿色健康码来展现自己的社会责任，以及对与会人的安全保障。绿码标志了一种下放型、全景式的权力模式。

1 Paul Mozur, Raymond Zhong and Aaron Krolik, ‘In Coronavirus Fight, China Gives Citizens a Color Code, With Red Flags’, *The New York Times*, 7 August 2020, https://www.nytimes.com/2020/03/01/business/china-coronavirus-surveillance.html.

2 Fan Liang, ‘COVID-19 and Health Code: How Digital Platforms Tackle the Pandemic in China’, *Social Media + Society* 6, 3 (July 2020), https://doi.org/10.1177/2056305120947657.

3 John Cheney-Lippold, ‘A New Algorithmic Identity: Soft Biopolitics and the Modulation of Control’, *Theory, Culture & Society* 28, 6 (November 2011): 164–81.

4 Michel Foucault, *Discipline and Punish: The Birth of the Prison*. 2nd Vintage Books ed. New York: Vintage Books, 1995.

数据，也会出错

当网络接入可以被视作一种人权，游离在数据之外的边缘人是非常难被准确定位的。

生活在贫困地区，或者是老人，并不知道要如何拥有和产生健康码，也就会被公共交通和其他建筑拒之门外。而地域的显示和追踪主要依靠电话号码，电话号码的实名注册却要比网络时代更早，因此有时候产生的问题是电话号码所追踪到的人和本人并不一致。[5] 至于对地区的危险程度评级和划分就使得在操作中更为困难：当北京被划分成橙色区域，那么住在接壤地区的人要如何定位，这在和蜂窝站点位置、wifi覆盖范围、GPS和蓝牙的定位精准度都息息相关。[6]

比出错代价更大的是，并没有使用手册指导你如何更改你的状态。被划为橙色之后，能做的只有在家中等隔离时间过去。无法自证数据的错误，就将数据的权力地位更往上叠加。

Fig. 1:根据一日走路步数、饮酒量、吸烟情况、睡眠等得出的个人健康评分以及在本地市民中的排名。

5 Tautvile Daugelaite, 'China's Health Code System Shows the Cost of Controlling Coronavirus', *Wired UK*, 17 July 2020, https://www.wired.co.uk/article/china-coronavirus-health-code-qr.

6 Jay Stanley and Jennifer Stisa Granick, 'The limits of location tracking in an epidemic', *American Civil Liberties Union White Paper*, 8 April 2020, https://www.aclu.org/report/aclu-white-paper-limits-location-tracking-epidemic.

Fig. 2: 根据企业全体员工走路步数、睡眠情况、体检率、慢性病空置率等得出的群体健康评分以及在本地企业中的排名。

健康，不止三种颜色

5月22日，阿里巴巴的所在地杭州市卫生健康委设想通过集成电子病历、健康体检等相关数据，建立从0到100分个人健康渐变色指数排行榜，并且推出对楼道、社区、企业等健康群体的集体评价。尽管这只是官方的设想，仍然足以让人对健康码的走向感到吃惊。[7]

为了公共健康管理而让渡出来的隐私权，在方便管理而被标记的“三种颜色”之后，可能将走向“渐变的”、“竞争式的”、“展演的”渐变色。“渐变色”的健康隐私数据会否被更大范围的资本主义商业化的投放？员工健康指数将造成如何的“不平等”？

我们不得不承认这样的一种可能性，那就是在新冠肺炎之后，人们开始适应这种例外状态，[8]习惯性地让渡个人隐私交由大数据统一接管。”人“的存在也或许将躺在渐变色的光谱里，以(R,G,B)的形式被标注。

References

Agamben, Giorgio. ‘Stato di eccezione e stato di emergenza’, *Quodlibe*t, 30 July 2020, https://www.quodlibet.it/giorgio-agamben-contagio.

Cheney-Lippold, John. ‘A New Algorithmic Identity: Soft Biopolitics and the Modulation of Control’, *Theory, Culture & Society* 28, 6 (November 2011): 164–81.

7 张刘涛，‘杭州市卫健委回应 ‘渐变色健康码’：仅为设想，暂无上线计划’，澎湃新闻, 25 May 2020, https://www.thepaper.cn/newsDetail_forward_7579606.

8 Giorgio Agamben, ‘Stato di eccezione e stato di emergenza’, *Quodlibet*, 30 July 2020, https://www.quodlibet.it/giorgio-agamben-contagio.

Daugelaite, Tautvile. ‘China’s Health Code System Shows the Cost of Controlling Coronavirus’, *Wired UK*, 17 July 2020, https://www.wired.co.uk/article/china-coronavirus-health-code-qr.

Foucault, Michel. *Discipline and Punish: The Birth of the Prison*, 2nd ed, *New York: Vintage Books*, 1995.

Liang, Fan. ‘COVID-19 and Health Code: How Digital Platforms Tackle the Pandemic in China’, *Social Media + Society* 6, 3 (July 2020), https://doi.org/10.1177/2056305120947657.

Mozur, Paul, Raymond Zhong and Aaron Krolik. ‘In Coronavirus Fight, China Gives Citizens a Color Code, With Red Flags’, *The New York Times*, 7 August 2020, https://www.nytimes.com/2020/03/01/business/china-coronavirus-surveillance.html.

Stanley, Jay and Jennifer Stisa Granick. ‘The limits of location tracking in an epidemic’, *American Civil Liberties Union White Paper*, 8 April 2020, https://www.aclu.org/report/aclu-white-paper-limits-location-tracking-epidemic.

张, 刘涛, ‘杭州市卫健委回应 ‘渐变色健康码’: 仅为设想, 暂无上线计划’, 澎湃新闻, 25 May 2020, https://www.thepaper.cn/newsDetail_forward_7579606.

25. DATA CUDGEL OR HOW TO GENERATE CORONA-COMPLIANCE IN ISRAEL

ALEX GEKKER & ANAT BEN-DAVID

With the rapid unfolding of the COVID-19 global pandemic, Israel was one of the first states outside East-Asia to impose involuntary surveillance measures as a means to combat the virus. Crucially, the government utilized the country's permanent state of exception to bypass the parliament and deploy a hitherto classified anti-terrorism tool developed by its internal security service (Shin Bet) to track the location of coronavirus patients, identify infection-chains and notify citizens who have been in close proximity to an identified patient to self-quarantine.[1] Despite the marked similarity to the Snowden revelations[2] in terms of scope and granularity of data available to secret services on individuals, the extreme measures undertaken by the Israeli government were met by a legal battle ensued by a small group of activists and civil society organizations, but not by a public outcry. Rather, the majority of Israelis were willing to compromise their right to privacy for the technological protection[3] offered against the virus, and expressed high levels of trust in the Shin Bet, even as the latter was often reluctant to take up the mantle.[4] In this essay we draw on historian Daniel Rosenberg's notion of "data before the fact" to reflect on how various uses of (big) data in Israel have led to compliance and confusion for the people involved.[5]

Rosenberg suggests that data came to be a historically recognised category that is "given" ("data" means "that which is given" in Latin and thus not questioned or interrogated. Only *the results* coming from the data are. Recently, with the rise of massive data collection and machine learning techniques, data has further changed meaning, but retained that historically grounded sense of objectivity. This joins the tendency of computers being seen as "accurate" and "unbiased"— consider how Facebook claims that no user privacy is breeched because no humans are involved in seeing one's personal details. Wendy

1 Tehilla Shwartz Altshuler and Rachel Aridor Hershkowitz, 'How Israel's COVID-19 Mass Surveillance Operation Works', *Stream*, 6 June 2020, www.brookings.edu/techstream/how-israels-covid-19-mass-surveillance-operation-works.

2 Ewen Macaskill and Gabriel Dance, 'NSA Files: Decoded', *The Guardian*, 1 November 2013, https://www.theguardian.com/world/interactive/2013/nov/01/snowden-nsa-files-surveillance-revelations-decoded.

3 Noa Landau, Yaniv Kubovich and Josh Breiner, 'Israeli Coronavirus Surveillance Explained: Who's Tracking You and What Happens With the Data', *Haaretz*, 18 March 2020, www.haaretz.com/israel-news/.premium-israeli-coronavirus-surveillance-who-s-tracking-you-and-what-happens-with-the-data-1.8685383.

4 Amos Harel, 'Israel's Security Service Opposes Tracking Citizens to Fight Coronavirus, but Government at a Loss', *Haaretz*, 26 June 2020, https://www.haaretz.com/israel-news/.premium-security-service-against-tracking-citizens-to-fight-virus-but-israel-at-a-loss-1.8945985.

5 Daniel Rosenberg, 'Data before the fact', in Lisa Gitelman (ed), *Raw Data Is an Oxymoron,* Cambridge, MA: MIT Press, pp. 15–40.

Hui Kyong Chun and David Berry suggest that computer software becomes ingrained in the very language and metaphors of how we think about "thinking" today.[6] Various data dashboards, including in combating Corona, cement the data-reflected reality rather than being tools for discussing alternatives. In the Israeli case, the discussion of possible responses to COVID-19 and their implications became entangled with the computerised data gathered on the disease's spread, in a way that limited potential objections to the measures imposed. We show this across three distinct episodes.

Shin Bet Surveillance

After a publication by investigative journalists, the Shin Bet's surveillance system was exposed.[7] Called simply "the Tool" it has been in operation since 2002 and used for continuous trawling collection of all available cell-phone data from every mobile device in Israel and the Palestinian Territories. Officially used for counter-terrorism and previously (officially) used only targeted surveillance on specific individuals and in relation to a case, the Tool has nonetheless been employed for digital contact tracing across the entire land and marketed as an emergency extreme measure that is a "magic bullet" solution. Specifically the "Tool" allowed avoiding the need to deploy a voluntary digital contact tracing apps as done by other democratic states.[8] Nonetheless such a civilian, Bluetooth-based phone app was developed, failed and re-developed again to a minimal reception by the Ministry of Health.[9] One of the central arguments against adopting this latter, privacy preserving option, was due to the fact that the Shin Bet is collecting all data anyway. Yet, being a secret government agency, the Shin Bet is reluctant to share the specifics of the data collected. Early reports indicate a 5% wide margin of error.[10] Out of 71 thousand people required to self-quarantine based on the tool's data in the first week of July alone, about 22 thousand appealed, claiming to be false positives, and 60% of those appeals were accepted. Overall, the data presented of the effectives of the tool was lacking, included repeated numbers in different categories, and was unreliable.[11] Nonetheless, the appearance of efficiency supported by seemingly impressive numerical data has led to a continuing adaption of the tool instead of other alternatives.

6 David M. Berry, *Critical Theory and the Digital*, London, UK: Bloomsbury, 2014; Wendy H. K. Chun, *Programmed Visions: Software and Memory*, Cambridge, Mass: MIT Press, 2011.

7 Ronen Bergman and Ido Shbertztuch, 'The "Tool", the GSS' Secret Database, Collects Data on All Citizens of the State of Israel and Knows: Where Have You Been, Who Did You Talk to, and When Did You Do All This', *Yediot*, 25 March 2020, https://www.yediot.co.il/articles/0,7340,L-5701611,00.html.

8 Ephrat Livni, 'Israel Is Now Using Counterterrorism Tactics to Track Possible Coronavirus Patients', *QZ*, 17 March 2020, https://qz.com/1819898/israel-to-use-invasive-surveillance-to-track-coronavirus-patients/.

9 Omri Segev Moyal, '"Hamagen" Application — Fighting the Corona Virus', *Medium*, 22 March 2020, https://medium.com/proferosec-osm/hamagen-application-fighiting-the-corona-virus-4ecf55eb4f7c.

10 'Health Ministry Admits More Than 12,000 Israelis Quarantined by Mistake', *I24 News*, 14 July 2020, https://www.i24news.tv/en/news/israel/1594736977-health-ministry-admits-more-than-12-000-israelis-quarantined-by-mistake.

11 Danny Old, 'GSS Placements Have Been Missing by About Five Percent Since Last Thursday', *Globes*, 5 July 2020, https://www.globes.co.il/news/article.aspx?did=1001334706.

National Compliance Index

Another use of numerical data to create compliance rather than support policy was through the deployment of a "national index"[12], in cooperation with renowned behavioral economist Dan Arieli's Kayma company.[13] The index was developed by Kayma as a single entrant to an urgent tandem presented by Israel's National Corona Response Centre. Despite potential financial and practical concerns, the company was selected to monitor various "commercial and civilian data sources" in order to track how compliant the population is with Covid regulations.[14] Prominent on various platforms—including on the main page of the country's most-read news website—and asking citizens to self-report on "compliance" such as hand-washing or mask-wearing, the index generates a variety of dashboard statistics, while being extremely opaque in its data sources. As in the previous case, the numerical data, information visualizations and dashboards derived from the index were available to the citizens only in their final, "ready-made" state, such as "what is the level of compliance to the lockdown in your home city compared to other cities"? discouraging reflection and encouraging the very thing they were supposedly measuring – compliance.

Lack of Ministry of Health Data

Many of the unclarities above could have been addressed – or at least mitigated – by clear and transparent reporting of Covid-19 infections and transmissions data by the governmental body responsible, Ministry of Health (MoH). Yet, despite repeated requests, throughout the first month of pandemic the data was published by the ministry's spokesperson as cropped images on the ministry's Telegram channel. This required a dedicated manual input of the information by volunteers to keep track of the official numbers. Even later, with a new updated data dashboard, users could not receive numerical information and moreover each new version overwrote the previous one.[15] Data scientist Dan Bareket who kept those previous versions manually has shown that there are gross differences between those older and newer versions.[16]

Those episodes come together to showcase how data can be wielded as a cudgel rather than a precise tool: collected through undisclosed means and used to create popular compliance, suppressing discussions of measures or alternatives.

---

12 Government of Israel, Ministry of Health, 'Return to Routine Index: To What Extent Has Israel Returned to Full Activity?', 12 May 2020, https://hamadad-haleumi.co.il/.

13 'Using Social Science to Aid in the Fight Against COVID-19', *Duke Today*, 27 April 2020, https://today.duke.edu/2020/04/using-social-science-aid-fight-against-covid-19.

14 Amiram Barkat, 'Dan Arieli v. Corona: The State Mobilizes the Behavioral Economy to Eradicate the Plague', *Globes*, 5 April 2020, https://www.globes.co.il/news/article.aspx?did=1001324609.

15 Government of Israel, Ministry of Health, 'Coronavirus in Israel. General Situation', last update 26 October 2020, https://datadashboard.health.gov.il/COVID-19/general.

16 @O_Koren, 'Thanks @dbreqt. Bothered to save historical versions of the Ministry of Health data the picture becomes clearer. What you see here is the percentage of symptomatic (at least one symptom) out of the positive each day in each version of the data file. The darker the color, the more up-to-date the file', Twitter post, 12 June 2020, https://twitter.com/O_Koren/status/1271483183570264064.

References

'Health Ministry Admits More Than 12,000 Israelis Quarantined by Mistake', *I24 News*, 14 July 2020, https://www.i24news.tv/en/news/israel/1594736977-health-ministry-admits-more-than-12-000-israelis-quarantined-by-mistake.

'Using Social Science to Aid in the Fight Against COVID-19', *Duke Today*, 27 April 2020, https://today.duke.edu/2020/04/using-social-science-aid-fight-against-covid-19.

@O_Koren, 'Thanks @dbreqt. Bothered to save historical versions of the Ministry of Health data the picture becomes clearer. What you see here is the percentage of symptomatic (at least one symptom) out of the positive each day in each version of the data file. The darker the color, the more up-to-date the file', Twitter post, 12 June 2020, https://twitter.com/O_Koren/status/127148318357026406.

Barkat, Amiram. 'Dan Arieli v. Corona: The State Mobilizes the Behavioral Economy to Eradicate the Plague', Globes, 5 April 2020, https://www.globes.co.il/news/article.aspx?did=1001324609.

Bergman, Ronen and Ido Shbertztuch. 'The "Tool", the GSS' Secret Database, Collects Data on All Citizens of the State of Israel and Knows: Where Have You Been, Who Did You Talk to, and When Did You Do All This', *Yediot*, 25 March 2020, https://www.yediot.co.il/articles/0,7340,L-5701611,00.html

Berry, David M.. *Critical Theory and the Digital*, London, UK: Bloomsbury, 2014.

Chun, Wendy H. K.. *Programmed Visions: Software and Memory*, Cambridge, Mass: MIT Press, 2011.

Government of Israel, Ministry of Health. 'Coronavirus in Israel. General Situation', last update 26 October 2020, https://datadashboard.health.gov.il/COVID-19/general.

Government of Israel, Ministry of Health. 'Return to Routine Index: To What Extent Has Israel Returned to Full Activity?', 12 May 2020, https://hamadad-haleumi.co.il/.

Harel, Amos. 'Israel's Security Service Opposes Tracking Citizens to Fight Coronavirus, but Government at a Loss', *Haaretz*, 26 June 2020, https://www.haaretz.com/israel-news/.premium-security-service-against-tracking-citizens-to-fight-virus-but-israel-at-a-loss-1.8945985.

Landau, Noa, Yaniv Kubovich and Josh Breiner. 'Israeli Coronavirus Surveillance Explained: Who's Tracking You and What Happens With the Data', *Haaretz*, 18 March 2020, www.haaretz.com/israel-news/.premium-israeli-coronavirus-surveillance-who-s-tracking-you-and-what-happens-with-the-data-1.8685383.

Livni, Ephrat. 'Israel Is Now Using Counterterrorism Tactics to Track Possible Coronavirus Patients', *QZ*, 17 March 2020, https://qz.com/1819898/israel-to-use-invasive-surveillance-to-track-coronavirus-patients/.

Macaskill, Ewen and Gabriel Dance. 'NSA Files: Decoded', *The Guardian*, 1 November 2013, https://www.theguardian.com/world/interactive/2013/nov/01/snowden-nsa-files-surveillance-revelations-decoded.

Old, Danny. 'GSS Placements Have Been Missing by About Five Percent Since Last Thursday', *Globes*, 5 July 2020, https://www.globes.co.il/news/article.aspx?did=1001334706.

Rosenberg, Daniel. 'Data before the fact', in Lisa Gitelman (ed), *Raw Data Is an Oxymoron,* Cambridge, MA: MIT Press, pp. 15–40.

Segev Moyal, Omri. '"Hamagen" Application — Fighting the Corona Virus', *Medium*, 22 March 2020, https://medium.com/proferosec-osm/hamagen-application-fighiting-the-corona-virus-4ecf55eb4f7c.

Shwartz Altshuler, Tehilal and Rachel Aridor Hershkowitz. 'How Israel's COVID-19 Mass Surveillance Operation Works', *Stream*, 6 June 2020, www.brookings.edu/techstream/how-israels-covid-19-mass-surveillance-operation-works.

26. MAKING SENSE OF THE PANDEMIC THROUGH DATA: THE ITALIAN CASE

TIZIANO BONINI

Forms of datafication during the COVID-19 pandemic have varied by country. The biggest concerns relating to datafication of citizens were the spread of contact tracing apps, and how they would potentially harm citizens' privacy. Some have suggested that people have become passively accustomed to surveillance by private multinational companies[1] but are reluctant to agree to be monitored by their country's Ministry of Health.

In Italy, as in many other countries, many controversies have arisen around health-tracking apps. In the end, the Italian app Immuni was released on June 2, 2020, and in eight days it was downloaded by two million Italian citizens.[2] While this might seem like a success story, the reality is more complicated. Experts pointed out that at least 30 million downloads would be needed to make the app useful for contact tracing.[3] There are many doubts about the possibility of reaching these numbers, partly because older smartphone models do not support the app.

Debate on the Immuni app has revealed two opposing fronts; we can refer to them as the techno-solutionists on the one hand, and the techno-apocalyptics on the other. The former believe they can slow down the diffusion of contagion simply by having an app installed on their mobile phones. The latter reject any form of surveillance, except that coming from Facebook or Google. Yet, the importance of data during the pandemic did not emerge only during the debate on Immuni. These public narratives of the lockdown period were influenced by the rhetoric of dataism—a blind and unconditional trust in data.

Every evening for two months at 6:30 PM, the head of the Italian Civil Protection went on television to "give numbers" about the pandemic. They discussed recovered patients, new contagions, newly hospitalized, and new deaths compared to the previous day. Despite the dubious reliability of those data—it was later discovered there were many more deaths, the contagions were ten times as many, and Italian regions did not provide data in a homogeneous way[4]—this press conference turned into a collective ritual. It was an appointment not to be missed,

1 Shoshana Zuboff, *The Age of Surveillance Capitalism*, New York: Profile Books, 2019.
2 'App Immuni, sono 2,2 milioni i download', *ANSA*, 10 June 2020, https://www.ansa.it/sito/notizie/tecnologia/software_app/2020/06/10/immuni10.319-modelli-android-supportati_72bc2c68-6998-4dd0-aac0-0d0861186920.html.
3 Jaime D'Alessandro, 'La app anti pandemia Immuni vicina ai tre milioni di download', *La Repubblica*, 16 June 2020, https://www.repubblica.it/tecnologia/2020/06/16/news/immuni_vicina_ai_tre_milioni_di_download-259372693/.
4 Carlotta De Leo, 'Coronavirus, Inps: poco attendibili i dati della Protezione civile. I morti sono quasi 19mila in più', *Corriere della Sera*, 21 May 2020, https://www.corriere.it/cronache/20_maggio_21/coronavirus-inps-poco-attendibili-dati-protezione-civile-morti-sono-quasi-19mila-piu-bc3bc49a-9b6c-11ea-b206-e08ec5340715.shtml.

like President Roosevelt's fireside chats on the radio, a real "media event"[5]: the pandemic ceremony. His national ceremony was flanked by other media micro-cerimonies. Dozens of Italian mayors, inspired by the macabre national ceremony, every night "entertained" their fellow citizens through live-shows on Facebook, You Tube and Instagram. They told citizens about the state of the virus spread in their municipality through use of data. In these cases, data was described as producing objective and neutral facts to convince citizens to stay at home and "flatten the curve."

But if we stoped here, we would end up seeing only a part of the story—the story in which data was used to build a public narrative that was passively accepted by citizens. That's not the case, or at least it wasn't for everyone. Since the early days of the pandemic and lock-down, organized groups of citizens have tried to analyse available data together, drawing different conclusions from the official narrative, or even producing new data. Many have opened Excel spreadsheets where they could download Civil Protection data (made available as open data) to interpret them independently.

Others have created Facebook groups to discuss such data and their meaning. They turned to their math friend, dusted off their old statistical knowledge, or simply followed the home-made analyses of their Facebook friends. From this point of view, we could say that the lockdown represented a period of collective learning about the role of data in society and accelerated the emergence or spread of data activism, data journalism, and open science practices.

On the side of data journalism, the local newspaper *L'Eco di Bergamo* conducted important investigative work. By collecting data independently and examining data already available, it showed that the number of deaths in the province of Bergamo—one of the most affected cities in Italy by COVID-19—was almost double the official statistic. On the open science and citizen science side, one of the most active groups in Italy was the Facebook group Dataninja, a community of journalists, citizens and researchers created in 2012 by a group of Italian journalists interested in using data to create information. For two months this community, numbering more than 3,000 members, produced data, graphs, and tables—a collective effort to try to make sense of what was happening.

Within the medical community, other interesting projects related to data emerged. The Giotto Movement in Modena was created by an association of young Italian family doctors with the aim of building together a shared Excel sheet that tallied the suspected COVID-19 patients that didn't match the official criteria to be eligible for a COVID-19 test and were taken care of by the Public Health and Hygiene Service. This need was felt by several family doctors, who (simultaneously and without consulting each other) created very similar "low technology" tools to keep track of the situation. These were the first weeks of emergency and the situation on the ground was very chaotic. The project evolved in three main phases:

5 Daniel Dayan and Elihu Katz, *Media Events: The Live Broadcasting of History*, Cambridge, MA and London: Cambridge University Press, 1992.

- Consultation: young doctors from various Italian regions defined a first version of the register.

- Testing: a group of about 20 couples of doctors training in General Medicine tested the instrument for a week and then built the final version of the register.

- Diffusion: the register was shared with all family doctors.

On the side of data activism, since March 12 the NGO Action Aid has activated a national mapping of spontaneous and institutional solidarity initiatives. These initiatives include volunteers doing shopping for the elderly, providing psychological support, fundraising, debunking fake news, and sharing scientific data. The project is named COVID-19 Italia Help, and consists of an interactive map[6] in which anyone can report and map Italian solidarity initiatives. The creators of the project described it as a "civic hacking" initiative, and the idea came from the same team that had developed the EarthQuakeCentroItalia project, which used open data and citizen generated data to respond to the Earthquake that struck Central Italy in 2016.[7]

In Bologna, the working cooperative Kilowatt launched the project "Passa il tempo, passa la bufera," an experiment in domestic ethnography "at a distance," to stimulate a ritual of collective self-observation. Kilowatt collected qualitative data through online questionnaires with open-ended questions, renewed once a week for five weeks. The 583 respondents provided detailed accounts of their lives during lockdown, changes in their moods, and their new domestic occupations. Data collected was then translated into info-graphics and collective diaries, which gave a collective portrait of the domestic climate during the pandemic. Kilowatt's aim was to try to keep the pulse of what was happening in our homes and in our lives, accompanying us to a new normality, going beyond the logic of statistics and using the tools of ethnography.

I talked over email with two of the creators of the project, Anna Romani and Gaspare Caliri. They told me that the answers to the last questionnaire clearly confirmed people's need for others and need for solitude—two indivisible and necessary feelings during the lockdown. They also noticed that the respondents feared that nothing will change: "we often hear this, but especially in relation not only to macro issues, but also to the individual management of one's own days, after having discovered the special texture of slow, freed time, time to lose, time for idleness, time for oneself, time for loved ones." According to Caliri, "the instrument of domestic ethnography worked as a detector of the so-called warm data[8], the Bateson Institute would say, i.e. those relational data that give meaning (intelligibility) to a complex system and the possibility of collective learning: those data where the important thing is the connection, not the point." In other words, they employed domestic ethnography as

6 COVID19 Italia Help, https://www.covid19italia.help/.
7 Terremoto Centro Italia, https://terremotocentroitalia.info/.
8 'Warm Data', *The International Bateson Institute*, https://batesoninstitute.org/warm-data/.

a "technology of the self"[9], meaning the activity of taking care of oneself during lockdown went through individual generation and collective analysis of qualitative data (the diaries).

These examples are only the surface of a process of domestication of data within daily life during the pandemic. They are significant because they show the ability and willingness of people to exercise agency with respect to data produced by institutions and narrated by the media. These examples show the need to negotiate, appropriate, decode, and rework data coming from above and, in some cases, produce new meanings of data. The collective process of producing knowledge about the virus has been largely based on the capacity of sharing and interpreting data. What I wanted to show here is slightly different: that private and collective initiatives from civil society have partly taken away the monopoly of production, analysis, and verification of data by institutions. Moreover, these examples also provide evidence that not all social formations have adhered to blind faith in data and technology as a solution to the COVID-19 crisis.

References

'App Immuni, Sono 2,2 milioni i Download', *ANSA*, 10 June 2020. https://www.ansa.it/sito/notizie/tecnologia/software_app/2020/06/10/immuni10.319-modelli-android-supportati_72bc2c68-6998-4dd0-aac0-0d0861186920.html.

'Warm Data', *The International Bateson Institute*, https://batesoninstitute.org/warm-data/.

D'Alessandro, Jaime. 'La App Anti Pandemia Immuni Vicina ai Tre Milioni di Download', *La Repubblica*, 16 June 2020, https://www.repubblica.it/tecnologia/2020/06/16/news/immuni_vicina_ai_tre_milioni_di_download-259372693/.

Dayan, Daniel and Elihu Katz. *Media Events: The Live Broadcasting of History*, Cambridge, MA and London: Cambridge University Press, 1992

De Leo, Carlotta. 'Coronavirus, INPS: Poco Attendibili i Dati della Protezione Civile. I Morti Sono Quasi 19mila in più', Corriere della Sera, 21 May 2020, https://www.corriere.it/cronache/20_maggio_21/coronavirus-inps-poco-attendibili-dati-protezione-civile-morti-sono-quasi-19mila-piu-bc3bc49a-9b6c-11ea-b206-e08ec5340715.shtml

Foucault, Michel. *Technologies of the Self: A Seminar with Michel Foucault*, Amherst: University of Massachusetts Press, 1988.

Zuboff, Shoshana. *The Age of Surveillance Capitalism*, New York: Profile Books, 2019.

9 Michel Foucault, *Technologies of the Self: A Seminar with Michel Foucault*, Amherst: University of Massachusetts Press, 1988.

27. CONTACT TRACING APPS AND "GOOD DATA"? THE CASE OF AUSTRALIA'S COVIDSAFE APP

ALEXANDRA ELLIOTT

A man decides to go grocery shopping during the COVID-19 pandemic. Despite his best efforts to be cautious he comes within 1.5 meters with another shopper while reaching for a basket. It happens again when selecting his milk, and two more times when squeezing through the crowded cereal aisle, and as he pays for his groceries. He then returns home to hugs from his wife and three kids. A few days later the man tests positive for COVID-19 and all those he came into contact with may potentially also be sick. Each of these people has their own web of contacts, and this is only from the contacts made within one hour.

Contact tracing helps detect cases of COVID-19, treat them early, and reduce further contamination—essential to overcome the pandemic. However, it is clear that contact tracing is no easy feat. With the total cases worldwide exceeding 7 million, it seems reasonable to adopt the assistance of technology in contact tracing efforts. So why is there so much contention over implementing contact-tracing apps?[1]

In an attempt to assess whether contact-tracing technologies should be met with approval, I will position it within academic notions of "Good Data." Through a case study of Australia's COVIDSafe app, I hope to reach an understanding of why this technique is an essential tool in minimising the curve of the Coronavirus, "a strategy that goes hand-in-hand with economic recovery and reducing the isolation recommendations that are currently in place".[2] I will then explore the concerns and controversies preventing unanimous enthusiasm about the process, presenting both the arguments and their rebuttals to paint a comprehensive portrait.

With the rise in suspicions over "Big Tech" and their manipulative and invasive data practices, a counteractive field of academia has emerged to discuss the ethical uses of data. There are discrepancies over the definitions found within the discourse, including terms like responsible data[3], good data[4], data justice[5]. For example, one of the central ideas of the field can be found within the work of Taylor and Purtova[6], who divide data justice into data responsibility and

1 Henrik Pettersson, Byron Manley and Sergio Hernandez, 'Tracking coronavirus' global spread', *CNN Health*, 23 October 2020, https://edition.cnn.com/interactive/2020/health/coronavirus-maps-and-cases/.

2 Holly Yan, 'Contact tracing 101: How it works, who could get hired, and why it's so critical in fighting coronavirus now', *CNN Health*, 15 May 2020, https://edition.cnn.com/2020/04/27/health/contact-tracing-explainer-coronavirus/index.html.

3 Linnet Taylor and Nadia Purtova, 'What is responsible and sustainable data science?', *Big Data & Society*, July 2019.

4 Claire Trenham and Adam Steer, 'The good data manifesto', in Angela Daly, S. Kate Devitt and Monique Mann, eds., *Good Data* (pp. 37-52), 2019. Amsterdam: Institute of Network Cultures.

5 Lina Dencik, Arne Hintz, Joanna Redden & Emiliano Treré, 'Exploring Data Justice: Conceptions, Applications and Directions', *Information, Communication & Society*, 22 (7), 2019.

6 Linnet Taylor and Nadia Purtova, 'What is responsible and sustainable data science?'.

data sustainability. The first covers the impact of data on the user (for example, matters of privacy and bias) and the latter refers to utilising data for the benefit of society. Many scholars have called for a unified understanding to accelerate the application of these ideas. For clarity, I unite these concepts under the label "Good Data."

Big Data as Public Good

To illustrate how contact-tracing apps are a sustainable data practice, I approach them as an implementation of "big data as a public good."[7] That is, the information that "big data" provides can be utilized for the benefit of society. However, the societal benefits of data access for humanitarian purposes is difficult to achieve, due to the clashing responsibilities and ambitions of the various actors involved. Taylor and Ritchie and Welpton[8] have both attempted to navigate these relationships and assess the likelihood of the exposure of personal datasets to benefit humanity.

Many papers dissect the data collection and analysis ecosystem of mobile operators and other "Big Tech" companies. If, upon release, data held by corporations can promote "social good"[9], such as by sending emergency alerts, then it should be made available. But this may not be in the best interests of the data's private owners. The responsibility of ensuring privacy lays with the data owner, who can hesitate to release information for fear it sullies their reputation. We therefore have encountered a roadblock to sharing data for humanitarian endeavours.

COVIDSafe provides an alternative, more harmonious model of data as public good by eliminating private ownership. The data it collects is analysed by the Australian government for the benefit of the Australian people. The government accepts the responsibility of individuals' privacy. Unlike other cases involving numerous differing parties who collect the data and who analyse and use the data, the government's goals align with a need to protect the Australian population. There is no longer a need for repurposing. Through COVIDSafe, an entirely new dataset is being collected, designed for the purpose of contact tracing, and therefore facilitating the process of data for the public good.

Contact Tracing

Contact tracing involves identifying people who have been in contact with an infectious person[10] so that they can isolate themselves and halt the spread. The process ultimately seeks to control the spread of a disease or virus and can be automated by smartphone tracking apps. Tracking people can be achieved over either Bluetooth or GPS. Bluetooth offers more privacy, since it does not record the location at which contact occurred. Alternatively, oth-

7 Linnet Taylor, 'The ethics of big data as a public good: which public? Whose good?', *Philophical Transactions A*, 374: 20160126 (2016).

8 Ritchie Feliz and Richard Welpton, 'Sharing risks, sharing benefits: data as a public good', *United Nations Economic Commission for Europe.* Available from: https://uwe-repository.worktribe.com/preview/958317/21_Ritchie-Welpton.pdf.

9 Linnet Taylor, 'The ethics of big data as a public good: which public? Whose good?'.

10 Yan (2020).

ers argue for GPS[11] and its ability to identify viral hotspots. Up until recently, Apple's iOS software blocked Bluetooth from running in the background of apps. This would have rendered contact-tracing apps ineffective as the app needed to always be open to detect contacts. They have now removed that function[12], thus supporting the development and use of tracing applications. Once in operation, a phone with a contact-tracing app will send out a code through Bluetooth to any other phone with the app that comes near.

COVIDSafe

Australia's government and health authorities have adopted the COVIDSafe app as a tool to contain and hopefully overcome Coronavirus in the country. Its endorsement has been strong, driven by widespread advertisements encouraging Australians to download the app, and the Prime Minister Scott Morrison appealing to the public with assurances that the more people that use the app the more quickly the pubs can reopen.[13] COVIDSafe works by recognising other devices in its proximity with the app installed. "It notes the date, time, distance and duration of the contact and the other user's reference code."[14] The reference code is anonymous and refreshed every two hours, the data collected is encrypted, and the information is deleted after 21 days.

From both the COVIDSafe website and statements by the government, it is clear that those involved are aware of users' concerns about infringement of privacy. The Guardian recently conducted a survey, which found that 57% of respondents were anxious about the security protecting their personal information.[15] In an attempt to quell concerns, both a Privacy Policy and Privacy Impact Assessment Report are available to read and users may opt out at any time and request the immediate deletion of their records.[16] Furthermore, it is a criminal offence to use the data collection for any purpose other than contact tracing, and by actors other than those delegated.

Regardless of these protections, COVIDSafe is not open-source software, prompting critics to argue that it "is not subject to audit or oversight."[17] The reason privacy protection is so critical

11 Stephen Nellis and Paresh Dave, 'Showdown looms between Silicon Valley, U.S. states over contact tracing apps', *Reuters*, 25 April 2020, https://www.reuters.com/article/us-health-coronavirus-usa-apps/showdown-looms-between-silicon-valley-u-s-states-over-contact-tracing-apps-idUSKCN22702F.

12 Andy Greenberg, 'Clever cryptography could protect privacy in COVID-19 contact-tracing apps', *Wired*, 4 August, https://www.wired.com/story/covid-19-contact-tracing-apps-cryptography/.

13 'Government concedes health officials are currently unable to use COVIDSafe coronavirus app', *SBS*, 2 May 2020, https://www.sbs.com.au/news/government-concedes-health-officials-are-currently-unable-to-use-covidsafe-coronavirus-app.

14 Australian Government, 'COVIDSafe app', last updated 14 October 2020, https://www.health.gov.au/resources/apps-and-tools/covidsafe-app.

15 Kelsie Nabben and Chris Berg, 'The COVIDSafe app was just one contact tracing option. These alternatives guarantee more privacy', *The Conversation*, 30 April 2020, https://theconversation.com/the-covidsafe-app-was-just-one-contact-tracing-option-these-alternatives-guarantee-more-privacy-137400.

16 Australian Government, 'COVIDSafe app'.

17 Roba Abbas and Katina Michael. 'The coronavirus contact tracing app won't log your location, but

is that the data collected constructs a "comprehensible social contacts map of the nation."[18] A dataset of Australians' behavioural patterns could be a valuable resource for a range of purposes from marketing to more malicious uses.

Since its appearance in the app store, COVIDSafe has experienced a number of setbacks. Hoax texts distributed a message to users reading "the COVIDSafe app has detected you are now +20km from your nominated home address.'[19] Revelations emerged that the users' phone make and model was communicated unencrypted.[20] There was also backlash in the media about the choice to store the data in the American-owned Amazon Web Services (AWS) over Australian providers.[21] Concerns were raised about the lost opportunity to support local businesses, and over information being accessed by American entities due to legislation approving government access to data held by US-owned companies. However, there remains ambiguity surrounding the matter, as AWS are already used for a range of Australian federal operations and the transferring of COVIDSafe data to any country is prohibited through the Biosecurity Act.

Research has confirmed that certain user numbers must be attainted before contact-tracing apps can be labelled as effective. The University of Oxford conducted an experiment on a simulated city to reveal that 80% of smartphone users in the UK—or 56% of the population—must be using the app for it to be successful in curbing the spread of the Coronavirus.[22] Unfortunately this cannot be enforced, it is important to ensure downloading the app is voluntary to maintain civil liberties.[23]

User numbers may be inhibited by scepticism throughout society towards the government and "Big Tech," who use surveillance to monitor our daily routines and, consequently, impart a reluctance to participate.[24] Furthermore, there is a high correlation between people who don't

it will reveal who you hang out with', *The Conversation*, 15 April 2020, https://theconversation.com/the-coronavirus-contact-tracing-app-wont-log-your-location-but-it-will-reveal-who-you-hang-out-with-136387.

18 Karen Middleton, 'How the COVIDSafe data could be used', *The Saturday Paper*, 2 May 2020, https://www.thesaturdaypaper.com.au/news/politics/2020/05/02/how-the-covidsafe-data-could-be-used/15883416009764.

19 Helen Regan, '2 million Australians have downloaded a coronavirus contact tracing app', *CNN World*, 28 April 2020, https://edition.cnn.com/2020/04/28/australia/covidsafe-coronavirus-tracing-app-australia-intl/index.html.

20 Ariel Bogle, 'Will the Government's coronavirus app COVIDSafe keep your data secure? Here's what experts say', *ABC News*, 27 April 2020, https://www.abc.net.au/news/science/2020-04-27/covidsafe-contact-tracing-app-coronavirus-privacy-security/12186044.

21 Linton Besser and Dylan Welch, 'Australia's coronavirus tracing app's data storage contract goes offshore to Amazon', *ABC News*, 23 April 2020, https://www.abc.net.au/news/2020-04-24/amazon-to-provide-cloud-services-for-coronavirus-tracing-app/12176682.

22 Adam Vaughan, 'There are many reasons why COVID-19 contact-tracing apps may not work', *New Scientist*, 17 April 2020, https://www.newscientist.com/article/2241041-there-are-many-reasons-why-covid-19-contact-tracing-apps-may-not-work/.

23 Eszter Hargittai and Elissa Redmiles, 'Will Americans be willing to install COVID-19 tracking apps?', *Scientific American*, 28 April 2020, https://blogs.scientificamerican.com/observations/will-americans-be-willing-to-install-covid-19-tracking-apps/.

24 Andy Greenberg, 'Does COVID-19 contact tracing pose a privacy risk? Your questions, answered', *Wired*,

own a smartphone and those at high risk of contracting COVID-19—particularly older generations and the poor. Contact tracing apps therefore fail to detect and protect potentially severe cases. The limitations of the technology present another problem. Bluetooth range extends beyond 1.5 metres, and also permeates through walls, creating false positives. Numbers may also be inaccurately inflated through "self-diagnosing incorrectly or worse, trolls spamming the system."[25] False positives need to be avoided, not only for the efficiency of the operation, but also to not lose the faith of users.

In Conclusion

If assessing contact-tracing apps based off their ethics, COVIDSafe would be considered a golden example of "Good Data." However, following Taylor and Purtova, it is not only sustainability at stake, but also the responsibility that must be met to attain a holistic "Good Data" practice.[26] Concerns over confidentiality and inaccuracies prevent contact-tracing apps from easily being categorized as "good." However, what if the equal weighting of responsibility and sustainability is not fixed? Extenuating circumstances often mean we must prioritize and compromise. Contact tracing apps are an example of foregoing responsibility to the individual for sustainability of the whole population. Additionally, incorporation of decentralized storage allows people to choose from a pool of suppliers to align with their values, providing an exit strategy. Such a decision would mean data is not stored post-virus[27], and inviting collaboration could ensure a more trustworthy model of contact tracing.[28] Trust has become particularly important, because the public needs to trust their government and health services to utilize this data for the benefit of the public. It is important to maintain perspective and remember what is at stake. In times of crisis, we may comply with conditions otherwise worth challenging. Sacrifices and personal discomfort may be necessary and worthwhile if they lead to overcoming and healing from COVID-19.

References

Abbas, Roba and Katina Michael. 'The coronavirus contact tracing app won't log your location, but it will reveal who you hang out with', *The Conversation*, 15 April 2020, https://theconversation.com/the-coronavirus-contact-tracing-app-wont-log-your-location-but-it-will-reveal-who-you-hang-out-with-136387.

Australian Government. 'COVIDSafe app', last updated 14 October 2020, https://www.health.gov.au/resources/apps-and-tools/covidsafe-app.

Besser, Linton and Dylan Welch. 'Australia's coronavirus tracing app's data storage contract goes offshore to Amazon', *ABC News*, 23 April 2020, https://www.abc.net.au/news/2020-04-24/amazon-to-provide-cloud-services-for-coronavirus-tracing-app/12176682.

Bogle, Ariel. 'Will the Government's coronavirus app COVIDSafe keep your data secure? Here's what experts say', *ABC News*, 27 April 2020, https://www.abc.net.au/news/science/2020-04-27/covidsafe-contact-tracing-app-coronavirus-privacy-security/12186044.

17 April 2020, https://www.wired.com/story/apple-google-contact-tracing-strengths-weaknesses/.

25 Andy Greenberg (2020).

26 Linnet Taylor and Nadia Purtova, 'What is responsible and sustainable data science?'.

27 Vaughan (2020).

28 Kelsie Nabben and Chris Berg, 'The COVIDSafe app was just one contact tracing option. These alternatives guarantee more privacy'.

Dencik, Lina, Arne Hintz, Joanna Redden & Emiliano Treré. 'Exploring Data Justice: Conceptions, Applications and Directions', *Information, Communication & Society*, 22:7 92019), 873-881.

Feliz Ritchie and Richard Welpton. 'Sharing risks, sharing benefits: data as a public good', *United Nations Economic Commission for Europe.* Available from: https://uwe-repository.worktribe.com/preview/958317/21_Ritchie-Welpton.pdf.

'Government concedes health officials are currently unable to use COVIDSafe coronavirus app', *SBS*, 2 May 2020, https://www.sbs.com.au/news/government-concedes-health-officials-are-currently-unable-to-use-covidsafe-coronavirus-app.

Greenberg, Andy. 'Clever cryptography could protect privacy in COVID-19 contact-tracing apps', *Wired*, 4 August, https://www.wired.com/story/covid-19-contact-tracing-apps-cryptography/.

Greenberg, Andy. 'Does COVID-19 contact tracing pose a privacy risk? Your questions, answered', *Wired*, 17 April 2020, https://www.wired.com/story/apple-google-contact-tracing-strengths-weaknesses/.

Hargittai, Eszter and Elissa Redmiles. 'Will Americans be willing to install COVID-19 tracking apps?', *Scientific American*, 28 April 2020, https://blogs.scientificamerican.com/observations/will-americans-be-willing-to-install-covid-19-tracking-apps/.

Middleton, Karen. 'How the COVIDSafe data could be used', *The Saturday Paper*, 2 May 2020, https://www.thesaturdaypaper.com.au/news/politics/2020/05/02/how-the-covidsafe-data-could-be-used/15883416009764.

Nabben, Kelsie and Chris Berg. 'The COVIDSafe app was just one contact tracing option. These alternatives guarantee more privacy', *The Conversation*, 30 April 2020, https://theconversation.com/the-covidsafe-app-was-just-one-contact-tracing-option-these-alternatives-guarantee-more-privacy-137400.

Nellis, Stephen and Paresh Dave. 'Showdown looms between Silicon Valley, U.S. states over contact tracing apps', *Reuters*, 25 April 2020, https://www.reuters.com/article/us-health-coronavirus-usa-apps/showdown-looms-between-silicon-valley-u-s-states-over-contact-tracing-apps-idUSKCN22702F.

Pettersson, Henrik, Byron Manley and Sergio Hernandez. 'Tracking coronavirus' global spread', *CNN Health*, 23 October 2020, https://edition.cnn.com/interactive/2020/health/coronavirus-maps-and-cases/.

Regan, Helen. '2 million Australians have downloaded a coronavirus contact tracing app', *CNN World*, 28 April 2020, https://edition.cnn.com/2020/04/28/australia/covidsafe-coronavirus-tracing-app-australia-intl/index.html.

Taylor, Linnet and Nadia Purtova. 'What is responsible and sustainable data science?', *Big Data & Society*, July 2019, doi:10.1177/2053951719858114.

Taylor, Linnet. 'The ethics of big data as a public good: which public? Whose good?', *Philophical Transactions A*, 374: 20160126 (2016), http://dx.doi.org/10.1098/rsta.2016.0126.

Trenham, Claire and Adam Steer. 'The good data manifesto', in Angela Daly, S. Kate Devitt and Monique Mann, eds., *Good Data* (pp. 37-52), 2019. Amsterdam: Institute of Network Cultures

Vaughan, Adam. 'There are many reasons why COVID-19 contact-tracing apps may not work', *New Scientist*, 17 April 2020, https://www.newscientist.com/article/2241041-there-are-many-reasons-why-covid-19-contact-tracing-apps-may-not-work/.

Yan, Holly. 'Contact tracing 101: How it works, who could get hired, and why it's so critical in fighting coronavirus now', *CNN Health*, 15 May 2020, https://edition.cnn.com/2020/04/27/health/contact-tracing-explainer-coronavirus/index.html.

TECHNOLOGICAL RECONFIGURATIONS IN THE DATAFIED PANDEMIC

THEME IV

28. SOLUTIONISM, SURVEILLANCE, BORDERS AND INFRASTRUCTURES IN THE "DATAFIED PANDEMIC"

PHILIP DI SALVO

The COVID-19 pandemic has been a prism and an amplifier for anything data. It has exposed underlying issues that require the attention of academics, activists, journalists, and policy makers. Health emergencies are enormous stress tests for civil rights and freedoms, and for the platforms through which societies come together. With most of the world population under lockdown or subjected to monitoring, digital platforms and internet infrastructures have become leading spaces where social life takes place. This may sound obvious now, but as Franco "Bifo" Berardi wrote in his pandemic-influenced book *Fenomenologia della fine*, COVID-19 globally recodified the assumptions of our societies, so we must consider their datafied sides.[1] While we live on the internet more than ever, access to tools, basic services, and social environments is becoming increasingly unequal. Such inequalities have increased due to the uneven distribution of opportunities, resources, and the exclusive design of socially-impactful technologies.

In a piece for *Open Democracy* written from the Dutch and Italian lockdowns spring 2020, Stefania Milan and I tried to identify "four enemies" from the pandemic in the context of the "datafied society."[2] Back then, we claimed that the pandemic was accelerating "potentially dangerous dynamics" capable of causing huge collective damage. In the fall of 2020, those dynamics apparently exploded in plain sight, exacerbated by the long-awaited "second wave" of the virus and political intervention worldwide. As we expected, the pandemic reformulated the relationships between tech, power, and justice, as claimed by Linnet Taylor, Gargi Sharma, Aaron Martin, and Shazade Jameson in their book *Data Justice and COVID-19: Global Perspectives*.[3] The outcomes of these reformulation have not yet manifested clearly, but their occurrence appears visible in some domains, especially the most marginalised communities. In this essay, I will discuss four keywords: solutionism, surveillance, borders, and infrastructures.

Solutionism

The pandemic has been accompanied by a new wave of solutionism in policy making, healthcare, and beyond. Solutionism has been described by Evgeny Morozov as the "idea that given the right code, algorithms and robots, technology can solve all of mankind's problems."[4] We

1 Franco Berardi, *Fenomenologia della fine*, Roma: NERO, 2020.

2 Philip Di Salvo and Stefania Milan, 'Four invisible enemies in the first pandemic of a "datafied society', *openDemocracy*, 8 June 2020, https://www.openDemocracy.net/en/can-europe-make-it/four-invisible-enemies-in-the-first-pandemic-of-a-datafied-society/.

3 Linnet Taylor, Gargi Sharma, Aaron Martin and Shazade Jameson (eds.), *Data Justice and COVID-19: Global Perspectives*, London: Meatspace Press, 2020.

4 Ian Tucker, 'Evgeny Morozov: "We are abandoning all the checks and balances"'. *The Guardian*, 9 March 2013, https://www.theguardian.com/technology/2013/mar/09/evgeny-morozov-technology-solutionism-interview.

heard lots of these calls during the pandemic, especially when the release of contact-tracing apps were heralded as the "silver bullet" to the spread of the pandemic. In Italy, the government adopted privacy-respectful solutions and frameworks for its national app Immuni ("the immune ones"). However, the sensitivity of the Italian app development came only from weeks of pressure from privacy activists, academics, and journalists to avoid more invasive software solutions. Even in an established democracy, China was frequently described as a model to follow, especially in regards to the tracking of citizens during the pandemic. Although that pressure led to better decisions and an improved app, privacy and surveillance are not the only potential problems in regards to these apps. Whereas they're undoubtedly effective to trace cases and are one more solution that states can adopt in the battle against COVID-19, they're not the most fundamental solution.

Even when privacy-respectful, contact tracing apps may exclude enormous segments of the population: Singapore has been an interesting and dramatic case study in these regards, also because the city has been frequently indicated as an excellent example in the response to the pandemic, especially in regards to technology usage. As the BBC reports, though, "success crumbled when the virus reached its many foreign worker dormitories" that are home to over 300,000 low-wage foreign workers, living in inadequate conditions where social distancing is impossible and contact-tracing apps fail in their mission.[5] As the cases number in the dorms sky-rocketed, Singapore authorities started releasing different statistics about the contagion: one about the city community, and one about the population in dorms. Excluded from any form of assistance and prevention, foreign workers were even hidden from the main data, ending up in dedicated statistics highlighting a clear inequality pattern. Stories of exclusion and blatant inequality related to technological responses to the pandemic have emerged from all over the world and also in developed and fully democratic countries. In Canada, for instance, it has been reported that the national contact-tracing app was released in French and English only, signaling another sign of exclusion for the four million Canadians who do not command those languages.[6] In the UK, an expert board reporting to the government highlighted that some 21% of the UK adults do not use a smartphone, de facto excluding them to the access to contact-tracing apps.[7] In Italy, the national contact tracing app doesn't run on an array of older Android and Apple phones (and has shown some bugs also with more recents models), making income and consumer electronics competence as decisive factors in the spread of the app among the Italian population. The predominance of older versions of smartphones in Italy has been indicated as a driver of the low adoption of the app, as *Wired* reports.[8] Although the Bangladesh and Western stories can't be put on the same level in regards of their sever-

5 Yvette Tan, 'COVID-19 Singapore: A 'pandemic of inequality' exposed', *BBC News*, 17 September 2020, https://www.bbc.com/news/world-asia-54082861.

6 Zi-Ann Lum, 'COVID Alert App Is A Glaring Reminder Of Health Inequality In Canada', *Huffington Post Canada*, 10 March 2020, https://tinyurl.com/y3smptl.

7 Natalia Drodziak, 'UK COVID-19 App Could Aggravate Inequalities, Advisers Warned', *Bloomberg News*, 14 May 2020, https://www.bloomberg.com/news/articles/2020-05-14/u-k-covid-19-app-could-aggravate-inequalities-advisers-warned.

8 Raffaele Angius and Luca Zorloni, 'Come si spiega lo spread delle app di contact tracing tra Italia e Germania', *Wired Italia*, 27 July 2020, https://www.wired.it/internet/web/2020/07/27/app-contact-tracing-italia-germania/.

ity, it is clear that at every latitude technological determinism, when pushed with too much sublime emphasis on "smart" and "shiny" digital technologies, may in any case lead to forms of inequality and exclusion. Furthermore, evidence about the effectiveness of contact tracing apps is also limited, as reported by Lancet in August.[9]

Surveillance

Whereas much of the debate about privacy in the context of the COVID-19 pandemic was about contact tracing apps, they're certainly not the only potentially harmful technology revitalized in recent months. Surveillance studies scholars Martin French and Torin Monahan have pointed out that there is "evidence of surveillance dynamics at play with how bodies and pathogens are being measured, tracked, predicted, and regulated."[10] Basically, controlling a pandemic spread involves forms of surveillance. The spread of the pandemic has seen an acceleration in the adoption of various monitoring technologies and automated decision-making systems, according to an AlgorithmWatch report.[11] These technologies include bracelets, selfies-apps, thermal scanners, facial recognition systems and programs for digital data collection and analysis. As AlgorithWatch posits, are these technologies becoming the "new normal?" The pandemic has seen an acceleration of the implementation of these technologies, frequently supported by a deterministic approach, raising critical questions about informed consent and the impact of such technologies on our fundamental rights. As we wrote at the beginning of this essay, global emergencies are also stress tests for societies and democracies at large, since they're forced to cope with extraordinary situations. As Elise Racine, a research associate at A Path for Europe (PfEU), argues, "risk for function creep means that these tools may be co-opted by other security initiatives."[12] In this way, data-driven technologies may endanger the fundamental rights of the most vulnerable, who are more exposed to abusive forms of monitoring and surveillance.

The pandemic has revitalized the appetite for surveillance all around the world, with facial recognition and other controversial technologies leading the way. As the Centre for Security Studies at ETH Zürich reports, the market for surveillance cameras is expecting a substantial growth in 2021, reaching 300,000 new cameras being installed every day globally and a billion cameras installed by the end of the same year.[13] Democratic institutions are at stake, since

9 Isobel Braithwaite, Thomas Callender, Miriam Bullock and Robert W. Aldridge, 'Automated and partly automated contact tracing: a systematic review to inform the control of COVID-19' *The Lancet Digital Health*, https://www.thelancet.com/journals/landig/article/PIIS2589-7500(20)30184-9/fulltext.

10 Martin French and Tori Monahan, 'Dis-ease Surveillance: How Might Surveillance Studies Address COVID-19?', *Surveillance & Society, 18*(1), 1-11.

11 Fabio Chiusi, 'Automated Decision-Making Systems in the COVID-19 Pandemic: A European Perspective. Introduction', *AlgorithmWatch*, 1 September 2020, https://algorithmwatch.org/wp-content/uploads/2020/08/ADM-systems-in-the-COVID-19-pandemic-Report-by-AW-BSt-Sept-2020.pdf.

12 Elise Racine, 'How could pandemic surveillance tools adversely affect vulnerable populations?', *International Development LSE Blog*, https://blogs.lse.ac.uk/internationaldevelopment/2020/05/06/how-could-pandemic-surveillance-tools-adversely-affect-vulnerable-populations/.

13 Alejandra Bringas and Kevin Kohler, 'Facial Recognition will Outlast COVID-19', *Center for Security Studies - ETH Zurich*, 5 October 2020, https://css.ethz.ch/en/center/CSS-news/2020/10/facial-recognition-will-outlast-covid-19.html.

intrusive technologies undermine democratic values and have been shown to be disproportionately used to target minorities and exacerbate racial biases.[14]

Examples of facial recognition being used to enforce COVID-19 restrictions have already emerged from Russia, where Moscow's enormous network of cameras has been used to control residents during the lockdown.[15] Even in democratic contexts like Italy, facial recognition is making its way into public spaces, often pushed as migration-containment strategy, as happened in the Italian city of Como[16]—another sign that the most vulnerable communities of our societies are also the most exposed to constant monitoring. Crises set new standards. Are we slowly moving into a surveillance state where immediate health measures are paving the way for overreaching forms of surveillance that are here to stay? Without proper testing, clear frameworks, and guidelines, we risk endorsing a normalization of surveillance with effects that could be difficult to assess and take years to be de-implemented.

Borders

Borders have traditionally been surveilled. Unsurprisingly, technologies for monitoring borders are also accelerating their adoption across the world, riding promises to make life easier and safer during the pandemic. Whereas boarding a plane without touching any surface may sound like a viable solution to prevent the further spread of the virus, boarding a plane only through facial recognition raises obvious privacy concerns. Datafied "immunity passports" now being discussed in various countries pose serious threats to various segments of the population. They have been sold as another "crisis-response that depends on technology, as we saw with contact-tracing apps," writes Privacy International.[17] As the London-based NGO argues, these technical solutions are currently being hyped and pushed by private actors involved in travelling and border services, but their adoption may have serious impacts on the right of citizens to movement, and the lives of those most discriminated against. Also, these tools may become useful for profiling, as they may give "the police and security services more powers to not only know information about our health, but also to stop people and demand proof of immunity in certain situations," as Privacy International again argues. The global lockdown has also deeply changed the nature or geographical borders and their political meanings, as migrants have been disproportionately victimized by this new status quo. Frequently, migrants and refugees failed to be included in COVID-19 statistics and figures, given their invisibility.[18] Refugees are usually the first targets of the datafied surveillance practices discussed here. In April 2020,

14 Natasha Singer and Cade Metz, 'Many Facial-Recognition Systems Are Biased, Says U.S. Study, *The New York Times*, 29 December 2019, https://www.nytimes.com/2019/12/19/technology/facial-recognition-bias.html.

15 'Coronavirus: Russia uses facial recognition to tackle COVID-19', *BBC News*, 3 April 2020, https://www.bbc.com/news/av/world-europe-52157131.

16 Philip Di Salvo, Laura Carrer and Riccardo Collucini, 'How facial recognition is spreading in Italy: the case of Como', *Privacy International*, 17 September 2020, https://privacyinternational.org/case-study/4166/how-facial-recognition-spreading-italy-case-como.

17 'The looming disaster of immunity passports and digital identity', *Privacy Internatonal*, https://privacyinternational.org/long-read/4074/looming-disaster-immunity-passports-and-digital-identity.

18 See chapter 9 in this volume. (pp.70-78)

the Bureau of Investigative Journalism reported how the digital monitoring and surveillance technological practices being now adopted during the pandemic were originally tested on refugees and migrants during the 2015 migration crisis in Europe.[19] In Singapore, migrant workers have been forced to download a contact-tracing app[20], while Russia is reportedly considering following suit.[21] Vulnerable communities, like migrants on the move, who are already suffering from weaker safeguards for their rights and freedoms, are now also increasingly becoming a testing ground for implementing datafied monitoring practices that may end up becoming standardized practices in a post-pandemic world.

Infrastructures

Digital infrastructures and platforms gained new centrality in our daily lives because of the pandemic. Smartworking, remote teaching, and public services were forced to migrate online and still rely on digital tools to function. This evolution also has profound implications in a society pushing for more datafication. It is time to ask, what are the long-term implications of making private services the de facto infrastructure of social life, citizenship, and agency? Coming back to contact-tracing apps as an example, there is little doubt that the framework provided by the Apple-Google alliance made a privacy-respectful structure readily available. Yet, we should demand greater transparency when such powerful companies become official suppliers of digital infrastructures used for health services. Power balances between national states and private entities are at stake. Most urgently, as David Lyon urges, the pandemic should be the moment when we start considering surveillance implications beyond the singular privacy issue.[22] More is at stake, because surveillance has become a structural element of today's societies. With most of our lives moving online, we're also moving into spaces where what Shoshana Zuboff calls "surveillance capitalism" is the ruling economical, political, and social structure.[23] Surveillance capitalism is increasingly exposing all societies' activities to extended datafication: the constant monitoring, sorting, and profiling of people for profit. It is time to build exit strategies and new forms of resistance; the datafied society is now an established reality and is already affected by global issues such as a pandemic. The view from inside this crisis has indicated that, in its current shape, the datafied society is increasingly working against its own citizens.

19 Crofton Black, 'Monitoring being pitched to fight COVID-19 was tested on refugees', *The Bureau of Investigative Journalism*, 28 April 2020, https://www.thebureauinvestigates.com/stories/2020-04-28/monitoring-being-pitched-to-fight-covid-19-was-first-tested-on-refugees.

20 'Singapore contact tracing app made mandatory for migrant workers', Privacy International, https://privacyinternational.org/examples/3890/singapore-contact-tracing-app-made-mandatory-migrant-workers.

21 Damelya Aitkhozhina, 'Russia's latest app will track migrant workers – but who's next?, *openDemocracy*, 9 June 2020, https://www.openDemocracy.net/en/odr/russias-latest-app-will-track-migrant-workers-but-whos-next/.

22 David Lyon, 'The coronavirus pandemic highlights the need for a surveillance debate beyond "privacy"', *The Conversation*, 24 March 2020, https://theconversation.com/the-coronavirus-pandemic-highlights-the-need-for-a-surveillance-debate-beyond-privacy-137060.

23 Shoshana Zuboff, *The Age of Surveillance Capitalism*, New York, NY: Public Affairs, 2019.

References

'Coronavirus: Russia uses facial recognition to tackle COVID-19', *BBC News*, 3 April 2020, https://www.bbc.com/news/av/world-europe-52157131.

'The looming disaster of immunity passports and digital identity', *Privacy Internatonal*, https://privacyinternational.org/long-read/4074/looming-disaster-immunity-passports-and-digital-identity.

'Singapore contact tracing app made mandatory for migrant workers', Privacy International, https://privacyinternational.org/examples/3890/singapore-contact-tracing-app-made-mandatory-migrant-workers.

Aitkhozhina, Damelya. 'Russia's latest app will track migrant workers – but who's next?, *openDemocracy*, 9 June 2020, https://www.openDemocracy.net/en/odr/russias-latest-app-will-track-migrant-workers-but-whos-next/.

Angius, Raffaele and Luca Zorloni. 'Come si spiega lo spread delle app di contact tracing tra Italia e Germania', *Wired Italia*, 27 July 2020, https://www.wired.it/internet/web/2020/07/27/app-contact-tracing-italia-germania/.

Berardi, Franco. *Fenomenologia della fine*, Roma: NERO, 2020.

Black, Crofton. 'Monitoring being pitched to fight COVID-19 was tested on refugees', *The Bureau of Investigative Journalism*, 28 April 2020, https://www.thebureauinvestigates.com/stories/2020-04-28/monitoring-being-pitched-to-fight-covid-19-was-first-tested-on-refugees.

Braithwaite, Isobel, Thomas Callender, Miriam Bullock and Robert W. Aldridge. 'Automated and partly automated contact tracing: a systematic review to inform the control of COVID-19' *The Lancet Digital Health*, https://www.thelancet.com/journals/landig/article/PIIS2589-7500(20)30184-9/fulltext.

Bringas, Alejandra and Kevin Kohler. 'Facial Recognition will Outlast COVID-19', *Center for Security Studies - ETH Zurich*, 5 October 2020, https://css.ethz.ch/en/center/CSS-news/2020/10/facial-recognition-will-outlast-covid-19.html.

Chiusi, Fabio. 'Automated Decision-Making Systems in the COVID-19 Pandemic: A European Perspective. Introduction', *AlgorithmWatch*, 1 September 2020, https://algorithmwatch.org/wp-content/uploads/2020/08/ADM-systems-in-the-COVID-19-pandemic-Report-by-AW-BSt-Sept-2020.pdf.

Di Salvo, Philip, Laura Carrer and Riccardo Collucini. 'How facial recognition is spreading in Italy: the case of Como', *Privacy International*, 17 September 2020, https://privacyinternational.org/case-study/4166/how-facial-recognition-spreading-italy-case-como.

Di Salvo, Philip and Stefania Milan. 'Four invisible enemies in the first pandemic of a "datafied society"', *openDemocracy*, 8 June 2020, https://www.openDemocracy.net/en/can-europe-make-it/four-invisible-enemies-in-the-first-pandemic-of-a-datafied-society/.

Drodziak, Natalia. 'UK COVID-19 App Could Aggravate Inequalities, Advisers Warned', *Bloomberg News*, 14 May 2020, https://www.bloomberg.com/news/articles/2020-05-14/u-k-covid-19-app-could-aggravate-inequalities-advisers-warned.

French, Martin and Tori Monahan. 'Dis-ease Surveillance: How Might Surveillance Studies Address COVID-19?', *Surveillance & Society*, *18*(1), 1-11.

Lum, Zi-Ann. 'COVID Alert App Is A Glaring Reminder of Health Inequality In Canada', *Huffington Post Canada*, 10 March 2020, https://tinyurl.com/y3smptl.

Lyon, David. 'The coronavirus pandemic highlights the need for a surveillance debate beyond "privacy"', *The Conversation*, 24 March 2020, https://theconversation.com/the-coronavirus-pandemic-highlights-the-need-for-a-surveillance-debate-beyond-privacy-137060.

Pelizza, Annalisa, Yoren Lausberg and Stefania Milan. 'The Dilemma Of Undocumented Migrants Invisible To Covid-19 Counting',in Stefania Milan, Emiliano Treré and Silvia Masiero (eds) *COVID-19 from the Margins. Pandemic Invisibilities, Policies and Resistance in the Datafied Society,* Institute of Network Culture, Amsterdam, 2021, pp. 70-78.

Racine, Elise. 'How could pandemic surveillance tools adversely affect vulnerable populations?', *International Development LSE Blog*, https://blogs.lse.ac.uk/internationaldevelopment/2020/05/06/how-could-pandemic-surveillance-tools-adversely-affect-vulnerable-populations/.

Singer, Natasha and Cade Metz. 'Many Facial-Recognition Systems Are Biased, Says U.S. Study, *The New York Times*, 29 December 2019, https://www.nytimes.com/2019/12/19/technology/facial-recognition-bias.html.

Tan, Yvette. 'COVID-19 Singapore: A 'pandemic of inequality' exposed', *BBC News*, 17 September 2020, https://www.bbc.com/news/world-asia-54082861.

Taylor, Linnet, Gargi Sharma, Aaron Martin and Shazade Jameson (eds.). *Data Justice and COVID-19: Global Perspectives*, London: Meatspace Press, 2020.

Tucker, Ian. 'Evgeny Morozov: "We are abandoning all the checks and balances"', *The Guardian*, 9 March 2013, https://www.theguardian.com/technology/2013/mar/09/evgeny-morozov-technology-solutionism-interview.

Zuboff, Shoshana. *The Age of Surveillance Capitalism*, New York, NY: Public Affairs, 2019.

29. COVID-19 AND THE STRIPPING OF POWER FROM THE EDGES

NIELS TEN OEVER

At the start of the COVID-19 pandemic, people wondered whether the internet infrastructure would be capable of handling the increase in data traffic. When many people started working, streaming, and following the rapidly unfolding news on social media from home, many expected this would strain on the internet infrastructure. Some European politicians were so concerned that they called on Netflix to lower the resolution of their video streams.[1] Why did it turn out the internet infrastructure was able to cope with the increasing demand? The answer is, because the internet no longer works as most people think it does. An extra layer of control was added to the internet by Content Delivery Networks. This chapter will discuss how pressure on the infrastructural margins of the internet is strengthening the center of the network, and examine how COVID-19 has exacerbated this trend.

In 2011, the Tunisian government started heavily censoring the internet in response to popular uprisings in the country. In response, many internet users engaged in what is commonly called a Distributed Denial of Service (DDoS) attack on the Tunisian government's website. In a DDoS attack, hundreds or even thousands of computers try to reach a website at the same time. This can lead to the website's server, or the connection to the server, being overloaded and thus render the website unavailable to internet users. When a website suddenly becomes very popular, this can also lead to similar behavior. When many users try to connect at the same time, the traffic effectively renders the site or service unavailable. Eight of Tunisia's websites were forced offline.

In response to the DDoS attacks, and to prevent down-time of servers due to their popularity, Content Distribution Networks (CDNs) were increasingly used. CDNs are globally-distributed proxy servers, often placed in data centers close to internet eXchange Points (IXPs). While a user thinks they are connecting to a popular website far away, they are connecting to a CDN server that is located near them. While you are thinking you are streaming a video from a jurisdiction that you think is safe, the video is more likely to be stored close to the network controlled by your Internet Service Provider (ISP) or your telecommunications operator.

When the internet was designed, an engineer adopted the end-to-end principles as their central motto. This was included in the mission statement of the Internet Engineering Taskforce, the institution responsible for co-developing and standardizing the internet infrastructure:

> The Internet isn't value-neutral, and neither is the IETF. We want the Internet to be useful for communities that share our commitment to openness and fairness. We

1 'Netflix to cut streaming quality in Europe for 30 days', *BBC News*, 19 March 2020, https://www.bbc.com/news/technology-51968302.

> embrace technical concepts such as decentralized control, edge-user empowerment and sharing of resources, because those concepts resonate with the core values of the IETF community. These concepts have little to do with the technology that's possible, and much to do with the technology that we choose to create (RFC3935).[2]

When users connected to the internet during the COVID-19 pandemic, it may seem they were edge-users connecting to another endpoint over "dumb pipes"—leveraging the powers of decentralized control. The truth it quite the opposite. The internet infrastructure held up during the COVID-19 pandemic not because people were getting their content from the global internet, but from a data center near them. You may think is actually a good thing, since it caused the internet to not collapse? Maybe. CDNs are the mere latest cause and consequence of centralization on the internet. The difference between CDNs and other large players such as Google and Facebook (who have their own CDNs) is that these other CDNs remain largely invisible. Some of you might have heard about Cloudflare, but what about Akamai, Fastly, and Limelight?

In 2017, Cloudflare unilaterally removed the neo-nazi forum and website Daily Stormer from its services.[3] In 2019, it similarly removed the imageboard 8chan after two shootings in the United States. The company cited the following reason for removal: "In the case of the El Paso shooting, the suspected terrorist gunman appears to have been inspired by the forum website known as 8chan. Based on evidence we've seen, it appears that he posted a screed to the site immediately before beginning his terrifying attack on the El Paso Walmart killing 20 people".[4] The interesting point was that no one asked Cloudflare to do this; they removed the content on their own volition, without a clear process in place. Many critical internet scholars such as Suzanne van Geuns, Corinne Cath,[5] and Kate Klonick[6] have reported on this. While such decisions show the concrete impact these companies can have, it is perhaps even more telling that one hears very little about these companies.

CDNs are perhaps the internet infrastructure that companies benefitted most from during the COVID-19 epidemic, because there was increased traffic to the websites that they provide services to. But what about the people who requested information from these websites? Technically, they got served by another server than the one they thought they were connected to. They might have received something else than what they asked for, because CDNs allow for particularly fine-mazed geography-based adaptation of content. The CDN that served a user

2 Alpestrine, H.T., 'RFC3935. A Mission Statement for the IETF', *Internet Engineering Task Force*, October 2004, https://tools.ietf.org/html/rfc3935.

3 'Criticism Received by Cloudflare for Content Censorship', *Cloudflare*, https://www.cloudflare.com/cloudflare-criticism/, accessed 27 October 2020.

4 Matthew Prince, 'Terminating Service for 8Chan', *Cloudflare*, 5 August 2019, https://blog.cloudflare.com/terminating-service-for-8chan/.

5 Suzanne van Geuns and Corinne Cath-Speth, 'How hate speech reveals the invisible politics of internet infrastructure', *TechStream*, 20 August 2020, https://www.brookings.edu/techstream/how-hate-speech-reveals-the-invisible-politics-of-internet-infrastructure/.

6 Kate Klonick. 'The terrifying power of internet Censors, *New York Times*, 13 September 2017, https://www.nytimes.com/2017/09/13/opinion/cloudflare-daily-stormer-charlottesville.html.

in Senegal might have different data than a CDN that served a user in Brisbane. And there is almost no way of knowing by which particular CDN server you got served, or to bypass the CDN. In this way, the opacity of internet infrastructure was exacerbated by the COVID-19 pandemic. In other words, the COVID-19 pandemic led to further black-boxing of the internet infrastructure, making it harder for users to understand how it works. While this might make the internet faster and more available, it does not make the internet more reliable. Arguably, it makes the internet a better tool for control, because it increases power asymmetries between users and transnational corporations.

In 2011, Tunisian internet users were able to use the internet infrastructure against their own government. In 2020, it is nearly impossible for users around the world to even know where the websites they are accessing are located, let alone take them down. The internet is no longer a bazaar. The COVID-19 pandemic helped fortify an industrial zone that now is the internet, which only allows users to connect on the outside, without having a view or control on the inside. The internet has become a smart network, with not so smart edges.

References

'Criticism Received by Cloudflare for Content Censorship', *Cloudflare*, https://www.cloudflare.com/cloudflare-criticism/, accessed 27 October 2020.

'Netflix to cut streaming quality in Europe for 30 days', *BBC News*, 19 March 2020, https://www.bbc.com/news/technology-51968302.

Alpestrine, H.T. 'RFC3935. A Mission Statement for the IETF', *Internet Engineering Task Force*, October 2004, https://tools.ietf.org/html/rfc3935.

Kate Klonick. 'The terrifying power of internet Censors, *New York Times*, 13 September 2017, https://www.nytimes.com/2017/09/13/opinion/cloudflare-daily-stormer-charlottesville.html.

Prince, Matthew. 'Terminating Service for 8Chan', *Cloudflare*, 5 August 2019, https://blog.cloudflare.com/terminating-service-for-8chan/.

Van Geuns, Suzanne and Corinne Cath-Speth. 'How hate speech reveals the invisible politics of internet infrastructure', *TechStream*, 20 August 2020, https://www.brookings.edu/techstream/how-hate-speech-reveals-the-invisible-politics-of-internet-infrastructure/.

30. THE RUSSIAN "SOVEREIGN INTERNET" FACING COVID-19

Francesca Musiani , Olga Bronnikova, Françoise Daucé, Ksenia Ermoshina, Bella Ostromooukhova & Anna Zaytseva

Despite the evolution of the COVID-19 pandemic in Russia, a state of emergency has not been declared in the country; only specific regions have entered into a state of "high alert" since early April. "Compulsory holidays" are only partially respected by a population plunged into a growing vagueness that is health-related, legal and economic at once.[1] In this context, Russia is deploying and updating its digital strategy and infrastructure, which have been carefully scrutinized in recent years for centralizing authority. What does the COVID-19 crisis say about the Russian state's digital power, and the challenges it poses to public freedoms?

The Russian State Facing COVID-19: Digital Ambitions put to the Test

The Russian authorities have advocated the use of digital tools to control the movements of citizens and limit the circulation of the virus. These uses aimed at "securitization" are inspired by China, Korea, and Singapore, but are also part of the "sovereignty" logic of the Russian Internet (Runet). This logic was already engaged[2] before the start of the epidemic, consolidating surveillance systems whose existence dates back several years (e.g., video surveillance cameras, aggregation of geolocation data supplied to the authorities by mobile operators).[3]

As of February, Sergei Sobyanin, the mayor of Moscow, proposed using facial recognition to monitor people returning from abroad, using the surveillance cameras of the "Safe City" program, operating since 2018.[4] Between February and March, 200 people who broke their quarantine were identified, including a man who merely took out his trash. As a study by IT and SORM—a popular blog on Telegram devoted to Runet surveillance and regulation issues—shows, this device was a catalyst for inequality.[5] Surveillance cameras were mainly installed in the modest districts of Moscow because those who decided their location resided in the upscale districts, and did not wish their activities to be monitored.

1 Anna Colin-Lebedev, 'L'État Russe Face au Défi du Coronavirus', *The Conversation*, 2 April 2020, https://theconversation.com/letat-russe-face-au-defi-du-coronavirus-135272.

2 Francesca Musiani, Benjamin Loveluck, Françoise Daucé and Ksenia Ermoshina, 'Souveraineté Numérique : l'Internet Russe Peut-il se Couper du Reste du Monde ?', *The Conversation*, 18 March 2019, https://theconversation.com/souverainete-numerique-linternet-russe-peut-il-se-couper-du-reste-du-monde-113516.

3 Andrey Zakharov, 'Smart City or Big Brother? How the Mayor's Office Learned to Know Everything About Muscovites', *BBC News*, 10 April 2020, https://www.bbc.com/russian/features-52219260.

4 Felix Light, 'Coronavirus Outbreak Poses Major Challenge for Russian Face Recognition System', *The Moscow Times*, 26 March 2020, https://www.themoscowtimes.com/ru/2020/03/26/vspishka-koronavirusa-yavlyaetsya-sereznim-ispitaniem-dlya-rossiiskoi-tehnologii-raspoznavaniya-lits-a38.

5 IT and Sorm, Telegram, https://t.me/itsorm/1663.

On March 20, 2020, faced with an increase in contaminations, Prime Minister Mikhail Mishustin recommended[6] monitoring citizens who have been in contact with infected people by collecting geolocation data from operators, and transmitting them to local administrations.[7] A patient monitoring application "Social Monitoring" was made available on April 1, 2020 on GooglePlay. It quickly became controversial, since its surveillance goes far beyond the movement of patients and offers little protection of personal data. The application was later finally withdrawn.[8]

However, the Russian State has not abandoned the digital tracking of citizens. Since April 13, all trips within Moscow that involved public transportation were carried out under penalty of fines, without a digital pass generated on an official website.[9] In response to criticism of the "Social Monitoring" application, the Moscow municipality declared that with this new device, personal data will be stored in Russian territory and will be deleted when the "high alert" state is over.[10] The same system was active in Tatarstan and the Primorye region; QR-Code passes were also available and recommended but not mandatory in Nizhny-Novgorod, while other Russian regions resorted to lighter measures.[11]

Resistance and Mobilisations of the Free Internet

The use of digital data to strengthen surveillance of the population while coping with the disease is causing concern for defenders of online freedoms. Technologists, engineers, and developers discuss government projects and conduct independent investigations to uncover security vulnerabilities, technical issues, and other controversial aspects of the technologies deployed by the Russian state.

Several associations and independent media channels have alerted internet users to the growing attacks on the protection of personal data and the development of online surveillance. On March 27, the NGO Roskomsvoboda published avademecum on digital rights in a pandemic period, stressing that the use of personal data, especially biometric data, legally required the consent of individuals. But "the use of facial recognition is in a gray area," argues lawyer Sarkis Darbinyan.[12] The association is also launching, with other associations in the post-Soviet space, an inventory of restrictions on digital freedoms around the world.[13] The

6 Russian Government, 'Decisions following the meeting of the Presidium of the Coordination Council under the Government of the Russian Federation to combat the spread of the new coronavirus infection', 23 March 2020, government.ru/orders/selection/401/39243/.

7 'A system for tracking citizens who have been in contact with infected with coronavirus will be created', *Roskomsvoboda*, 23 March 2020, https://roskomsvoboda.org/56599/.

8 'The Moscow City Administration's application for "social monitoring" has appeared on Google Play', *Kommersant*, 1 April 2020, https://www.kommersant.ru/doc/4309778.

9 https://nedoma.mos.ru/.

10 'Digital passes: how the access system will work in the city', *Mos*, 11 April 2020, https://www.mos.ru/mayor/themes/2299/6434050/.

11 'Self-isolation and control: Russian regions introduce new restrictions on the movement of citizens', *Vesti*, 7 April 2020, https://www.vesti.ru/doc.html?id=3254717.

12 Felix Light, 'Coronavirus outbreak poses major challenge for Russian face recognition system'.

13 Pandemic Big Brother, https://pandemicbigbrother.online/ru/.

Agora association is opening a legal aid service linked to the pandemic. Its lawyers are also concerned about the use of facial recognition to enforce quarantine.[14] Activists close to government-opposing personality Alexei Navalny (such as the Society for the Protection of the Internet)[15] denounced, even more boldly, the establishment of a "digital gulag",[16] and called on citizens not to transmit their personal data to the applications that control movements and trace contacts.

At the same time, solidarity initiatives are developing on the internet, aimed at supporting the poorest citizens and caregivers. The Makers vs. Covid collective uses 3D-printing techniques to provide doctors with the protective gear they need.[17] An online hackathon, "Covidhack," is developing a bot for Telegram that produces a citizen database allowing people with coronavirus to speak anonymously and map their symptoms. Internet infrastructures are also being weakened by the pandemic, due to the growth in traffic driven by new digital habits in confinement. Russian networks are frequently down, but the maintanance work of technicians and cable operators employed by the over three thousand Internet Service Providers (ISPs) that manage these networks comes at the risk of legal threats. OrderKom, a consulting firm for ISPs, offers these workers legal support, including the preparation of authorizations for movements due to on-site work, and a legal defense in the event of a fine.[18]

Faults and Paradoxes of Digital Surveillance

Over the days and the weeks, gaps emerged between the authorities' security ambitions and the realities of their implementation. Digital surveillance and health-related solutions were delegated to many public and private, federal and regional players, who often made contradictory decisions. The paradoxes and dysfunctions documented by online freedom activists show the limits of the announced "securitization" design. Perhaps the most obvious failure is that of digital passes in Moscow. The Nedoma.mos.ru site that generates the passes uses foreign hosting servers; the government was therefore accused of putting its own project of sovereign Runet in jeopardy.[19]

Digital freedom activists, such as Mikhail Klimarev of the Society for the Protection of the Internet, point to the ineffectiveness of technological solutions. Instead, he suggests that COVID-19 strategies should focus on civic responsibility, while digital surveillance infantilizes citizens and is likely to be circumvented. This crisis highlights the lack of mutual trust

14 'Agora opens legal aid operational headquarters in connection with the coronavirus pandemic', *Agora*, 19 March 2020, https://agora.legal/news/2020.03.19/Agora-otkryla-operativnyi-shtab-pravovoi-pomoshi-v-svyazi-s-pandemiei-koronavirusa/1002.

15 Internet Defense Society, https://ozi-ru.org/.

16 'Technical solutions to combat coronavirus. Second episode', *Navalny*, https://shtab.navalny.com/hq/ekaterinburg/3796/.

17 Makers vs COVID, https://makersvscovid.ru/.

18 Ordercom, www.ordercom.ru/.

19 IT and Sorm, Telegram, https://t.me/itsorm/1645.

between citizens and the state. Indeed, the information on the epidemic disseminated by the state is viewed with suspicion, oscillating between "they are hiding the true extent of the disaster to us" and "it is a plot to muzzle us even more." If the authorities take the COVID-19 crisis as an opportunity to re-open their hunt for "fake news," on their end, YouTubers and independent journalists denounce the incomplete or questionable information disseminated by representatives of power. They also object to the public behaviour of officials like Vladimir Putin's spokesperson, who showed up at a press conference with a highly contested "virus blocker" badge.[20] Sometimes, events are borderline ironic, such as the Ministry of Foreign Affairs' opening of a thread of information for its nationals abroad on the Telegram application, which is officially banned in Russia.

Thus, part of civil society, without questioning the need for confinement, mobilizes against the threatening initiatives of the Russian "Big Brother." It denounces the incompetence of the authorities to manage the implementation of technical devices, as well as the institutional power's violation of its own laws (like the provision on the storage of Russian data on Russian territory), as well as the non-protection of personal data.

While the wide and ambitious Russian Internet surveillance and sovereignty project is gaining strength during the coronavirus crisis, its implementation is uncertain and often contradictory. The pandemic demonstrates the limits of the internet infrastructure centralization project. The government ends up being obliged to relax specific regulatory measures, such as the Yarovaya law, which requires ISPs to keep the history and metadata of users for the purpose of legal interception and fight against terrorism.[21] However, this apparent complexity is not necessarily synonymous with ineffectiveness. It is part of the flexible reconfigurations of digital constraints in Russia, adjusting to the recently rising challenges, and raising legitmate concerns of digital freedoms defenders.

References

'A system for tracking citizens who have been in contact with infected with coronavirus will be created', *Roskomsvoboda*, 23 March 2020, https://roskomsvoboda.org/56599/.

'Agora Opens Legal Aid Operational Headquarters in Connection With the Coronavirus Pandemic', *Agora*, 19 March 2020, https://agora.legal/news/2020.03.19/Agora-otkryla-operativnyi-shtab-pravovoi-pomoshi-v-svyazi-s-pandemiei-koronavirusa/1002.

'Digital passes: how the access system will work in the city', *Mos*, 11 April 2020, https://www.mos.ru/mayor/themes/2299/6434050/.

'Kremlin is Reliably Protected From Coronavirus: Peskov Wears a "miracle badge"', *9TV*, 9 April 2020, https://www.9tv.co.il/item/12619.

'Self-isolation and control: Russian regions introduce new restrictions on the movement of citizens', *Vesti*, 7 April 2020, https://www.vesti.ru/doc.html?id=3254717.

'The Moscow City Administration's application for "social monitoring" has appeared on Google Play',

20 'Kremlin is reliably protected from coronavirus: Peskov wears a "miracle badge"', *9TV*, 9 April 2020, https://www.9tv.co.il/item/12619.

21 Wikipedia contributors, 'Yarovaya Law', https://en.wikipedia.org/wiki/Yarovaya_law.

Kommersant, 1 April 2020, https://www.kommersant.ru/doc/4309778. https://nedoma.mos.ru/.

Colin-Lebedev, Anna. 'L'État Russe Face au Défi du Coronavirus', *The Conversation*, 2 April 2020, https://theconversation.com/letat-russe-face-au-defi-du-coronavirus-135272.

Light, Fred. 'Coronavirus Outbreak Poses Major Challenge for Russian Face Recognition System', *The Moscow Times*, 26 March 2020, https://www.themoscowtimes.com/ru/2020/03/26/vspishka-koronavirusa-yavlyaetsya-sereznim-ispitaniem-dlya-rossiiskoi-tehnologii-raspoznavaniya-lits-a38.

Musiani, Francesca, Benjamin Loveluck, Françoise Daucé and Ksenia Ermoshina. 'Souveraineté Numérique : l'Internet Russe Peut-il se Couper du Reste du Monde ?', *The Conversation*, 18 March 2019, https://theconversation.com/souverainete-numerique-linternet-russe-peut-il-se-couper-du-reste-du-monde-113516.

Russian Government, 'Decisions following the meeting of the Presidium of the Coordination Council under the Government of the Russian Federation to combat the spread of the new coronavirus infection', 23 March 2020, government.ru/orders/selection/401/39243/.

'Self-isolation and Control: Russian Regions Introduce New Restrictions on the Movement of Citizens', *Vesti*, 7 April 2020, https://www.vesti.ru/doc.html?id=3254717

'Technical Solutions to Combat Coronavirus. Second episode', *Navalny*, https://shtab.navalny.com/hq/ekaterinburg/3796/.

Wikipedia contributors, 'Yarovaya Law', https://en.wikipedia.org/wiki/Yarovaya_law.

Zakharov, Andrey. 'Smart City or Big Brother? How the Mayor's Office Learned to Know Everything About Muscovites', *BBC News*, 10 April 2020, https://www.bbc.com/russian/features-52219260.

31. ALTERNATIVE PERSPECTIVES ON RELATIONALITY, PEOPLE AND TECHNOLOGY DURING A PANDEMIC: ZENZELENI NETWORKS IN SOUTH AFRICA

NIC BIDWELL & SOL LUCA DE TENA

Many rural communities in Africa have characteristics that are neither represented by data about COVID-19, nor addressed by public health information designed to help people protect themselves. This does not mean to say that rural inhabitants are unaffected by information designed for different populations; and grassroots initiatives have been vital in countering the impacts of this. Here, we reflect on the role of community networks in customising information and services for rural inhabitants during the pandemic, and how they reveal constructs embedded in data representation and aggregation. Community networks (CNs) are telecommunications initiatives that are installed, maintained, and operated by local inhabitants to meet their own communication needs. Rey-Moreno's 2017 survey identified 37 community networks in 12 African countries.[1] With the success of four Annual African CN Summits[2], more are emerging every year. Our account focuses on Zenzeleni Networks in South Africa. Thus, we begin by introducing its response to COVID-19 and ensuring health information suited local circumstances. We end by arguing that examples of contextualisation reveal logics about personhood that are vital to tackling the disease, but not represented by individualist models embedded in datafication.

Zenzeleni's Response to COVID-19

Zenzeleni is a community-owned wireless internet service provider that has connected more than 13,000 people and 10 organisations to the internet in South Africa's Eastern Cape province.[3] The network is owned by amaXhosa inhabitants (including 40% women) and is run by two local cooperatives. A cooperative approach ensures internet access costs are up to 20 times lower than services offered by existing telecommunications operators, and expenditure is retained locally. The non-profit organisation Zenzeleni Networks NPC was established through the cooperative, and provides vital connections with regulatory authorities and telecommunications expertise. Zenzeleni was seeded in Mankosi, a remote

1 Carlos Rey-Moreno, 'Supporting the Creation and Scalability of Affordable Access Solutions: Understanding Community Networks in Africa', *Internet Society*, Internet Society, 23 May 2017, https://www.internetsociety.org/doc/cnafrica.

2 Internet Society, Fourth Summit on Community Networks in Africa, https://www.internetsociety.org/events/summit-community-networks-africa/2019/#:~:text=Community%20Networks%20provide%20an%20alternative,rural%20areas%20around%20the%20world.&text=The%204th%20Summit%20on%20Community,28%20October%20%E2%80%93%202%20November%202019.

3 Carlos Rey-Moreno and Shaun Pather, 'Advancing Rural Connectivity in South Africa through Policy and Regulation: A Case for Community Networks', *2020 IST-Africa Conference (IST-Africa)*, Kampala, Uganda, 2020, pp. 1-10.

district of 12 villages, by PhD researchers at the University of the Western Cape in Cape Town,[4] which followed prolonged collaborations on solar electricity and media sharing technologies.[5] Over the past eight years, the community network has evolved as a social innovation ecosystem in which rural communities own their telecommunication businesses. Like other community networks[6] in the global south,[7] Zenzeleni has created employment and developed technical skills in one the most disadvantaged areas in South Africa.

As well as providing more affordable and higher quality network services than alternatives, Zenzeleni's embeddedness directly links technology and media considerations to local life. As the COVID-19 lockdown ensued, inhabitants working, studying or seeking work in cities returned to their rural family homes. Zenzeleni played a vital role in providing continuity to residents' urban lives, by adding network infrastructure to extend the community access points and ensuring free and open access to education websites, including all of the nation's universities and further education colleges. Indeed, usage of access points tripled since the pandemic began.

Not only are health services difficult to access, but the local populations served by Zenzeleni are particularly vulnerable; they have a high incidence of HIV, tuberculosis, and child and maternal health issues.[8] Thus, Zenzeleni sourced funding to connect the District Hospital. Just as importantly, however, from the pandemic's onset, the network started to address health information needs. Like other groups across Africa, Zenzeleni immediately recognised the mismatch between health information issued by WHO and South Africa's national government and local circumstances. Not only was information initially unavailable in most of Africa's 2000 languages, even when advice was in a home language it was ill-suited to many rural contexts. Recommending regular handwashing, for instance, is inappropriate for Mankosi's inhabitants who share a few unreliable taps in their villages because water is not supplied to households. Similarly, guidelines on shared transport are irrelevant when only one bus a day connects villages on a five hour round trip to the nearest supermarket. Zenzeleni ensured free and open access to official health websites. Under-

4 Carlos Rey-Moreno, Zukile Roro, William D. Tucker, Masbulele Jay Siya, Nicola J. Bidwell, Javier Simo-Reigadas, 'Experiences, challenges and lessons from rolling out a rural WiFi mesh network', *ACM DEV '13: Proceedings of the 3rd ACM Symposium on Computing for Development*, January 2013, 11, pp. 1–10, https://doi.org/10.1145/2442882.2442897.

5 Nicola J. Bidwell, Thomas Reitmaier and Kululwa Jampo, 'Orality, Gender and Social Audio in Rural Africa', in C. Rossitto, L. Ciolfi, D. Martin and B. Conein (eds) *COOP 2014 - Proceedings of the 11th International Conference on the Design of Cooperative Systems*, 27-30 May 2014, Nice (France), Springer, Cham, https://doi.org/10.1007/978-3-319-06498-7_14.

6 Nicola J. Bidwell and Michael Jensen, 'Bottom-up Connectivity Strategies: Community-led Small-scale Telecommunication Infrastructure Networks in the Global South', Association for Progressive Communications, 2001.

7 Association for Progressive Communications, *Global Information Society Watch 2018: Community Networks*, Association for Progressive Communication, 2018, pp. 36-41, https://giswatch.org/sites/default/files/giswatch18_web_0.pdf.

8 'Veteran TB doctor still fighting', *SpotlightNSP*, 14 May 2014, https://www.spotlightnsp.co.za/2018/11/09/mankosi-clinic-the-long-and-winding-road-to-rural-healthcare/v.

standing the local context launched projects also increased access to relevant information resources and raised awareness of health strategies that matched local circumstances.

My Mask Protects you, and Yours Protects me: Accounting for Personhood in the Datafied Society

While providing health information in home languages suited to local constraints is vital, but efficacy in managing a socially-spread disease requires integrating deeper insights about the nuances of local social practices and relations. For instance, people returning to villages from cities bring information of varying legitimacy, from recommendations to outright falsehoods. Locally, this information was interpreted through assumptions that information in cities was inherently more credible because cities are highly connected. The valorisation of information associated with electronic media has been discussed elsewhere in rural southern Africa.[9] An implicit part of Zenzeleni's role has been to foster critical approaches to disinformation by directing inhabitants to legitimate information and ensuring information was properly contextualised. However, at the same time, promoting information access must account for sharing practices. While internet hotspots safely offer socially-distanced access, many inhabitants group around tablets and phones.[10]

Device-sharing practices in Mankosi are not merely about limited access to devices. They also involve a cultural construct of relationality. Devices like smartphones are embedded with logic that personhood exists prior to interpersonal relationships. This individualist logic contrasts with the philosophy of Ubuntu, an isiXhosa word which is often translated as "I am because we." This collective logic assumes that neither community or individual exists prior, and being human depends on the mutual and dynamic constitution of other humans. As Eze explains:

> We create each other and need to sustain this otherness creation. And if we belong to each other, we participate in our creations: we are because you are, and since you are, definitely I am.[11]

The importance of the construct of Ubuntu to effective contextualisation is illustrated by Zenzeleni's local volunteers' observations that community members assisted each other in putting on face-masks. Senses of mutual responsibility are straightforward in communities such as Mankosi. However, routinely performing responsibility involves physical help and, since none of the guidelines explicitly combine social distancing with putting on a mask, this represents an ambiguity.

---

9 Hilma N. Aludhilu and Nicola J. Bidwell, 'Home is not Egumbo: Language, Identity and Web Design', *AfriCHI '18: Proceedings of the Second African Conference for Human Computer Interaction: Thriving Communities*, December 2018, 2, pp. 1–11, https://doi.org/10.1145/3283458.3283460.

10 Nicola J. Bidwell, Thomas Reitmaier and Kululwa Jampo, 'Orality, Gender and Social Audio in Rural Africa'.

11 Michael Onyebuchi Eze, 'Ubuntu: Toward a New Public Discourse', in *Intellectual History in Contemporary South Africa*, New York: Palgrave Macmillan, 2010, p. 90.

The challenge of translating a guideline such as "wear it for me" reveals an important role for community networks in COVID-19 times, and in datafication more generally. Much like the assumption of a person putting on their masks themselves, prevalent models of data extraction, representation, and personalisation cultivate and amplify an individualist logic.[12] Yet, as many commentators have suggested, the best protection we have against the virus is Ubuntu.[13] Zenzeleni and other community networks around the world offer an alternative perspective on relationality, people, and technology.

References

Aludhilu, Hilma N. and Nicola J. Bidwell. 'Home is not Egumbo: Language, Identity and Web Design', *AfriCHI '18: Proceedings of the Second African Conference for Human Computer Interaction: Thriving Communities*, December 2018, 2, pp. 1–11, https://doi.org/10.1145/3283458.3283460.

'Veteran TB doctor still fighting', *SpotlightNSP*, 14 May 2014,https://www.spotlightnsp.co.za/2018/11/09/mankosi-clinic-the-long-and-winding-road-to-rural-healthcare/v.

Association for Progressive Communications. *Global Information Society Watch 2018: Community Networks*, Association for Progressive Communication, 2018, pp. 36-41, https://giswatch.org/sites/default/files/giswatch18_web_0.pdf.

Bidwell, Nicola J.. 'Moving the Centre to Design Social Media for Rural Africa', *AI&Soc: Journal of Culture, Communication & Knowledge*, 31(1), 2016: 51-77.

Bidwell Nicola J. and Michael Jensen. 'Bottom-up Connectivity Strategies: Community-led Small-scale Telecommunication Infrastructure Networks in the Global South', Association for Progressive Communications, 2001.

Bidwell, Nicola J., Thomas Reitmaier and Kululwa Jampo. 'Orality, Gender and Social Audio in Rural Africa', in C. Rossitto, L. Ciolfi, D. Martin and B. Conein (eds) *COOP 2014 - Proceedings of the 11th International Conference on the Design of Cooperative Systems*, 27-30 May 2014, Nice (France), Springer, Cham, https://doi.org/10.1007/978-3-319-06498-7_14.

Eze, Michael Onyebuchi. 'Ubuntu: Toward a New Public Discourse', in *Intellectual History in Contemporary South Africa*, New York: Palgrave Macmillan, 2010, p. 181-192.

Internet Society, Fourth Summit on Community Networks in Africa, https://www.internetsociety.org/events/summit-community-networks-africa/2019/#:~:text=Community%20Networks%20provide%20an%20alternative,rural%20areas%20around%20the%20world.&text=The%204th%20Summit%20on%20Community,28%20October%20%E2%80%93%202%20November%202019.

Nordling, Linda. 'Our epidemic could exceed a million cases'—South Africa's top coronavirus adviser', *Nature*, 583(7818): 672-672.

Rey-Moreno, Carlos. 'Supporting the Creation and Scalability of Affordable Access Solutions: Understanding Community Networks in Africa', *Internet Society*, Internet Society, 23 May 2017, https://www.internetsociety.org/doc/cnafrica.

Rey-Moreno, Carlos and Shaun Pather, 'Advancing Rural Connectivity in South Africa through Policy and Regulation: A Case for Community Networks', *2020 IST-Africa Conference (IST-Africa)*, Kampala, Uganda, 2020, pp. 1-10.

12 Bidwell, Nicola J.. 'Moving the Centre to Design Social Media for Rural Africa', *AI&Soc: Journal of Culture, Communication & Knowledge*, 31(1), 2016: 51-77.

13 Linda Nordling, 'Our epidemic could exceed a million cases'—South Africa's top coronavirus adviser', *Nature*, 583(7818).

Rey-Moreno, Carlos, Zukile Roro, William D. Tucker, Masbulele Jay Siya, Nicola J. Bidwell, Javier Simo-Reigadas. 'Experiences, challenges and lessons from rolling out a rural WiFi mesh network', *ACM DEV '13: Proceedings of the 3rd ACM Symposium on Computing for Development*, January 2013, 11, pp. 1–10, https://doi.org/10.1145/2442882.2442897..

32. L'IMPERIALISMO DELLE PIATTAFORME NELLA PANDEMIA: IL RUOLO DEGLI UTENTI DI YOUTUBE NELL'ANALISI DELLA MODERAZIONE DEI CONTENUTI IN LINGUE "ALTRE"

CLAUDIO AGOSTI

Platform Imperialism in the Time of the Pandemic: The Role of YouTube Users in the Analysis of Content Moderation in "Other" Idioms

How can users actively intervene to mitigate the consequences of platform imperialism in the time of the pandemic? This chapter takes YouTube as an object of investigation to show how users can actively partake in an empirical analysis aimed at identifying the mechanisms of content personalization with respect to COVID-19-related content in languages other than English, namely Spanish, Portuguese, Chinese and Arabic. The essay is based on original data from an experiment conducted during the COVID-19 pandemic by means of the Tracking Exposed software.

Questo capitolo discute le premesse di quella che qui identifichiamo come una situazione di sudditanza verso un sistema di piattaforme digitali che agiscono come controllori del mondo dell'informazione. L'articolo utilizza YouTube come oggetto d'indagine, identificando una logica che vede nell'algoritmo un capro espiatorio grazie al quale le piattaforme possono proclamarsi immuni da ogni errore. La discussione qui proposta offre un'illustrazione del funzionamento dell'algoritmo di YouTube, proponendo una logica che renda il lettore consapevole del funzionamento del capitalismo di sorveglianza e quindi capace di sovvertirlo.[1]

La Moderazione dei Contenuti come Forma di Colonialismo Culturale

Oggigiorno, la visione di Internet come forza democratica può sembrare un ricordo utopico e distante. Qui ripercorriamo alcuni passaggi chiave che hanno trasformato la rete globale dello scambio di conoscenza in un sistema di sfruttamento cognitivo degli utenti stessi.

I sistemi che intermediano l'accesso all'informazione (pensate a Google, YouTube, Facebook e le maggiori piattaforme digitali) hanno agito, in un primo periodo della loro esistenza, come un territorio libero ed inesplorato. Connettersi e scambiarsi informazioni era possibile per chiunque avesse accesso alla rete. Quasi non era prevista l'ipotesi che gli scambi d'informazione potessero essere problematici dal punto di vista personale e collettivo, complici

1 Shoshana Zuboff, 'Big other: surveillance capitalism and the prospects of an information civilization', *Journal of Information Technology* 30(1), 2015.

anche i cambiamenti politici di allora in alcuni casi difficili da pensare senza il contributo dei *social network* (per esempio l'elezione di Barack Obama a presidente deli Stati Uniti d'America nel 2008) o raccontati dalla stampa occidentale come esempi dell'impatto positivo dei social network, come la cosidetta "Primavera Araba".

Lo scorso secolo anticipava l'idea che Internet sarebbe stato il futuro. Iniziò allora un massiccio investimento da parte di interessi privati, tralasciando l'importante concetto che il web non consiste in una serie di siti e servizi disconnessi tra loro (facebook.com o twitter.com), ma in una rete di reti. La romanzata versione di una "rete delle reti" decentralizzata, multiculturale e resiliente, è stata superata dall'esistenza di piattaforme che fornivano nuove, uniche funzionalità agli utenti ma anche possibilità alle istituzioni pre-Internet. Questi sviluppi sono stati funzionali ad una specie di "gioco delle piattaforme"— infrastrutture "nuove" che mettono in contatto la domanda e l'offerta.

In qualitá di territorio ancora inesplorato e mercato non regolamentato, Internet ha avvantaggiato gli attori con più risorse a disposizione e quelli più tecnologicamente avanzati, attribuendo loro il potere di manipolare la circolazione di informazioni dopo che per anni questa è stata organica e non censurabile. Si può dire che il campo di battaglia siamo noi, utenti anonimi aggregati nell'ordine delle centinaia di migliaia. Il valore economico della rete si misura nei nostri minuti di attenzione.

Sono nati così mercati accessori, come quelli che permettono di comprare visibilità tramite i cosidetti *influencers*, organizzare eserciti di *troll* (disturbatori) a pochi centesimi al post, o condurre vaste operazioni di *scraping* (la raccolta dei dati automatizzata) per creare disinformazione mirata. Alcune di queste operazioni sono salite agli onori delle cronache grazie a casi eclatanti come quello di *Cambridge Analytica*. Altre sono emerse da casi meno clamorosi e visibili, ma contribuiscono tutt'ora alla crescita di contenuti manipolatori (disinformazione), tossici (incitazioni all'odio), criminali (reclutamento terroristico, discorsi divisivi ed avversi ai diritti umani), e non sollecitati (spam organizzato meccanicamente). Questo ha reso la vita sulle piattaforme sociali frustrante e problematica. E la pandemia da COVID-19 non ha fatto che peggiorare le cose per gli utenti. È in questo contesto storico che si inscrive l'analisi dell'algoritmo di YouTube presentata qui.

L'Antefatto: Come Analizzare l'Algoritmo di YouTube

Dal 2016 sviluppo un sistema di analisi degli algoritmi chiamato Tracking Exposed.[2] Il sistema usa software libero e rende le metodologie di analisi ripetibili. Ogni utente può usarlo per condurre analisi, ogni gruppo di ricercatrici può verificare come i contenuti vengono regionalizzati e decidere se l'algoritmo li stia trattanto in modo appropriato.

Il nostro lavoro di analisi è iniziato con Facebook, per poi proseguire con YouTube, PornHub e Amazon. Il concetto è lo stesso per ogni piattaforma: creare e tenere copia di quello che gli algoritmi di personalizzazione producono sulla base dei dati dell'utente. Ottenuti i dati,

2 Tracking Exposed, https://tracking.exposed. See also Algorithms Exposed, https://algorithms.exposed.

se ne possono fare tre macrousi: 1) ottenere prove più sostanziali di un aneddoto circa la personalizzazione dei contenuti sulle piattaforme per mezzo degli algoritmi, 2) comparare la propria personalizzazione con quella di altri utenti, per testare quanto distorta stia diventando la nostra percezione, 3) analizzare l'algoritmo e il suo comportamento testando diverse condizioni d'uso.

Va chiarito che non si tratta di *reverse engineering* degli algoritmi di personalizzazione. Le aziende in questione monitorano ogni sensore di un cellulare, i nostri contatti, le loro attività, e le "sommano" ai dati del passato, generando troppe variabili che sfuggono alla nostra visione individuale. Non ci dobbiamo comunque perdere d'animo: iniziare a vedere e misurare l'ingerenza della personalizzazione rappresenta già un primo passo verso un'approccio critico e comsapevole verso gli algoritmi e le piattaforme.

Nell' estate 2019, il software YTTREX (abbreviazione del nome esteso, che poi è anche il sito: https://youtube.tracking.exposed) era pronto per essere sperimentato da dieci studentesse presso l'Università di Amsterdam. Va ricordato che una piattaforma può personalizzare se conosce qualcosa di noi, se invece il soggetto si pone come nuovo utente, con un browser "pulito" si può osservare come la piattaforma ci tratti nel modo più generico possibile sebbene entro una macro categoria al di fuori del nostro controllo. In quel caso, l'essere connessi alla rete universitaria rappresentava una variabile nuova e ignota: se il test fosse stato realizzato usando una rete wifi libera vicino alla stazione ferroviaria, o al Politecnico di Milano, la nostra prima esplorazione dell'algoritmo sarebbe molto probabilmente stata diversa. Fortunatamente ai fini dell'esperimento è sufficiente operare tra una massima personalizzazione ed una minima, e non serve aumentare la complessità tenendo sotto controllo tutte le variabili possibili.

Una delle prime operazioni da fare consiste in "pulire" il browser, il che consiste in diverse opzioni di rimozione dei dati presenti nella *cache*, dei *cookie* e altri elementi. Se ci fosse un tasto "nuclearizza tutte le tracce", in grado di pulire gli innumerevoli traccianti nascosti nel browser con un solo click, molti sicuramente lo userebbero. Navigare è un'esperienza che non per forza deve essere registrata ed associata ad una storia indelebile: si tratta di una questione complessa associata alla privacy, ma ha un impatto notevole sulla libertà di essere informati in modo non discriminatorio. Comunque, questo tasto non c'è—del resto il leader di mercato dei browser, Chrome, è sviluppato dal leader del tracciamento, Google. Per pulire il browser occorre un'azione coordinata: almeno quattro click più alcune accortezze di cui essere a conoscenza. Per semplicità, all'inizio del progetto installammo un browser relativamente poco conosciuto, Brave, per iniziare gli esperimenti in una condizione di "zero tracciamento".

Ci interessava documentare se, e quanto, i profili sotto osservazione ricevessero le stesse "raccomandazioni" in termini di contenuto. Stavamo considerato i primi venti video correlati, ed abbiamo scelto una visualizzazione a grafo. La figura 1 mostra i dieci profili in questione: al centro sono rappresentati con i cerchi, i video suggeriti ad almeno due profili. Più grandi le dimensioni del cerchio, più volte il contenuto in questione è stato suggerito agli utenti: lo si può capire anche dalla quantità di linee che lo collegano ai profili. I pallini verso

l'esterno invece rappresentano video suggeriti solo ad un profilo in modo esclusivo: questa è la porzione personalizzata dei contenuti.

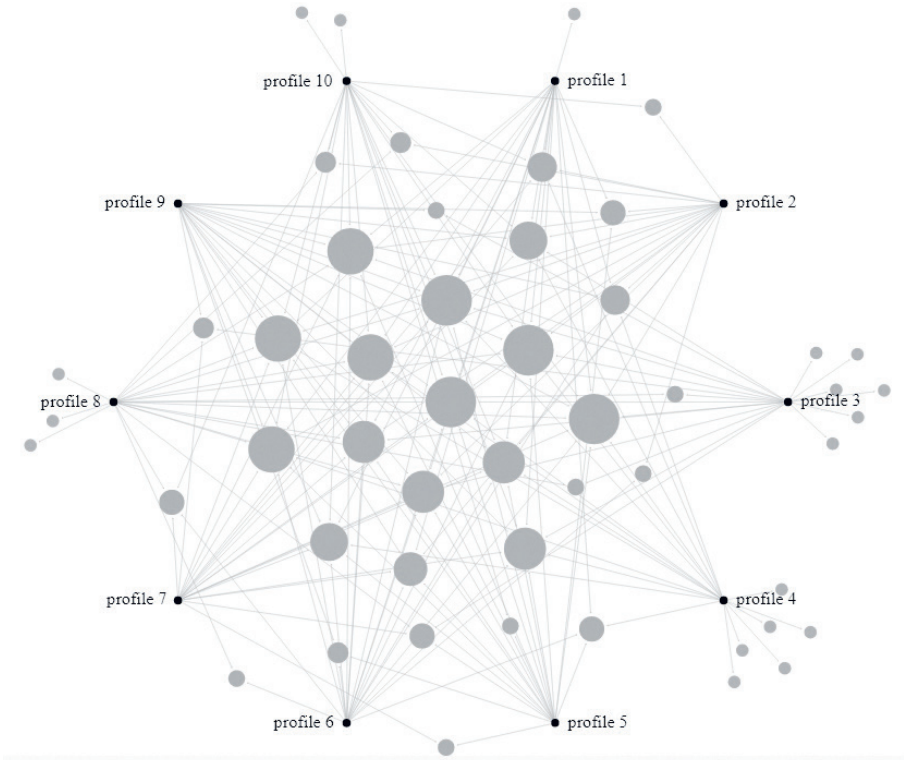

Fig. 1: Risultato dell'analisi con browser "ripuliti".[3]

Emergono due osservazioni significative. La prima è che la stragrande maggioranza dei video è comune a tutti i profili sotto osservazione, mentre la seconda è che alcuni profili hanno subito un minimo di personalizzazione nonostante la mancanza di traccianti pregressi e di qualunque memoria digitale. Dobbiamo prendere in considerazione il fatto che non può esistere un modo veramente neutrale di visitare YouTube: la piattaforma infatti sembra prendere in considerazione due variabili iniziali, ovvero la nazione di provenienza dell'utente e la lingua configurata nel sistema operativo. I profili 3, 4 ed 8 nel nostro esperimento erano di tre studentesse che, come abbiamo scoperto in seguito, avevano il computer configurato rispettivamente in coreano e francese come lingue di sistema, mentre le altre macchine erano configurate per l'inglese. Il video osservato era in lingua inglese, ed il collegamento partiva da una rete olandese. È un comportamento che abbiamo giustificato immaginando una persona che si trova in un paese straniero, che accede ad un link su YouTube da un browser appena installato

3 Le immagini sono state realizzate con i dati di YTTREX da Laura Swietlicki usando Gephi. Gli altri esperimenti sono disponibili visitando la seguente pagina web: https://youtube.tracking.exposed/results/.

(Brave). YouTube non sa se questa persona conosca l'inglese o l'olandese in quanto la lingua di sistema viene comunicata automaticamente dal browser al fine di offrire un aggancio ad una realtà comprensibile all'utente. Sulla base di questo esperimento, possiamo concludere con una discreta certezza che alcune raccomandazioni degli algoritmi sono personalizzate sulla base di base di dati tecnici e non comportamentali.

Per concludere, i video suggeriti, la grande maggioranza in comune, erano tutti afferenti all'argomento del video osservato. A quel punto abbiamo ripetuto l'esperimento, ma utilizzando i browser di uso quotidiano da parte delle studentesse usavano, quindi "inquinato" da innumerevoli traccianti web come ogni dispositivo non adeguatamente pulito con cura.

Fig. 2: Risultato dell'analisi con brower "personalizzati".

Ci è parso immediatamente chiaro quanto la personalizzazione fosse la giustificazione per le percezioni divergenti. I video in comune sono una minoranza. Questa condizione è quella standard nella quale si trovano le utenti di YouTube. Analizzando i risultati della personalizzazione del contenuto, abbiamo potuto notare come in una certa percentuale la personalizzazione sia il risultato di abitudini personali, ma specialmente come dipendano direttamente dall'interpretazione autonoma di YouTube che cerca di collegare le tendenze individuali al

video oggetto di studio, che era lo stesso, visualizzato nello stesso momento e a partire da uno medesimo luogo fisico.

La Personalizzazione dei Contenuti Durante la Pandemia: Il Test Collettivo

All'inizio della pandemia, YouTube ha dichiarato al New York Times che avrebbe rimosso eventuali contenuti vergenti su teorie del complotto relative al coronavirus dalla piattaforma.[4] Il nostro team ha ipotizzato che l'azione della piattaforma si sarebbe concentrata sui contenuti in lingua inglese, sapendo che l'algoritmo tende a trovare suggerimenti personalizzati sulla base di logiche poco chiare che collegano le azioni passate degli utenti al tema del video osservato. Se quindi dei video contenenti disinformazione sul COVID-19 fossero rimasti disponibili su YouTube, ma fossero stati, ad esempio, in spagnolo, questi non sarebbero stati fatti oggetto della rimozione.

Per confermare questa ipotesi avevamo però bisogno di coinvolgere una certa quantità di utenti di accedere a video che parlassero di COVID-19 e della pandemia in generale. I video dovevano essere gli stessi, per rendere i dati comparabili riducendo le variabili sotto osservazione. Dovevamo raccogliere evidenze di come "gli altri idiomi" ricevessero un diverso trattamento rispetto all'inglese, e per questo abbiamo preso in considerazione le quattro lingue più parlate al mondo oltre all'inglese: spagnolo, portoghese, cinese ed arabo. Il video di partenza doveva provenire da una fonte autorevole, e per fortuna la BBC trasmette in tutte e cinque le lingue di cui avevamo bisogno. Un video che spiegava il virus COVID-19, pubblicato pressochè negli stessi giorni sui diversi canali della BBC, ha fatto al caso nostro. Abbiamo pertanto lanciato una *call to action* per reclutare volontarie per il nostro esperimento.

Ogni volontaria avrebbe dovuto installare l'estensione sul browser, accedere in sequenza ai cinque video, così da poter poi studiare le raccomandazioni che YouTube avrebbere presentato agli utenti tra il 25 ed il 26 marzo 2020, in modo da generare una "fotografia" unica e irripetibile che ci avrebbe permetto di poter effettivamente contestare le dichiarazioni di YouTube.[5]

I risultati[6], dettagliati nell'articolo intitolato "YTTREX: crowdsourced analysis of YouTube's recommender system during COVID-19 pandemic", a firma di Leonardo Sanna, Salvatore Romano, Giulia Corona e Claudio Agosti.[7] L'articolo presenta l'analisi quantitativa sulla

4 Jack Nikas, 'Can YouTube Quiet its Conspiracy Theorists?', *New York Times*, 2 March 2020, https://www.nytimes.com/interactive/2020/03/02/technology/youtube-conspiracy-theory.html.

5 I risultati della raccolta dei dati sono stati rilasciati in seguito al pubblico per facilitare la revisione convidisa della nostra analisi. Essi non contengono dati personali, e ci sono state varie versioni di rilascio.

6 I dati sono disponibili su in formato CSV su Github (xhttps://github.com/tracking-exposed/experiments-data/tree/master/wetest1).

7 Sanna, Leonardo, Salvatore Romano, Giulia Corona and Claudio Agosti. 'YTTREX: crowdsourced analysis of YouTube's recommender system during COVID-19 pandemic', September 2020, available at

forma, frequenza e tipologie di raccomandazioni proposte da YouTube. Abbiamo misurato e identificato delle soglie di *filter bubble*, illustrando come i dati ottenuti per mezzo dei metodi "ufficiali" di YouTube (le così dette API ufficiali) non corrispondano a quello che viene osservato empiricamente da YTTRTEX.

L'Analisi Continua: Verso un Ruolo Attivo degli Utenti di YouTube

L'analisi che abbiamo intrapreso con l'esperimento descritto in precendenza continua. Per ogni video in lingua visualizzata abbiamo collezionato alcune centinaia di video correlati. A volte il titolo è sufficientemente esplicativo da confermare come si tratti di una teoria del complotto relativa alla pandemia. A volte si tratta invece di video di *debunking* e non possiamo verificare con certezza la loro onestà informativa. Poichè abbiamo la URL del video, possiamo verificare se i video in questione sono stati rimossi da YouTube in un secondo momento, per esempio dopo il nostro test. Questa analisi qualitativa però richiede un certo sforzo ed un adeguato metodo di valutazione che non abbiamo ancora sviluppato. Ci sono analisi che ancora non abbiamo esplorato, ad esempio: quanto sono recenti i video suggeriti? Si può da qui stimare una vita media di un video? Quante sono le view? Percentualmente le raccomandazioni sono prese da fonti validate con la spunta blu o no? E ancora: perchè il video in arabo, per la totalità delle volte in cui è stato visualizzato, era accompagnato da una trasmissione Live in seconda posizione? Questo è l'unico comportamento fisso che abbiamo osservato, e richiede spiegazione nelle analisi future. Inoltre, la nostra ricerca non si è avvalsa di un'analisi di tipo qualitativo dei contenuti, vale a dire le teorie del complotto sul COVID-19. Infatti per contestualizzare i nostri risultati, serve una conoscenza approfondita della lingua in cui il contenuto è espresso e del contesto in cui un certo contenuto viene visualizzato.

Ed è qui che entrano in gioco gli utenti di YouTube, che possono pertanto partecipare in un esperimento di resistenza attiva al potere centralizzato della piattaforma. Il nostro approccio prevede la distribuzione delle responsabilità e dei ruoli, e il coinvolgimento attivo del maggior numero possibile di utenti delle piattaforme come YouTube—utenti che parlano cinese, arabo, spagnolo o portoghese, possono ancora essere d'aiuto. Solo così potremmo, da una parte, diventare utenti consapevoli, e dall'altra, avere sufficienti dati a disposizione per dimostrare come quello che abbiamo chiamato "imperialismo delle piattaforme" agisce nella vita di tutti i giorni, e quali siano le conseguenze sulla nostra visione del mondo.

https://github.com/tracking-exposed/experiments-data/blob/master/wetest1/YTTREX-crowdsourced%20analysis%20of%20YouTube's%20recommender%20system%20during%20COVID-19%20pandemic.pdf.

Bibliografia

Nikas, Jack. 'Can YouTube Quiet its Conspiracy Theorists?', *New York Times*, 2 March 2020, https://www.nytimes.com/interactive/2020/03/02/technology/youtube-conspiracy-theory.html.

Sanna, Leonardo, Salvatore Romano, Giulia Corona and Claudio Agosti. 'YTTREX: crowdsourced analysis of YouTube's recommender system during COVID-19 pandemic', September 2020, available at https://github.com/tracking-exposed/experiments-data/blob/master/wetest1/YTTREX-crowdsourced%20analysis%20of%20YouTube's%20recommender%20system%20during%20COVID-19%20pandemic.pdf.

Zuboff, Shoshana. 'Big other: surveillance capitalism and the prospects of an information civilization', Journal of Information Technology 30(1), 2015: 75-89.

33. LIVING WITH INSTALIVE IN IRAN: SOCIAL MEDIA USE IN AUTHORITARIAN COUNTRIES DURING THE PANDEMIC

HOSSEIN KERMANI & MARIA FAUST

COVID-19 has become the "new normal" and substantially altered the lives of people across the world through new forms of online communication. One of the most drastic changes to everyday life has been the increase of digital and social media use, which imposed both opportunities and challenges. Social media users make up 3.8 billion of the estimated 4.5 billion internet users worldwide, or almost 85% of overall internet users. Since the surge of the pandemic, social media use has risen from 75 to 82 minutes per day for each person. Social distancing and lockdowns during spring 2020 caused people to search for new forms of connection through video chat. For example, as of 2020, TikTok has 1.5 billion users worldwide, and its number of downloads increased by more than 100 million between the last quarter of 2019 and the first quarter of 2020. Both TikTok and Douyin—the Chinese mainland, authoritarian version—share the same censorship practices of Bytedance, even more so in times of COVID-19. Instalive, the Instagram feature for live video chat, surged as an alternative digital video format across the world. While these statistics generally show changes in people's communicative practices, they are even more important in authoritarian contexts such as Iran.

Social and Digital Context in Iran

In Iran, the country in the Middle East with the most severe COVID-19 effects, social media use has also significantly increased. Iranian users have been keen to adopt social media—Yahoo messenger, Twitter, and Instagram—in their everyday life. Social media has played a crucial role in contemporary political protests in Iran (e.g., the 2009 Green Movement). The popularity of social media in Iran can be attributed to the fact that these platforms provide dissident Iranians, who were traditionally deprived of access to mainstream media, with a space to share their content with social networks. That is probably why Iranians have continued to use social media through circumvention tools, despite the state's disincentive actions like filtering, and hardliners denouncing the platforms.

In 2020, following Telegram and WhatsApp, Instagram is the third most used social media platform in Iran, with about 24 million users out of 84 million inhabitants. Instalive has become increasingly popular, especially among Persian women. During lockdown, Instagram users increased by about 31%, with some users using it 4 times as much as before. Thus, Instalive affected people's communicative practices. For instance, many Iranians who had not experienced online video chat before, started to using Instalive to chat with their families and friends. Besides such personal impacts, Instalive serves as an alternative TV for Iranians, providing an opportunity for both media practitioners and ordinary citizens to broadcast and consume their favorite content, which they probably cannot access through national and official media.

Islamic Republic of Iran Broadcasting vs. Instalive as an Alternative TV in Iran

Not only are all the official Iranian media severely controlled, but operating private television channels and radio stations is strictly prohibited in Iran. The Islamic Republic of Iran Broadcasting (IRIB), Iran's national radio and television organization, has the exclusive right to broadcast audio-visual content in national scale, and is managed directly by state authorities. It mainly broadcasts state-aligned content in order to underpin the state's hegemonic discourse. In this regard, many dissident Iranians, including political activists and public figures, such as singers and cinema stars (i.e., media practitioners), do not have any chance to be featured in its programs. Iranian audiences have been deprived of watching their favorite programs and figures on air. For instance, the IRIB, as well as the other official media, are banned from mentioning the Iranian former reformist president Mohamad Khatami. It has been argued that blacklisting excludes individuals who never should be shown in Iran's national TV, such as Mohammad Reza Shajarian, the most famous Iranian singer.

In this restrictive context, both media practitioners and ordinary citizens perceive Instalive as an alternative platform that can serve their need to free audio-visual media. They are using this feature to broadcast and consume forbidden content. Instalive was employed by some of the presidential campaigns to advertise their candidates during the 2017 election, but its use intensified and diversified during the lockdown. For example, Iranian President Hassan Rouhani used Instalive to broadcast his presidential speeches as he argued that the IRIB refused to publicly do that. Now, many of Iranian's celebrities and microcelebrities use this platform to broadcast sexual and socio-cultural content which are often prohibited under Islamic rules.

While no program about sex is allowed on the IRIB—even educative programs or erotic scenes—Tataloo and Neda Yassi's Instalive broke the record for viewers by more than 630,000. Tataloo is an Iranian rapper who had more than 4 million followers at that time, and was well known by his weird and unconventional behavior. However, his page was closed by Instagram because of he was accused of child grooming. Yassi is also an Instagram microcelebrity who is famous because of her sexual posts and stories. Their Instalive was the perfect representation of everything sexually forbidden in Iran. Tataloo and Yassi talked about having group sex, explained sexual behavior, and promoted free relations with many sexual partners. Given that the only acceptable form of sexual relationship is marriage in Iran, this Instalive crossed all of the state's "red lines" as well as broke IRIB policies.

Nevertheless, not all popular Instalives during the COVID-19 time were as offensive to the state as this example. For instance, let us look at the case of Aghamiri and Ahlam's Instalive. Hassan Aghamiri is clergy, and Ahlam is an Iranian female singer; they actually represent two hostile camps in Iran. Women's singing in public is forbidden in Iran, and it is not conclusively allowed on the IRIB. This restriction is allegedly exerted by the Islamic rules. In Iran, clergies are considered to be the representatives of Islam. It is anticipated that clergies condemn female singing and are not to be seen with them anywhere, as has been the case since the Islamic revolution. To this extent, Instalive disobeyed the state's Islamic rules, playing with

socio-cultural structures in Iran. A clergy co-singing with a female singer, happened in that live show, is something that would never be seen on the IRIB.

These two examples show how Iranians use Instalive to overcome the state's and IRIB's restrictions. Employing Instalive, media practitioners produce content based on what is forbidden by the IRIB. Such content gained the attention of Iranians who have been deprived of such programs on national TV.

What's Next? Instalive After COVID-19

Instalive introduced new opportunities for citizens in closed societies to share and discuss sensitive content. While Iranians use Twitter to discuss politics, they use Instagram to play with the state's hard cultural and social restrictions. As Iranians perform or watch Instalives, they are undermining the power of the state-controlled TV. Yet, the state clearly showed its intention to censor and control Instalives. Ali Zolghadri, the deputy chief of Tehran's security police, stated that they would cancel Instalive shows with obscene behaviour or norm-breaking language. Despite such hard comments, Iranians manage to find ways to circumvent the state's limitations. This time, they transformed Instalive into an informal national TV. No matter if its use will increase or decrease in the days after the COVID-19 crisis, it can be assumed that Instalive will remain a serious competitor to the IRIB, challenging its exclusivity and hegemony in more ways than we have seen so far.

34. COVID-19 AND THE ARGENTINE THEATRE

NICOLÁS FUSTER

As soon as the summer holidays ended in February, the government of Argentina, which had only taken office last December, experienced a rather abrupt end to their honeymoon. The pandemic had started on the other side of the globe. Then, it appeared in Europe. But for some reason, the news of the sudden arrival in Argentina took the authorities by surprise. "I did not believe that the virus would arrive this soon," the Minister of Health stated on March 9, 2020.[1]

Ten days later, President Alberto Fernández ordered a total quarantine.[2] The decision found approval among the opposition party and citizens that used social media to discuss the quarantine through the hashtag #QuedateEnCasa ("Stay home"). Like people in many other countries, Argentines learned to bake bread and cakes through Instagram, and several famous musicians such as Pedro Aznar and Kevin Johansen performed live from their houses to help soothe fans. Some of these home-made concerts reached peaks of almost 190.000 watchers. As days went by, people also used social media—mainly through the hashtag #ArgentinaAplaude on Twitter—to organize for signing the national hymn and to cheer the medical staff with massive applauses during the evenings.[3]

The NYTimes reported that Mr. Fernández's popularity was strong. He held several press conferences together with the mayor of Buenos Aires, who belongs to an opposition party. This dialogue and agreement were appreciated by the citizenry, even if the long-term polarization did not seem to disappear. By the end of April, the media reported that because of COVID-19, some prisoners could leave the penitentiaries, which are often overcrowded with unhygenic conditions.[4] The possibility of giving house arrest to a number of prisoners[5], many of which were sex offenders and would have lived close to their victims—if not in the very same house[6]—triggered a tough public response. A strong *cacerolazo* (pot banging,

1 'Ginés González García: Esperábamos que el coronavirus llegara un poco más tarde', *La Voz*, 9 March 2020, https://www.lavoz.com.ar/ciudadanos/gines-gonzalez-garcia-esperabamos-que-coronavirus-llegara-un-poco-mas-tarde.

2 Enric González, 'Argentina entra en cuarentena obligatoria hasta el 31 de marzo', *El País*, 20 March 2020, https://elpais.com/sociedad/2020-03-20/argentina-entra-en-cuarentena-obligatoria-hasta-el-31-de-marzo.html.

3 'Miles de personas aplaudieron en todo el país a quienes combaten el coronavirus', *Telam*, 28 March 2020, https://www.telam.com.ar/notas/202003/445734-coronavirus-argentina-aplausos-balcones.html.

4 'Coronavirus: Alberto Fernández avaló la prisión domiciliaria para presos comunes y generó polémica', *El Cronista*, 28 April 2020, https://www.cronista.com/economiapolitica/Coronavirus-Alberto-Fernandez-avalo-la-prision-domiciliaria-para-presos-comunes-y-genero-polemica-20200428-0009.html.

5 Verónica Smink, 'Coronavirus en Argentina: por qué genera tanta polémica la decisión de sacar de la cárcel a algunos presos por riesgo a que se contagien el COVID-19', BBC Mundo, 1 May 2020, https://www.bbc.com/mundo/noticias-america-latina-52496655.

6 Gustavo Carabajal, 'Salida polémica: otro violador recibió la prisión domiciliaria en San Miguel', *La*

an Argentine protesting method emerged during the crisis of 2001) was heard in the main cities on April 30.[7] The response was truly intense, and Human Rights Watch stated that the reaction was understandable, and sending prisoners to their places as a temporary measure does not mean releasing them.[8]

Impatience

Despite the calm style of the President, the announcement of the quarantine being extended unsettled many Argentines. Argentina counts almost half of its workers in the informal sector.[9] A number of them are day laborers, meaning that they buy provisions with their meagre daily earnings. It started to become clear that the quarantine was not an option for many, especially in the suburbs. Argentina has a tradition of openness, and could not be labelled a xenophobic country. However, due to COVID-19, aggressions towards Asians and Italians were reported. Moreover, Argentines either infected or suspected to be infected received threatening messages through social media, where fake profiles were created in order to bully and insult the presumed infected.

Education

Teachers are laboriously organizing classes through videos, WhatsApp, and online platforms. In order to supply the lack of classes, the Government sent a bill to the Congress for allowing teaching from afar. The bill was smoothly approved by the lower house and will be soon voted on in the Senate. In April, the Ministry of Education announced the distribution of booklets as teaching materials, co-financed with UNICEF, for students in vulnerable situations.[10] A few days later, Carla Carrizo, an opposition MP, noticed that the booklets had a strong political content in favor of the national Government and cast the other parties in a negative light. The 18 million booklets cost around EUR 4.000.000. "The first one to be educated should be the Ministry of Education. Instead of indoctrinating kids, we should be discussing how to raise critical minds," Mrs Carrizo said.[11]

Nación, 29 April 2020, https://www.lanacion.com.ar/seguridad/salida-polemica-otro-violador-recibio-prision-domiciliaria-nid2359800.

7 'Coronavirus en Argentina: fuerte cacerolazo contra la liberación de presos', *El Cronista*, 30 April 2020, https://www.cronista.com/economiapolitica/Coronavirus-en-Argentina-fuerte-cacerolazo-contra-la-liberacion-de-presos-20200430-0076.html.

8 José Miguel Vivanco, 'Debate sobre la liberación de presos en Argentina', *Human Rights Watch*, 1 May 2020, https://www.hrw.org/es/news/2020/05/01/debate-sobre-la-liberacion-de-presos-en-argentina.

9 'Informe de la UCA: 49,3% de los trabajadores tiene empleo informal', *Iprofesional*, 24 June 2019, https://www.iprofesional.com/management/294562-Informe-de-la-UCA-493-de-los-trabajadores-tiene-empleo-informal.

10 Government of Argentina, 'Educación y UNICEF producirán cuadernillos para estudiantes en situación de vulnerabilidad', 7 April 2020, https://www.argentina.gob.ar/noticias/educacion-y-unicef-produciran-cuadernillos-para-estudiantes-en-situacion-de-vulnerabilidad.

11 Silvia Mercado, 'La oposición pidió que el ministro de Educación brinde explicaciones sobre los cuadernillos escolares que incluyen la difusión de actos de gobierno', *Infobae*, 22 May 2020, https://www.infobae.com/educacion/2020/05/22/la-oposicion-pidio-que-el-ministro-de-educacion-brinde-explicaciones-sobre-los-cuadernillos-escolares-que-incluyen-la-difusion-de-actos-de-gobierno/.

The app

Like in other countries, the Argentine authorities launched an app for mobile phones, called CuidAr ("To take care," with a capital A that combines "to take care" with Argentina). The app has a triple function: is allows users to self-diagnose, be tracked, and process their circulation permission. At the beginning, it was said that the app would be mandatory, and later announced that it would be mandatory in some provinces. This provoked criticisms from experts, especially on Twitter. One of these, programmer and activist Javier Smaldone, said that the government has not yet provided the source code nor the back-end in the server.[12] Another IT expert, Maximiliano Firtman, argued that apart from not working well, the app lacks basic security standards.[13] It is rather easy to pretend to be someone else, there is no option to edit information, and the government could share the data with third parties. Eventually, the authorities decided not to make the app mandatory, but to leave it as it is.

Improvisation

During the press conference when a new extension of the quarantine was announced, Mr. Fernández said that "the quarantine will last for as long as needed." When asked about the anxiety and anguish the lockdown could have on the people, the President, visibly irritated, replied that "what is distressing is getting infected." His response unleashed controversy over the emotional aspect of lockdown: the stress of the uncertainty of workers and owners of SMEs, and the women who suffer domestic violence. New cases of SARS-CoV-2 were recently reported in the so-called villas, the Argentine equivalent to Brazilian favelas. In Villa Itatí, a suburb of Buenos Aires, 10% tests were positive.[14] Within the capital city, an article showed that cases of COVID-19 in precarious settlements were a third of the total cases.[15] There were a number of extremely poor urban areas where families lived in the very same room, where social distancing is not an option and alcohol hand gel is not widely used. By mid-April, the WHO placed Argentina among the countries with less tests for COVID-19.[16] If, as argued, the first reaction of the authorities was appropriate, the last movements show improvisation.

12 @mis2centavos, 'La app #CuidAR no es obligatoria, y además de ser invasiva, puede no funcionar. Lo mejor es llevar el permiso de circulación IMPRESO o en formato PDF. Nadie puede exigirte que tengas NADA instalado en tu celular.' Twitter post, 31May 2020, https://twitter.com/mis2centavos/status/1267193256099614720?s=20.

13 @maxifirtman, 'El presidente informó que la app "CuidAr" será obligatoria para los que trabajen. No salió resolución pero analicé la app y aquí va hilo con detalles. ¿Es segura? ¿qué hace la app? ¿me sigue adonde voy? ¿qué podría hacer una actualización futura? ¿la voy a poder instalar? +', Twitter post, 9 May 2020, https://twitter.com/maxifirtman/status/1259226698761076737?s=20.

14 'Villa Itatí: detectaron siete casos de coronavirus y 75 sospechosos', *Telam*, 28 May 2020, https://www.telam.com.ar/notas/202005/469365-coronavirus-operativo-detectar-villa-itati.html.

15 'Coronavirus en las villas porteñas: ya hay 1.410 infectados y representan el 34% de los casos de la Ciudad de Buenos Aires', *Infobae*, 19 May 2020, https://www.infobae.com/sociedad/2020/05/19/coronavirus-en-las-villas-portenas-ya-hay-1410-infectados-y-representan-el-34-de-los-casos-de-la-ciudad-de-buenos-aires/.

16 Nadia Dragneff, 'La OMS ubica a la Argentina entre los últimos puestos del ranking mundial de testeos', *Perfil*, 16 April 2020, https://www.perfil.com/noticias/equipo-de-investigacion/coronavirus-argentina-figura-entre-ultimos-puestos-ranking-mundial-testeos-preventivos.phtml.

"Comunitarism"

The combined lockdown and delicate economic situation of the country hit the most vulnerable. As soon as the quarantine started, Mosquito Sancineto, an actor and drama teacher of the underground scene of Avenida Corrientes, set up *Artistas Solidarios* ("Caring Artists"). This NGO received donations, prepared bags with food and cleaning products, and distributed them to artists that cannot work because of COVID-19. Adriana Yasky, who is in charge of the logistics, said,

"We have a bank account and we receive donations of 500 or 1.000 ARS (Argentinian Peso, about 5 / 10 EUR), sometimes more. We asked a nutritionist to prepare a list of foodstuffs, so we know that what we provide is healthy. We also give bleach and soap. In addition, we provide psychological support by volunteer professionals. A little idea of Mosquito is getting to be noticed thanks to social media: many famous artists such as Carla Peterson, who has over one million followers on Instagram, did a live with us. Others, like cartoonist Maitena, sent us their support. We have been contacted by other artists in the rest of the country who want to help, hence Artistas Solidarios is now working also in Mar del Plata. We use social media for everything: for asking for donations, for letting artists know that we are here to help. I am the one who reads the messages, then I make a table of the distribution, according to the requests of the week. A group goes to the wholesale supermarket and prepare the bags, and the guys with the cars deliver them. Donations are precious so we must spend wisely. We were lucky to find volunteers that, because of their jobs, hold the circulation permission! We deliver more than 100 bags each Saturday, and the number is increasing and increasing. All of this would be impossible without social media and WhatsApp."

Digital Activism

On June 3, 2015, there was a massive demonstration against violence against women in Argentina. Twitter, Facebook and Instagram played a role under the slogan #NiUnaMenos ("Not one less"). Since then, the movement increased and crossed borders in Argentina and Latin America. It also arrived in Spain and Italy under the slogan #NonUnaDiMeno. Five years after the first rally in Argentina, digital platforms were essential again; activists launched a *ruidazo* ("big noise") on Twitter and Instagram.

Next

So far, Argentines have followed the rules and have also shown creativity and respect. Now, the improvisation phase should be over. If politics has a vision, it ought to perform like actors do after months of rehearsing, when they know what the next scene will be like, and how the play is going to end.

References

'Coronavirus: Alberto Fernández avaló la prisión domiciliaria para presos comunes y generó polémica', *El Cronista*, 28 April 2020, https://www.cronista.com/economiapolitica/Coronavirus-Alberto-Fernandez-avalo-la-prision-domiciliaria-para-presos-comunes-y-genero-polemica-20200428-0009.html.

'Coronavirus en Argentina: fuerte cacerolazo contra la liberación de presos', *El Cronista*, 30 April 2020, https://www.cronista.com/economiapolitica/Coronavirus-en-Argentina-fuerte-cacerolazo-contra-la-liberacion-de-presos-20200430-0076.html.

'Coronavirus en las villas porteñas: ya hay 1.410 infectados y representan el 34% de los casos de la Ciudad de Buenos Aires', *Infobae*, 19 May 2020, https://www.infobae.com/sociedad/2020/05/19/coronavirus-en-las-villas-portenas-ya-hay-1410-infectados-y-representan-el-34-de-los-casos-de-la-ciudad-de-buenos-aires/.

'Ginés González García: Esperábamos que el coronavirus llegara un poco más tarde', *La Voz*, 9 March 2020, https://www.lavoz.com.ar/ciudadanos/gines-gonzalez-garcia-esperabamos-que-coronavirus-llegara-un-poco-mas-tarde.

'Informe de la UCA: 49,3% de los trabajadores tiene empleo informal', *Iprofesional*, 24 June 2019, https://www.iprofesional.com/management/294562-Informe-de-la-UCA-493-de-los-trabajadores-tiene-empleo-informal.

'Miles de personas aplaudieron en todo el país a quienes combaten el coronavirus', *Telam*, 28 March 2020, https://www.telam.com.ar/notas/202003/445734-coronavirus-argentina-aplausos-balcones.html.

'Villa Itatí: detectaron siete casos de coronavirus y 75 sospechosos', *Telam*, 28 May 2020, https://www.telam.com.ar/notas/202005/469365-coronavirus-operativo-detectar-villa-itati.html.

@maxifirtman, 'El presidente informó que la app "CuidAr" será obligatoria para los que trabajen. No salió resolución pero analicé la app y aquí va hilo con detalles. ¿Es segura? ¿qué hace la app? ¿me sigue adonde voy? ¿qué podría hacer una actualización futura? ¿la voy a poder instalar? +', Twitter post, 9 May, https://twitter.com/maxifirtman/status/1259226698761076737?s=20.

@mis2centavos, 'La app #CuidAR no es obligatoria, y además de ser invasiva, puede no funcionar. Lo mejor es llevar el permiso de circulación IMPRESO o en formato PDF. Nadie puede exigirte que tengas NADA instalado en tu celular.' Twitter post, 31May 2020, https://twitter.com/mis2centavos/status/1267193256099614720?s=20.

Carabajal, Gustavo. 'Salida polémica: otro violador recibió la prisión domiciliaria en San Miguel', *La Nación*, 29 April 2020, https://www.lanacion.com.ar/seguridad/salida-polemica-otro-violador-recibio-prision-domiciliaria-nid2359800.

Dragneff, Nadia. 'La OMS ubica a la Argentina entre los últimos puestos del ranking mundial de testeos', *Perfil*, 16 April 2020, https://www.perfil.com/noticias/equipo-de-investigacion/coronavirus-argentina-figura-entre-ultimos-puestos-ranking-mundial-testeos-preventivos.phtml.

González, Enric. 'Argentina entra en cuarentena obligatoria hasta el 31 de marzo', *El País*, 20 March 2020, https://elpais.com/sociedad/2020-03-20/argentina-entra-en-cuarentena-obligatoria-hasta-el-31-de-marzo.html.

Government of Argentina. 'Educación y UNICEF producirán cuadernillos para estudiantes en situación de vulnerabilidad', 7 April 2020, https://www.argentina.gob.ar/noticias/educacion-y-unicef-producirán-cuadernillos-para-estudiantes-en-situacion-de-vulnerabilidad.

Mercado, Silvia. 'La oposición pidió que el ministro de Educación brinde explicaciones sobre los cuadernillos escolares que incluyen la difusión de actos de gobierno', *Infobae*, 22 May 2020, https://www.infobae.com/educacion/2020/05/22/la-oposicion-pidio-que-el-ministro-de-educacion-brinde-explicaciones-sobre-los-cuadernillos-escolares-que-incluyen-la-difusion-de-actos-de-gobierno/.

Smink, Veronica. 'Coronavirus en Argentina: por qué genera tanta polémica la decisión de sacar de la cárcel a algunos presos por riesgo a que se contagien el COVID-19', *BBC Mundo*, 1 May 2020, https://www.bbc.com/mundo/noticias-america-latina-52496655.

Vivanco, José Miguel. 'Debate sobre la liberación de presos en Argentina', *Human Rights Watch*, 1 May 2020, https://www.hrw.org/es/news/2020/05/01/debate-sobre-la-liberacion-de-presos-en-argentina.

35. COVID-19 AND NON-PERSONAL DATA IN THE INDIAN CONTEXT: ON THE NORMATIVE IDEAL OF PUBLIC INTEREST

PREETI RAGHUNATH

The southwestern Indian state of Kerala has been in the news for flattening the curve in the face of the COVID-19 pandemic, raising the bar for public health interventions through proactive and informed policy stances. However, another storm was brewing for a few weeks in April and early May that had implications for the larger public health crisis. Opposition leader Ramesh Chennithala questioned the state government upon entering into a contract with a private firm, Sprinklr, which would be granted full access to citizens' health data. This led to petitions being filed in the Kerala High Court, and the judge ordering that the data of COVID-19 patients with Sprinklr be anonymised. Several days before the original post from which this chapter is drawn was written, the Kerala government told the High Court that the data had been transferred to a State-owned cloud space. While this incident, in the midst of a global pandemic, speaks to ongoing discussions on the data privacy and healthcare cybersecurity, it also highlights what is emerging as an important domain in data governance: non-personal data.

Defining Non-Personal Data

There is not yet a definition of non-personal data in the Indian context. However, it is generally defined by its nature of not being personal data. While the Personal Data Protection Bill, 2019 is before the Joint Parliamentary Committee, the Indian government has now instituted a panel to examine Non-Personal Data (NPD). Non-personal data is anonymized or pseudonymized data, stripped of the potential to be traced back to an individual. My concern in the remainder of this piece is to examine NPD as a public good in the context of data ownership concerns, COVID-19, and the health sector.

Ownership and Public Interest

Non-Personal Data is often misunderstood as "big data." It may be part of big data stacks in form, but any anonymized and pseudonymized data could be called NPD. It could exist in the form of big data or thick data, especially in the case of smaller enterprises and local commercial setups. Whatever its form, NPD has immense value to be exploited economically. Srinivas Kodali, an independent researcher on open data, spoke to me about the new National Health Stack in India. He told me, "The National Health Stack is essentially a plan by the Indian "Big Tech" lobby to push monetization of anonymized health data for profit. This often leads to the pushing of technology onto people through coercion." He tweeted about how the Stack is less concerned with healthcare, and more about rendering the individual as data. Kris Gopalakrishnan is Co-Founder of Infosys, a big Indian technology firm heading the Committee formed by the Indian government. This overlap makes it difficult to dismiss

concerns of the ownership of NPD. In envisaging NPD as an economic asset, one must be wary of the collusion of the state and "Big Tech" to amass profits and profile citizens.

COVID-19 and Non-Personal Data

Questions of data ownership and public interest are normative ideals in any democratic policy process and democratic practice. In the case of NPD, it becomes imperative to advocate for data to be treated as a public good. The humanitarian concerns of the COVID-19 situation only accentuate and highlight the need to draw on these ideals. In light of the security concerns of the Aarogya Setu mobile application and the Indian experience of trusting "Big Tech" with a public data-driven process like Aadhaar, only makes a case for advocating for approaching individual and community data as non-rival and reusable public goods. Aadhaar is a biometric identity system put in place by the government to onboard citizens. Aarogya Setu is an app that was put in place by the government to manage medical data and diagnose COVID-19 cases. Both Aadhaar and Aarogya Setu have come under scathing criticism for evading privacy, relying on identity markers, exhibiting poor security architectures, and generally being used by the government to control the population. The Indian government announced that it would be making the Aarogya Setu app open-source. In response, those championing privacy and security accused the government of "openwashing" by not sharing the right source code. The recent case of the Tablighi Jamaat controversy saw right-wing forces blaming the entire Muslim community for allegedly conspiring to spread COVID-19. It serves as an example of how technology and apps could promote profiling of individuals by religion, caste, and other identity markers.

These issues should direct our attention to the larger practices of data management of NPD, in the face of COVID-19. For instance, practices of open data and sharing of datasets between civil society actors and small technology firms working with them could aid the process of promoting pertinent healthcare facilities. Similarly, data standards need to be aligned with commonly accepted principles, since data could accentuate or diminish the complexity of a pandemic. Proponents of openness also suggest that scientific research and other literature on the pandemic need to be shared openly to accelerate finding new pathways for diagnosis. Next, working with NPD exclusively would mean that segregation and selection of data need to be enabled, to account for the removal of personal data and associated concerns of privacy erosion. The segregation and selection process would require proactive efforts from technologists and those in power to enable the maintenance of data for public usage, since there are efforts by liberal economists to downplay privacy concerns during times of the pandemic.

The Indian government must facilitate such processes to engage with the larger community of activists, advocates, technology experts, innovators, and human rights proponents who work in the public interest. Caution must be shown to ensure that working with NPD does not become an exercise in technocracy, and remains an inclusive and open process. This inclusivity must extend to the policymaking domain as well, creating new pathways for deliberation. The recent exercise by the government of putting out a report on NPD in the public domain has generated discussion on what could govern such data in India. Lack of a public interest mandate in the same, and the impetus given to a possible "nationalization" of data,

has been seen as a cause for worry by industry, and more importantly, by civil society. The ideas of data trusts, community privacy, and community data, though encouraging, is not sufficiently defined to block loopholes for manipulation. India's entrenched migrant crisis and travel concerns of citizens demonstrate that COVID-19 warrants such an act of urgent advocacy in favour of public interest. Rapid datafication of livelihood and socio-economic processes in India would only serve "Big Tech" and the state, if we lose this opportunity to design data-related policymaking and policies in public interest.

36. ARGENTINA-BRASIL: LA RESIGNIFICACIÓN DEL USO DE LA TECNOLOGÍA EN ÉPOCAS DE PANDEMIA

Argentina-Brazil: The resignification of technology use in the pandemic

JULIÁN CORDOBA PIVOTTO

In a world in constant evolution, Latin America is probably where the COVID-19 pandemic has most changed the way we communicate as a society. This chapter reviews the cases of Argentina and Brazil to illustrate how the use of technology can foster different scenarios of resistance and alterity.

La situación del COVID-19 ha cambiado la manera de comunicarnos como sociedad. No importa en qué país y situación nos encontremos; de una u otra manera estamos afectados por las consecuencias de esta pandemia y uno de los factores principales y más presentes en este cambio es el uso de la tecnología. Gracias a ella es posible prolongar y continuar con ciertos aspectos de nuestra vida como el trabajo, el estudio o el encuentro con amigos y familiares. A la vez, también es interesante ver cómo la tecnología nos permite vincularnos de nuevas y diferentes maneras con los gobiernos, que juegan un papel fundamental en esta situación, debido al poder de decisión que tienen.

Sucede que, poco después de que el contagio se esparciera en primer lugar por Asia, Europa, y Norteamérica, llegó el turno de que los mandatarios y líderes de América Latina se enfrenten a los desafíos que trae esta cuestión, adaptándose y concentrándose en las características propias que tiene esta parte del mundo. Así, en un lugar donde se encuentran alteridad, resistencia, subversión y creatividad -como lo sugieren Milán y Treré[1]—, los líderes han tomado posiciones y estrategias muy disímiles entre sí, como en el caso de Argentina y Brasil. Como resultado, los habitantes de esos países han respondido de maneras distintas a cada una de estas estrategias. Este artículo revisa estas estrategias y estas respuestas, para entender cómo se dio el uso de la tecnología en cada ocasión y pensar en qué situaciones se distinguen las características que hacen de la región un lugar tan particular. Para eso, es conveniente revisar cada caso por separado.

Argentina

Este país fue uno de los primeros en decretar un aislamiento obligatorio, que aplicó para el total del territorio nacional y sólo tuvo como excepción a aquellos considerados "personal de servicio esencial", como el personal médico o aquellos ligados a la producción y comercialización de alimentos y medicamentos. La tecnología jugó un rol principal para la gestión del gobierno: cada transmisión en televisión para comunicar las medidas elegidas se vio reforzada por una fuerte

1 Stefania Milan and Emiliano Treré, 'Big Data from the South(s): Beyond Data Universalism', *Television & New Media* 20, 4 (2019).

campaña de concientización en redes sociales, con indicaciones sobre qué podían hacer los ciudadanos para evitar los contagios. Un dato interesante es el aprovechamiento de la emergente red social Tik Tok: allí, la cuenta del Ministerio de Salud de Argentina publica consejos para evitar el contagio con un mensaje simple y sencillo, mayormente dirigido a jóvenes, que es el grupo que mayor actividad tiene en esa red.

El gobierno argentino también utilizó la tecnología para desarrollar una aplicación para smartphones, como sucedió en otras partes del mundo. En este caso se trata de CuidAR, una aplicación de descarga obligatoria para quienes requieran el permiso de circulación, que da un autodiagnóstico basado en los síntomas que indique el usuario. Sin embargo, ante la aparición de esta aplicación, los expertos explican que podría no tener el resultado esperado, ya que no queda claro qué hace el gobierno con los datos que se recolectan, o cómo se usan.[2] Además, dado que la aparición de síntomas podría restringir el permiso, algunos usuarios podrían optar por simplemente mentir al ingresar esos datos. La aplicación, blanco de críticas por vulneración a la privacidad, no pareciera tener un futuro muy optimista.

Por otro lado, los argentinos y las argentinas también supieron aprovechar la tecnología. Gran parte de la población, aquellos que cuentan con un dispositivo con acceso a internet, aprovecharon este medio para continuar con sus trabajos, clases, reuniones y obligaciones. Sin embargo, no sólo se usaron para eso, sino también para mantener contacto con el gobierno y expresar tanto su apoyo como su disconformidad. Un ejemplo de esto es el uso de Twitter, que se convirtió en el lugar principal para organizar muestras de apoyo hacia el personal de salud: así nacen los aplausos desde los balcones, cada día a las 21hs como hora pactada.

Pero esos balcones también fueron escenario de otro tipo de expresiones, como las manifestaciones en contra de la misma decisión del gobierno. Sucede que, pasados más de 70 días desde la declaración del aislamiento, una parte de la población decidió manifestar quejas y malestar, alegando la defensa de cuestiones como la actividad económica y la caída del consumo. El modus operandi de la organización fue la misma que para el agradecimiento al personal de salud: otra vez las redes sociales en general y Twitter en particular fueron protagonistas. En la actualidad, esta movilización ha tenido respuesta, las demandas fueron escuchadas y se han flexibilizado algunos sectores del país para que parte de la población pueda volver a trabajar.

Brasil

El país vecino tuvo una respuesta institucional y poblacional distinta a los efectos de la pandemia. Desde el gobierno, la respuesta fue totalmente distinta a la argentina: su presidente ha calificado al virus como "un resfriadito"[3] y no ha decretado ningún tipo de aislamiento, explicando que priorizaba la actividad económica en su lugar.

2 Nora Bär, 'Coronavirus en la Argentina. Controversia por la aplicación CuidAR: privacidad, confianza y vulnerabilidad', *La Nación*, 11 May 2020, https://www.lanacion.com.ar/ciencia/coronavirus-controversia-aplicacion-cuidar-gobierno-nid2364162.

3 'Coronavirus: Jair Bolsonaro critica las medidas de confinamiento y compara el covid-19 con un "resfriadito"', *BBC Mundo*, 25 marzo 2020, https://www.bbc.com/mundo/noticias-america-latina-52032551.

El gobierno hizo una campaña con este posicionamiento: con el hashtag #oBrasilNãoPodeParar, justificaba su postura por la negativa de detener la producción y la actividad laboral. La idea del gobierno, al parecer, era que la base de apoyo de Bolsonaro reproduzca y comparta el hashtag para demostrar apoyo a esta incitativa, apoyo que no se dio en redes ni por medio de la tecnología, sino en las calles, del modo habitual y sin respetar el aislamiento social. Allí también, el presidente se hizo presente.

Pero el uso del hashtag no fue solamente por parte del oficialismo brasileño. Del otro lado, también hubo -con mayor expansión y éxito- cierto activismo: con el slogan #ForaBolsonaro, que ya había sido usado anteriormente, alentado y difundido por referentes sociales, líderes de opinión y figuras opositoras, se dio respuesta a la campaña oficialista.

De un modo diferente, otra gran parte de la población de Brasil tuvo una respuesta distinta ante esta (in)acción por parte del gobierno nacional. Se trata de los habitantes de las *favelas*, quienes habitan zonas donde viven los sectores más económicamente empobrecidos de la sociedad brasileña. En Rocinha, Río de Janeiro, los habitantes empezaron a comunicarse por servicios de mensajería, como WhatsApp, para organizar una cuarentena "autogestionada", que consistía en un horario límite para la circulación por la zona. En Paraisópolis, São Paulo, se creó la figura del "Presidente de Calle": un vecino voluntario que se encarga de vigilar y dar apoyo a las 50 familias de su entorno más próximo, quien debe alertar si alguno de los habitantes que vigila presenta alguno de los síntomas, para así hacer más inmediata la atención médica.[4]

En ambas zonas, además, los mismos vecinos junto a algunos voluntarios de distintas organizaciones entregaron los llamados "COVID-19 kits", que incluyen tapabocas y jabón. La comunicación por servicios de mensajería sirvió para orientar y mejorar su distribución, fundamental para estos habitantes que -en su mayoría- tienen empleos informales y debido a esto la imposibilidad de continuar con ellos o recibir ingresos.

Teniendo en cuenta las características de este tipo de hogares, en los que suelen vivir 10 personas en construcciones de hasta 3 habitaciones -como menciona una activista en este reportaje] (https://www.youtube.com/watch?v=CbQyU-clUSg&feature=emb_title) sumado a la falta de información y reacción por parte del gobierno nacional, es necesario actuar. Así lo consideraron los voluntarios y vecinos, quienes decidieron compartir información sobre medidas de distanciamiento social y prevención de los contagios en un contexto en el que proveer información es de vital importancia. Aquí, nuevamente los servicios de mensajería jugaron un factor fundamental.

Conclusión

Los casos de Argentina y Brasil nos permiten ver cómo responde la población ante las acciones del gobierno, apoyando o manifestándose en contra; en cualquier caso, expresándose. Estos fenómenos reflejan una ciudadanía involucrada. En Argentina, el descontento se manifiesta

4 Carlos Meneses Sánchez, 'Las favelas de Brasil se organizan desde dentro para sobrevivir a la pandemia', *EFE*, 8 April 2020, https://www.efe.com/efe/america/sociedad/las-favelas-de-brasil-se-organizan-desde-dentro-para-sobrevivir-a-la-pandemia/20000013-4216714.

en demandas de carácter predominantemente económico. En Brasil, por otro lado, las demandas son por mejoras sanitarias. Lo destacable de la comparación entre ambos es la forma en la que se involucran sus poblaciones: la ciudadanía se preocupa, decide comunicar y actúa en consecuencia: todo eso como resultado de la pandemia y gracias a la tecnología. El nuevo desafío será que, una vez superada esta situación, ese compromiso se mantenga. Ojalá así sea.

References

Bär, Nora. 'Coronavirus en la Argentina. Controversia por la Aplicación CuidAR: Privacidad, Confianza y Vulnerabilidad', *La Nación*, 11 May 2020, https://www.lanacion.com.ar/ciencia/coronavirus-controversia-aplicacion-cuidar-gobierno-nid2364162.

'Coronavirus: Jair Bolsonaro Critica las Medidas de Confinamiento y Compara el COVID-19 con un "Resfriadito"', *BBC Mundo*, 25 March 2020, https://www.bbc.com/mundo/noticias-america-latina-52032551.

Meneses Sánchez, Carlos. 'Las Favelas de Brasil se Organizan Desde Dentro Para Sobrevivir a la Pandemia', *EFE*, 8 April 2020, https://www.efe.com/efe/america/sociedad/las-favelas-de-brasil-se-organizan-desde-dentro-para-sobrevivir-a-la-pandemia/20000013-4216714.

Milan, Stefania and Emiliano Treré. 'Big Data from the South(s): Beyond Data Universalism', *Television & New Media* 20, 4 (2019): 319–35.

37. A BRAZILIAN CAUTIONARY TALE ON PANDEMIC NEGATIONISM: OPEN DATA IS AN ESSENTIAL SAFEGUARD FOR EVIDENCE-BASED POLICY-MAKING

NICOLO ZINGALES

When it comes to COVID-19 deaths, Brazil is the second hardest hit country in the world, reaching almost 130.000 deaths at the time of writing. This may be surprising to those who remember that, when the novel coronavirus made its way to Brazil, after having caused thousands of deaths in other countries such as China and Italy, there was a widely shared belief that the warm temperatures in the country would prevent its spread. Perhaps this bolstered the confidence of the country's President Jair Bolsonaro when he minimized the importance of the virus by criticizing the "oversized" concern for its destructive power and attaching economic motives to its exaggeration.[1] What was more puzzling, however, is that the President maintained a negationist approach despite the steady increase in the numbers of victims, and contradicted the instructions given by health authorities, state governors and even his own Health Minister.

On March 24, 2020, Bolsonaro gave a national address on television, in which he revealed the key tenets of his strategy to fight the pandemic: first, a preoccupation for the economic consequences, demonstrated by his admonition that "life goes on, and jobs must be maintained."[2] Second, a forceful rejection of the social isolation imposed by state and municipal authorities, combined with an exhortation to "vertical" isolation, meaning separating those segments of the population with higher risk of death or of developing serious conditions with COVID-19. In support of that strategy, he suggested that for most people the virus would be no more than a gripezinha ("small flu"), and that Brazilians have somehow acquired an immunity to disease by "diving into sewers" (a reference to the fact that in certain areas of Brazil people have to cope with sewage water pouring onto the streets).[3] Third, Bolsonaro encouraged investment in demonstrating the efficacy of hydroxychloroquine against the virus.

While one could oppose this strategy on ideological grounds, a different criticism concerns how it was reached. The strategy marked a stark contrast with the position advocated by

1 Alex Tajra, 'Todos Nós Vamos Morrer um Dia: Veja Falas de Bolsonaro Sobre o Coronavírus', *UOL.com.br*, 1 May 2020, https://noticias.uol.com.br/saude/ultimas-noticias/redacao/2020/05/01/todos-nos-vamos-morrer-um-dia-as-frases-de-bolsonaro-durante-a-pandemia.htm.

2 '"Gripezinha": Leia a Íntegra do Pronunciamento de Bolsonaro Sobre COVID-19', *UOL.com.br*, 24 March 2020, https://noticias.uol.com.br/politica/ultimas-noticias/2020/03/24/leia-o-pronunciamento-do-presidente-jair-bolsonaro-na-integra.htm.

3 Pedro Henrique Gomes, 'Brasileiro Pula em Esgoto e não Acontece Nada, Diz Bolsonaro em Alusão a Infecção pelo Coronavírus", *Globo*, 26 March 2020, https://g1.globo.com/politica/noticia/2020/03/26/brasileiro-pula-em-esgoto-e-nao-acontece-nada-diz-bolsonaro-em-alusao-a-infeccao-pelo-coronavirus.ghtml.

scientific authorities, and it was devoid of evidence. The first telling sign of these problems was the dismissal on April 16 of Health Minister Luiz Henrique Mandetta, due to a divergence of views over the necessity of social isolation measures.[4] This was followed not a month later by the resignation of his replacement, Nelson Teich, appointed by Bolsonaro to find a better ally on the economy-focused strategy. Although Teich did not provide any reasons for the resignation, it is worth noting that it came the day after he learned in a press conference that the President had issued a decree. Without consulting the Ministry, he classified gyms, beauty salons, and barbers as "essential services" that cannot be interrupted by state and municipal authorities.[5] In later declarations, Teich explained that he had weighed the government's request to the Federal Council of Medicine to allow the prescription of chloroquine for mild cases of COVID-19 in his resignation, stressing that the country's health care budget is too small to be used for things that don't work.[6] The epilogue of this saga was the official government guidelines for wider use of chloroquine in mild cases, published when the Health Ministry came under the control of Eduardo Pazuello, an active-duty army general. The decision to authorize the use of hydroxychloroquine was reached unilaterally, despite the existence of scientific studies on the medicine finding "no beneficial effect against the disease," and without revealing any results from the studies announced by the President in his television address in March. Especially considering the delicate nature of this decision, which was liable to impact lives of thousands of people, it was logical to expect that the evidence for his decision would be produced and made available for public oversight.

Another tension with the scientific community arose on June 5, when the Health Ministry removed statistics about the novel coronavirus from its portal, explaining that it doubted the accuracy of the numbers due to the prevalence of "sub-notifications." It was alleged that numbers were manipulated by states and municipalities in order to receive emergency aid, and as a result, new reports would limit the numbers of deaths that occurred each day.[7] These changes involved significantly curtailing published data. In the new version made available on June 7, one could only see daily contagions, deaths, and recoveries without reference to the running total. The new version also didn't permit a breakdown of numbers by state or municipality, or comparisons with Severe Acute Respiratory Syndrome (SARS) records, another useful indicator. In this version, numbers could also no longer be downloaded, which created obstacles to further analysis.[8] All this motivated the Sustainability Network, the Com-

4 Linda Paraguassu and Ricardo Brito, 'Bolsonaro Expected to Fire Defiant Brazilian Health Minister', *Reuters*, 15 April 2020, https://www.reuters.com/article/us-health-coronavirus-brazil/bolsonaro-expected-to-fire-defiant-brazilian-health-minister-idUSKCN21X1QM.

5 Dom Phillips, 'Brazil Loses Second Health Minister in Less Than a Month as COVID-19 Deaths Rise', *The Guardian*, 15 May 2020, https://www.theguardian.com/world/2020/may/15/brazil-health-minister-nelson-teich-resigns.

6 'Teich: Decisão de Bolsonaro em Antecipar Uso da Cloroquina Teve Peso em sua Saída', *A Gazeta*, 24 May 2020, https://www.agazeta.com.br/brasil/teich-decisao-de-bolsonaro-em-antecipar-uso-da-cloroquina-teve-peso-em-sua-saida-0520.

7 'Oposição e MP Devem ir à Justiça Para Garantir Divulgação de Dados da COVID-19', *Estado de Minas*, 7 June 2020, https://www.em.com.br/app/noticia/nacional/2020/06/07/interna_nacional,1154645/oposicao-e-mp-devem-ir-a-justica-para-garantir-divulgacao-de-dados-da.shtml.

8 'Carta Aberta ao Governo Federal: A Opacidade Custa Vidas', *Open Knowledge Brasil*, 10 June 2020, https://www.ok.org.br/noticia/carta-aberta-ao-governo-federal-a-opacidade-custa-vidas/.

munist Party of Brazil, and the Socialism and Freedom Party to launch a constitutionality challenge against the new policy, resulting in a judicial order to the health ministry to revert to the original configuration. Supreme Court Judge Alexandre de Moraes mentioned in his decision that the Brazilian Constitution enshrined the principle of publicity as one of the main vectors for public administration, giving it absolute priority in the administration's management and granting full access to information to the entire society.[9] The same principle had been invoked by the judge in another ruling against the government in March, setting aside a decree that due to the pandemic created an exception to the 20 day-response deadline to requests pursuant to the law of access to information. According to the ruling, the decree "ha[d] not established exceptional and concrete situations that would [legitimately] impede access to information"—rather simply turning the principle of publicity and transparency into an exception. In both cases, the Judge spoke clearly: the pandemic cannot be used as an excuse to lower transparency standards, which are indispensable to hold those in power accountable, arguably even more so during the pandemic.

A third example of negationism and rupture with evidence-based policy was the case of "*O Brasil não pode parar*," a media campaign encouraging autonomous workers to continue working despite the imposition of social isolation measures. The video of the campaign was published on the official Instagram page of the Special Secretariat of Communication of the Presidency and shared by several people close to the President. However, the video's distribution was immediately stopped by a court in Rio de Janeiro. Their injunction followed a complaint lodged by the Federal Public Minister to prevent the spread from official government accounts of this campaign, as well as other information against social isolation that is not grounded in scientific evidence. Interestingly, when these facts were brought to light by the Press, the Secretariat denied the existence of the campaign, despite its wide circulation and the public availability of screenshots of its publication by the Secretariat just three days prior.[10]

While the nation-wide campaign was withdrawn, Bolsonaro remains able to use his own channel (TV Bolsonaro) to broadcast content of choice to his audience through an app. According to an article published by the Intercept on June 15, TV Bolsonaro is the main channel in the Mano app, produced by IP.TV. This is the contractor preferred by state governments of São Paulo, Paraná, Amazonas e Pará for the provision of long-distance education to primary and secondary schools during the pandemic. The Intercept documented that the livestreaming app requires users to allow collecting of personal data, and suggested that this disproportionate data collection may have been the economic value justifying IP.TV's provision of such services free of charge to the state governments.[11] Unfortunately, no further information is available on these contracts between state governments and IP.TV, and it is not clear what

9 Supremo Tribunal Federal, 'Suspensa Norma que Restringe Acesso a Informações Públicas', 26 March 2020, https://portal.stf.jus.br/noticias/verNoticiaDetalhe.asp?idConteudo=440207&ori=1.

10 Hanrrikson de Andrade, 'Após divulgar campanha nas redes, Planalto nega campanha vetada por liminar', *UOL.com.br*, 28 March 2020, https://noticias.uol.com.br/politica/ultimas-noticias/2020/03/28/apos-divulgar-campanha-nas-redes-planalto-nega-campanha-vetada-por-liminar.htm.

11 Amanda Audi and Pedro Zambarda, 'Escola com Partido', *The Intercept Brasil*, 15 June 2020, https://theintercept.com/2020/06/15/app-empresa-tv-bolsonaro-aulas-online-pandemia/?fbclid=IwAR29-mo-3W3neZov-UViX-TPilHCLLPAyuRuskkcB6rdk0oaPVMgdcIyioA.

safeguards were included to protect the personal data of millions of students and professors. This lack of clarity over data processing has been a reality for the entire duration of the pandemic in Brazil.

The country still awaits the entry of a comprehensive data protection law and the formation of a data protection authority. Both have been repeatedly postponed[12], but are now reportedly bound to happen in the next few days.[13] While public-private partnerships could in principle help the country to deliver services and information to citizens, the current inadequacy of the applicable data protection framework is such that these partnerships must be regarded with suspicion. It is not a coincidence that the revelation of the terms of the partnership between telecom operators and the Agency for Statistics for the measurement of unemployment led to a successful constitutional challenge, on grounds of the insufficiency of the applicable safeguards.[14] This Supreme Court ruling was a good reminder of the promises of transparency and open data, highlighted by Judge de Moraes in the two above-mentioned cases, which allowed direct citizen engagement with evidence to keep public in check. Perhaps more transparency and evidence-based policies could have prevented the normalization of agglomerations we are seeing today across the country.

References

'Carta Aberta ao Governo Federal: A Opacidade Custa Vidas', Open Knowledge Brasil, 10 June 2020, https://www.ok.org.br/noticia/carta-aberta-ao-governo-federal-a-opacidade-custa-vidas/.

'"Gripezinha": Leia a Íntegra do Pronunciamento de Bolsonaro Sobre COVID-19', *UOL.com.br*, 24 March 2020, https://noticias.uol.com.br/politica/ultimas-noticias/2020/03/24/leia-o-pronunciamento-do-presidente-jair-bolsonaro-na-integra.htm.

'Oposição e MP Devem ir à Justiça Para Garantir Divulgação de Dados da COVID-19', *Estado de Minas*, 7 June 2020, https://www.em.com.br/app/noticia/nacional/2020/06/07/interna_nacional,1154645/oposicao-e-mp-devem-ir-a-justica-para-garantir-divulgacao-de-dados-da.shtml.

'Teich: Decisão de Bolsonaro em Antecipar Uso da Cloroquina Teve Peso em sua Saída, A Gazeta, 24 May 2020, https://www.agazeta.com.br/brasil/teich-decisao-de-bolsonaro-em-antecipar-uso-da-cloroquina-teve-peso-em-sua-saida-0520.

Audi, Amanda and Pedro Zambarda. 'Escola com Partido', *The Intercept Brasil*, 15 June 2020, https://theintercept.com/2020/06/15/app-empresa-tv-bolsonaro-aulas-online-pandemia/?fbclid=IwAR29-mo-3W3neZov-UViX-TPilHCLLPAyuRuskkcB6rdk0oaPVMgdcIyioA.

12 Luca Belli and Nicolo Zingales, 'Brazilian Data Protection Under Covid-19: Legal Certainty is the Main Casualty', *Blog Droit Européen*, 3 July 2020, https://blogdroiteuropeen.com/2020/07/03/brazilian-data-protection-under-covid-19-legal-certainty-is-the-main-casualty-by-luca-belli-and-nicolo-zingales/.

13 Kate Black, Gretchen A. Ramos, Giovanni Biscardi and Michael C. Hoosier, 'Brazil's Data Protection Law Will Be Effective After All, But Enforcement Provisions Delayed Until August 2021', *The National Law Review*, 28 August 2020, https://www.natlawreview.com/article/brazil-s-data-protection-law-will-be-effective-after-all-enforcement-provisions.

14 Bruno Ricardo Bioni and Renato Leite Monteiro, 'A Landmark Ruling in Brazil: Paving the Way for Considering Data Protection as an Autonomous Fundamental Right', *Future of Privacy Forum*, 9 June 2020, https://fpf.org/2020/06/09/a-landmark-ruling-in-brazil-paving-the-way-for-considering-data-protection-as-an-autonomous-fundamental-right/.

Belli, Luca and Nicolò Zingales. 'Brazilian Data Protection Under Covid-19: Legal Certainty is the Main Casualty', *Blog Droit Européen*, 3 July 2020, https://blogdroiteuropeen.com/2020/07/03/brazilian-data-protection-under-covid-19-legal-certainty-is-the-main-casualty-by-luca-belli-and-nicolo-zingales/.

Bioni, Bruno Ricardo and Renato Leite Monteiro. 'A Landmark Ruling in Brazil: Paving the Way for Considering Data Protection as an Autonomous Fundamental Right', *Future of Privacy Forum*, 9 June 2020, https://fpf.org/2020/06/09/a-landmark-ruling-in-brazil-paving-the-way-for-considering-data-protection-as-an-autonomous-fundamental-right/.

Black, Kate, Gretchen A. Ramos, Giovanni Biscardi and Michael C. Hoosier. 'Brazil's Data Protection Law Will Be Effective After All, But Enforcement Provisions Delayed Until August 2021', *The National Law Review*, 28 August 2020, https://www.natlawreview.com/article/brazil-s-data-protection-law-will-be-effective-after-all-enforcement-provisions.

De Andrade, Hanrrikson, 'Após divulgar campanha nas redes, Planalto nega campanha vetada por liminar', *UOL.com.br*, 28 March 2020, https://noticias.uol.com.br/politica/ultimas-noticias/2020/03/28/apos-divulgar-campanha-nas-redes-planalto-nega-campanha-vetada-por-liminar.htm.

Gomes, Pedro Henrique. 'Brasileiro Pula em Esgoto e não Acontece Nada, Diz Bolsonaro em Alusão a Infecção pelo Coronavírus", *Globo*, 26 March 2020, https://g1.globo.com/politica/noticia/2020/03/26/brasileiro-pula-em-esgoto-e-nao-acontece-nada-diz-bolsonaro-em-alusao-a-infeccao-pelo-coronavirus.ghtml.

Paraguassu, Linda and Ricardo Brito. 'Bolsonaro Expected to Fire Defiant Brazilian Health Minister', *Reuters*, 15 April 2020, https://www.reuters.com/article/us-health-coronavirus-brazil/bolsonaro-expected-to-fire-defiant-brazilian-health-minister-idUSKCN21X1QM.

Phillips, Dom. 'Brazil Loses Second Health Minister in Less Than a Month as COVID-19 Deaths Rise', *The Guardian*, 15 May 2020, https://www.theguardian.com/world/2020/may/15/brazil-health-minister-nelson-teich-resigns.

Supremo Tribunal Federal. 'Suspensa Norma que Restringe Acesso a Informações Públicas', 26 March 2020, https://portal.stf.jus.br/noticias/verNoticiaDetalhe.asp?idConteudo=440207&ori=1.

Tajra, Alex. 'Todos Nós Vamos Morrer um Dia: Veja Falas de Bolsonaro Sobre o Coronavírus', *UOL.com.br*, 1 May 2020, https://noticias.uol.com.br/saude/ultimas-noticias/redacao/2020/05/01/todos-nos-vamos-morrer-um-dia-as-frases-de-bolsonaro-durante-a-pandemia.htm.

38. TOWARDS CIVIC DATA POLICIES: PARTICIPATORY SAFEGUARDS IN COVID-19 TIMES

ARNE HINTZ

The pervasive tracing, tracking, and analysing of citizens and populations has emerged as the tradeoff of an increasingly datafied world. Citizens are becoming more transparent to the major data-collecting institutions of the platform economy and the state, while they have limited possibilities to intervene into processes of data governance, control the data that is collected about them, and affect how they are profiled and assessed through data assemblages. The COVID-19 pandemic has highlighted the centrality of these dynamics. Contact tracing and detailed identification of outbreak clusters have been essential responses to COVID-19. Yet, detailed data about our movements, interactions and pastimes is now tracked, stored, and analysed, both "online" through the use of contact-tracing apps and "offline" (e.g., when we fill in a form at a bar or restaurant). The rise of tracking raises the question of how exactly data is collected and analysed, by whom, for what purposes, and with what limitations. Essentially, it signals the necessity of legal safeguards to ensure that data analytics fulfil their purpose while preventing privacy infringements, discrimination, and the misuse of data. The COVID-19 pandemic thus alerts us to the importance of effective regulatory frameworks that protect the rights and freedoms of digital citizens. It also demands public involvement in a debate that affects our lives during the pandemic and beyond.

The wider context of data policy in the wake of major data controversies by both public and commercial institutions—from the Snowden revelations to Cambridge Analytica—is currently ambiguous. On the one hand, it reflects a deeply entrenched commitment to expansive data collection. On the other hand, it increasingly recognises the need for enhanced data protection and citizens' data rights. In many countries, the possibilities for monitoring people's data traces (particularly by state agencies) have significantly expanded. The UK Investigatory Powers Act from 2016 serves as a stark example, because it legalised a broad range of measures, including the "bulk collection" of people's data and communication; the "internet connection records" (i.e., people's web browsing habits); and "computer network exploitation" (i.e., state-sponsored hacking into the networks of companies and other governments as well as the devices of individual citizens).[1]

At the same time as these encroachments, we have also seen the strengthening of data protection rules, most prominently by the European Union General Data Protection Regulation (GDPR) in 2018. The GDPR enhances citizen control over data by providing rights to access and withdraw personal data, request an explanation for data use, and deny consent to data tracking by platforms. It requires that data be collected only for specific purposes to reduce indiscriminate data sharing and trading. The GDPR also limits the processing of sensitive personal data. While some elements of the GDPR have been controversial and the regulation

1 Arne Hintz and Ian Brown, 'Enabling Digital Citizenship? The Reshaping of Surveillance Policy After Snowden', *International Journal of Communication*, 11 (2017): 782–801.

overall is often described as insufficient, it has been recognised as an important building block towards a citizen-oriented data policy framework.[2] The emerging policy environment of data collection and data use has been significant in societies that are increasingly governed through data analysis and processes of automated decision-making. Profiling citizens and segmenting populations through detailed analysis of personal and behavioural data are now at the core of governance processes and shape state-citizen relations.[3]

What does the shifting data environment mean during COVID-19 times? How should regulatory frameworks enable and constrain the tracking and tracing of virus outbreaks, and what boundaries should exist? If we accept that some data collection and analysis is useful to address the pandemic and its serious health implications, the purpose limitation of this data (as highlighted by the GDPR) becomes crucial. In some countries, contact-tracing apps were designed to track a much wider range of data than initially necessary for tracing infection chains and enable government agencies to use that data for non-medical tracking purposes (see also chapter 6 in this book). In order to avoid contact-tracing becoming a Trojan Horse for widespread citizen surveillance, strict purpose limitation would be an essential cornerstone of a robust regulatory framework. Similarly, limitations to the collection of sensitive data and the deletion of all data at fixed times during or after the pandemic would be core components of such a framework. While it may be debatable whether wider data collection and sharing would be acceptable as long as the affected individuals give their consent, a consent model often leads to pressures and incentives for citizens to hand over data against their will and interest, which would make strict prohibitions seem a more appropriate mechanism. The COVID-19 contact-tracing case thus points to some of the elements that are increasingly discussed and regulated as part of policy reforms such as the GDPR, and it highlights the challenges of indiscriminate data collection.

Indiscriminate data collection also poses questions about who should develop such policy, and whether broader public involvement would be desirable or even necessary. The COVID-19 pandemic helps us explore the role of citizens as policy actors. Contributions to the regulatory and legislative environment by civic actors outside the realm of traditional "policymakers" have received increased attention in recent years. These range from the role of civil society in multi-stakeholder policy processes to policy influences by social movements[4] and to the development of specific legislation by citizens in the form of what has been called crowd law[5] and policy hacking.[6] The COVID-19 case demonstrates multiple dimensions of these kinds of public engagement. It shows the strong normative role of technical developers arguing

2 Lilian Edwards and Michael Veale. 'Slave to the Algorithm? Why a 'Right to an Explanation' is Probably Not the Remedy You Are Looking For', *Duke Law and Technology Review*, 16(1) (2017), pp. 18-84; Arne Hintz and Jess Brand, 'Data Policies: Regulatory Approaches for Data-driven Platforms in the UK and EU (2017-2019): Project Report', Data Justice Lab, https://datajusticelab.org/data-policies/.

3 Lina Dencik, Joanna Redden, Arne Hintz and Harry Warne, 'The "Golden View": Data-driven Governance in the Scoring Society', *Internet Policy Review* 8(2), 2019.

4 Stefania Milan, *Social Movement and their Technologies*, London: Palgrave, 2013.

5 Beth Noveck, Gabriella Capone and Victoria Alsina, 'Legislature 2.0: CrowdLaw and the Future of Lawmaking', *GovLab*, 4 November 2017.

6 Arne Hintz, 'Policy Hacking: Opening Up the Code of Media and Communications Regulation', in Jeremy Hunsinger and Andrew Schrock (eds) *Making Our World: The Hacker and Maker Movements in Context*, Bern: Peter Lang, 2018.

for decentralised data storage options in contact-tracing apps (e.g., the Decentralised Privacy-Preserving Proximity Tracing project), who have prevailed in many cases over the initial government intention to centralise data handling. Further, we have seen legal scholars taking the lead in proposing relevant legislative frameworks, for example, by developing a dedicated Coronavirus Safeguards Bill for the UK (which has not, so far, been adopted by the UK government but has still influenced the debate on contact-tracing).[7] The public discourse on COVID-19 responses in many countries has also considered the problem of data collection and possible privacy infringements, thus placing data analytics firmly on the public agenda.[8]

The current pandemic has shown that emergency situations require the rapid adoption of legal safeguards, and a wider public debate on what data analyses are acceptable and where boundaries lie. Policy components from recent regulatory frameworks such as the GDPR can be an important part of this endeavour, as should critical reflection on data extraction laws such as the Investigatory Powers Act. Expert proposals from civil society have promoted rules that address problems raised by the pandemic while protecting civic rights. At the "margins" of established policy processes, these interventions by civil society and the public play a significant role in advancing normative pressure on civic data policies.

References

Dencik, Lina, Joanna Redden, Arne Hintz and Harry Warne. 'The "Golden View": Data-driven Governance in the Scoring Society', *Internet Policy Review* 8(2), 2019, DOI: 10.14763/2019.2.1413.

Edwards, Lilian, Michael Veale, Orla Lynskey, Nóra Loideain at al.. 'The Coronavirus (Safeguards) Bill 2020. Proposed Protections for Digital Interventions and in Relation to Immunity Certificates', *LawArXiv* (13 April 2020), https://doi.org/10.31228/osf.io/yc6xu.

Edwards, Lilian and Michael Veale. 'Slave to the Algorithm? Why a "Right to an Explanation" is Probably Not the Remedy You Are Looking For', *Duke Law and Technology Review*, 16(1), 2017: 18-84.

Hintz, Arne. 'Policy Hacking: Opening Up the Code of Media and Communications Regulation', in Jeremy Hunsinger and Andrew Schrock (eds) *Making Our World: The Hacker and Maker Movements in Context*, Bern: Peter Lang, 2018, pp. 97-114.

Hintz, Arne and Jess Brand. 'Data Policies: Regulatory Approaches for Data-driven Platforms in the UK and EU (2017-2019): Project Report', Data Justice Lab, https://datajusticelab.org/data-policies/.

Hintz, Arne and Ian Brown. 'Enabling Digital Citizenship? The Reshaping of Surveillance Policy After Snowden', *International Journal of Communication*, 11, 2017: pp. 782–801.

Milan, Stefania. *Social Movement and their Technologies*, London: Palgrave, 2013.

Noveck, Beth, Gabriella Capone and Victoria Alsina. 'Legislature 2.0: CrowdLaw and the Future of Lawmaking', *GovLab*, 4 November 2017, http://thegovlab.org/legislature-2-0/.

Ruiz, Javier. 'Contact-Tracing Apps: No Substitute for Public Healthcare Interventions', *Bot populi*, April 21, 2020, https://botpopuli.net/covid19-contact-tracing-apps-public-healthcare-interventions.

7 Lilian Edwards, Michael Veale, Orla Lynskey, Nóra Loideain et al., 'The Coronavirus (Safeguards) Bill 2020. Proposed Protections for Digital Interventions and in Relation to Immunity Certificates', *LawArXiv* (13 April 2020).

8 Javier Ruiz. 'Contact-Tracing Apps: No Substitute for Public Healthcare Interventions', *Bot populi*, April 21, 2020, https://botpopuli.net/covid19-contact-tracing-apps-public-healthcare-interventions.

PANDEMIC SOLIDARITIES AND RESISTANCE FROM BELOW

THEME V

39. IN MEMORY OF COVID-19 IN CHINA: FORMS OF DIGITAL RESISTANCE TOWARDS CENSORSHIP

KINOKO MERINI

COVID-19, an epidemic that emerged from Wuhan city, has been always entangled with information censorship since it was detected. During the last week of December 2019, doctors in Wuhan—including Dr. Li Wenliang who became known as the virus whistleblower—used their personal social media accounts to sound the alarm about the rapid spread of the unknown disease.[1] Their attempt was stigmatised by local authorities as spreading rumours and misinformation. Even in the times of COVID-19, the Chinese internet witnessed a battle between censorship and resistance by Chinese citizens and journalists. They used digital networked communication to spread censored content and fight for the right to be informed. This created a temporal "us" against the authorities' state.

Nick Couldry offered a critical reflection on how digital networked communication forms solidarity—what he termed "the myth of us" (2014).[2] He argued that timescale mattered as one of the social conditions of political changes, because networked action provided effective means for disrupting government surveillance and quickly mobilizing citizens. Yet, the long-term contexts that guarantee sustainable individual action in and through networks are missing. Couldry also said that it is too early to conclude that digital networks function as a process of autonomous communication. Nonetheless, he did not deny the potential of political change through social movements that use digital networks. We can think of how COVID-19 outlined and amplified the problems of internet censorship in China, which triggered resistance that could become legacies for activists and citizens even after the crisis.

GitHub: The New Frontier of Data Activism in China

Documentation of COVID-19 reports on the software repository GitHub reveal a form of data activism as a novel frontier of media activism.[3] As Milan argues, it is a re-active action enacted by technological experts who use web crawling or other data collection processes to transfer reports and articles to the repositories, racing against the speed of censorship.[4] "Terminus2049," an online crowd-sourcing project relying on GitHub, was set up in 2018 to archive articles that were censored from mainstream media outlets and social media platforms such as WeChat and Weibo. As stated in its GitHub page, the project's slogan

1 Yong Xiong, Hande Atay Alamm and Nectar Gan, 'Wuhan Hospital Announces Death of Whistleblower Doctor Li Wenliang', *CNN World*, 7 February 2020, https://www.cnn.com/2020/02/06/asia/li-wenliang-coronavirus-whistleblower-doctor-dies-intl/index.html.

2 Nick Couldry, 'The Myth of "Us": Digital Networks, Political Change and the Production of Collectivity', *Information, Communication & Society* 18 (6), 2015.

3 GitHub, https://github.com.

4 Stefania Milan, 'Data Activism as the New Frontier of Media Activism', in Goubin Yang and Viktor Pickard (eds) *Media Activism in the Digital Age*, New York: Routledge, 2017, pp. 151-163.

is "no more 404"—the error code indicating that a server could not find the requested page. Terminus2049 functions as a site of resistance towards the state censorship on media content.

During the outbreak of COVID-19 in China, Terminus2049 archived and documented reports and articles that had been censored or removed. These reports included in-depth reports questioning the local Wuhan government's early reaction to the coronavirus published by Caixin Media. On April 19, three volunteers from Terminus2049[5] went missing in Beijing and were presumed to be detained by the authorities.[6] However, Terminus2049 is not the only project on GitHub that is involved in crowdsourcing documentation of coronavirus memories. Similar projects such as "2019ncovmemory" (which has already set the archive to private to avoid risks), "womenincov"[7] (which features recordings of female medical staff and issues related to domestic violence), and "workerundervirus"[8] can be also found on GitHub.

How did GitHub become a platform for Chinese citizens and activists to preserve counter-narratives? To begin with, the software development website GitHub is accessible in China for its usual function of sharing code. The platform gained its visibility outside the developer communities during the Anti-996 Movement in 2019, initiated by Chinese programmers to protest against excessive working conditions in tech companies.[9] As part of the movement, the "996.ICU" project was devoted to compiling a list of companies that follow a 996-working schedule (from 9 AM to 9 PM, 6 days a week). This repository quickly became one of GitHub's fastest-growing repositories. Through mainstream media reporting and the wide-spread discussion about 996-working culture in China, the movement brought people's attention to GitHub as a suitable site for civic participation. The platform was also a tactical choice for organizing contemporary activism in China, given its capacity to be operated both within and beyond "the Great Firewall."

The Explosion of Creativities on Social Media

I am not arguing that GitHub is the only online space to contain Chinese citizens' memories of coronavirus and channel their demands for transparency and accountability. In fact, social media accelerates cycles of action and protest, which can produce new forms of collectivity. What amazed me the most is how citizens creatively and collectively expressed their anger, discontentment, and solidary by spreading an interview of Dr. Ai Fen on social media platforms. On March 10, Renwu Magazine published an article titled "The one who gave out the whistle (发哨子的人)"—an interview with the head of Emergency Department

5 https://terminus2049.github.io/.
6 'China: COVID-19 Activist Held Incommunicado: Chen Mei', *Amnesty International*, 7 May 2020, https://www.amnesty.org/en/documents/asa17/2289/2020/en/?fbclid=IwAR36usX-s8KhOyjk8bloSSKS34buiqYRbPvtQ_pvj2i-En_MK22ZtWj8cdo.
7 https://womeninncov.github.io/.
8 https://workerundervirus.github.io/.
9 Klint Finley, 'How GitHub Is Helping Overworked Chinese Programmers', *Wired*, 4 April 2020, https://www.wired.com/story/how-github-helping-overworked-chinese-programmers/.

in Wuhan Central Hospital, Dr. Ai Fen. She alleged that she had been reprimanded by superior officials after attempting to warn her colleagues about COVID-19 and her experiences in the emergency department. The article was quickly removed, but censorship failed to silence the public. Citizens found their own ways of preserving and spreading the article: using screenshots, replacing words with emojis, and formatting the article vertically instead of horizontally. More creative people creatively used a series of QR codes, fictional languages such as Klingon and Sindarin, Morse code, and the computer science encoding system Base 64. Chinese social media platforms were turned into battlefields against censorship. As communication scholar Kecheng Fang commented to BBC, it was a ceremonial event that connected individual citizens who share similar values and led to the formation of solidarity.[10]

Fig. 1: The circulartion of the censored report in different languages. Source: https://www.jixiaokang.com/2020/03/13/2020-03-13-fa-shao-zi-de-ren/

Alternative/Artistic New Media Projects

The creativities in this event brought forth the possibilities of adapting alternative or artistic activism, while still being able to communicate a social message. Such activism is often recog-

10 Yunsheng Fang, 'Pneumonia Epidemic: Whistleblower Triggers Anti-Censorship War, Chinese People Use Creative Relay to Fight Back', *BBC News*, 11 March 2020, https://www.bbc.com/zhongwen/trad/chinese-news-51831652.

nizable by its ability to slip under the radar and not be identified as "politics" to authorities. As Leah Lievrouw points out, besides citizens' active engagement in spreading censored content regarding coronavirus on social media platforms, activists have incorporated the concept of memories into alternative and activist new media projects.[11]

"Unfinished Farewell" is a new media project, directed by visual designer Jiabao Li and Laobai Wu, that offers a place for people to release their grief and for the public to mourn.[12] By collecting help-seeking posts and heartbreaking stories of losing the loved ones from accounts on different social media platforms, the project aggregates individual stories to form counter-hegemonic narratives. It invites the visitors to reflect on a question: "after this pandemic, who can remember the pain of someone like my mother who had nowhere to seek medical treatment, being refused by the hospital, and died at home?" There is a need to document similar tragedies as evidence to be used later when seeking accountability after the crisis. This project set the urgency for such a need in an emotionally powerful way, by presenting information of the lost lives as a visualization.

"Qingming, A Sculpture of Resilience" has appeared online.[13] Qingming Festival, also known as Tomb-sweeping Day, is a day to mourn and commemorate ancestors and lost loved ones. Because of the pandemic measures, people in China were unable to visit graves in this year's Qingming Festival, so they used online tomb-sweeping applications as an alternative. However, the project was not created for tomb-sweeping. It invites you to virtually join a counter-clockwise walk in front of the Hongshan Auditorium in Wuhan. It aims to transform the trajectories left by visitors into an online monument, which represents a collective will of remembering how the officials were trying to silence the alarms about the coronavirus in Wuhan. As strongly stated on the website, "We shall never forget our pain and tear. Neither should we stop examining the systematic problems exposed during the crisis, the strive for a better future." Despite that the state's regulations and pandemic measurements prohibit citizens from gathering physically in front of Hongshan Auditorium in Wuhan, the project records an artistic form of protest online.

The political environment and the strict censorship conducted by corporate social media platforms in contemporary China hampered the possibility for organizing physical protests or forming grassroots collectives. The COVID-19 crisis triggered an intensity that lasts for months in everyday life, but it also nurtured creative and alternative resistances that could go beyond physical protests. Despite that fact that one should be cautious, and not mistakenly assume that the forms of collectivity in the crisis represent the whole social picture, I would like to believe the diverse forms of resistance towards censorship will be able to maintain and evolve into the future.

11 Leah Lievrouw, *Alternative and Activist New Media*, Cambridge, UK: Polity, 2011.
12 Unfinished Farewell, https://www.farewell.care/?lang=en.
13 Qingming, https://www.qingming.space/index-en.html.

References

'China: COVID-19 Activist Held Incommunicado: Chen Mei', *Amnesty International*, 7 May 2020, https://www.amnesty.org/en/documents/asa17/2289/2020/en/?fbclid=IwAR36usX-s8KhOyjk-8bloSSKS34buiqYRbPvtQ_pvj2i-En_MK22ZtWj8cdo.

Couldry, Nick. 'The Myth of "Us": Digital Networks, Political Change and the Production of Collectivity', *Information, Communication & Society* 18 (6): 608-626, 2015.

Fang, Yunsheng. 'Pneumonia Epidemic: Whistleblower Triggers Anti-Censorship War, Chinese People Use Creative Relay to Fight Back', BBC News, 11 March 2020, https://www.bbc.com/zhongwen/trad/chinese-news-51831652

Finley, Klint. 'How GitHub Is Helping Overworked Chinese Programmers', *Wired*, 4 April 2020, https://www.wired.com/story/how-github-helping-overworked-chinese-programmers/.

Lievrouw, Leah. *Alternative and Activist New Media*, Cambridge, UK: Polity, 2011.

Milan, Stefania. 'Data Activism as the New Frontier of Media Activism', in Goubin Yang and Viktor Pickard (eds) *Media Activism in the Digital Age*, New York: Routledge, 2017, pp. 151-163.

Xiong, Yong, Hande Atay Alamm and Nectar Gan. 'Wuhan Hospital Announces Death of Whistleblower Doctor Li Wenliang', *CNN World*, 7 February 2020, https://www.cnn.com/2020/02/06/asia/li-wenliang-coronavirus-whistleblower-doctor-dies-intl/index.html.

40. TEJIDOS COMUNITARIOS DESDE LOS MÁRGENES: LAS CAJAS DE RESISTENCIA COMO HERRAMIENTA AUTÓNOMA Y AUTOORGANIZADA EN TIEMPOS DE NECESIDAD

Knitting communities from the margins: Resistance clusters as an autonomous and self-organized instrument in times of need

MARTA ESPUNY CONTRERAS

In Spain, the COVID-19 pandemic has multiplied networks of mutual support and solidarity, such as "resistance funds" (e.g., solidarity pantries). These collective initiatives are a type of digital activism grounded in practices of horizontal resistance that originated on social media platforms. What possibilities of autonomy and resistance are activated within these platforms? What do movements achieve by using digital social networks?

Las respuestas colectivas como redes de apoyo mutuo y solidaridad y, en concreto, las cajas de resistencia (despensas solidarias, fondos de emergencia, etc.) se han multiplicado a raíz de la pandemia del COVID-19. Se trata de un tipo de activismo digital, unas prácticas de resistencia centradas en el apoyo colectivo y la solidaridad comunal que se han venido desarrollando especialmente en redes sociales.

En este texto se plantea una reflexión crítica sobre los conflictos y contradicciones que derivan del uso de redes centralizadas -como Instagram o Facebook- para la creación y coordinación de redes autónomas, basándonos en las siguientes preguntas: ¿qué posibilidades autónomas de resistencia se activan dentro de estas plataformas?, ¿qué consiguen estos movimientos al hacer uso de las redes sociales? Hablaremos de la fragmentación que sufre el activismo en redes sociales, y cómo las redes estudiadas superan esa centralización e individualización mediante la localidad, es decir, anteponiendo el sentimiento de pertenencia y responsabilidad mutua que diseña un acuerpamiento y una lucha desde la identidad. Esta localidad, adelantamos, necesita ser reconfigurada pues ya no se lee con relación a un espacio compartido sino a una identidad común.

Vulnerabilidad Social, Exclusión y Redes Comunitarias: Instagram como Objeto Político

La actual pandemia ha puesto en evidencia las numerosas deficiencias de nuestras no tan bien consolidadas democracias europeas. Las redes de apoyo mutuo surgían como única alternativa válida de supervivencia para los sectores de la sociedad denominados por Sousa Santos como no-existentes; personas y poblaciones que, por su procedencia[1],

1 Gorka Andraka, 'El Rescate de la Manta', *El Salto Diario*, 27 March 2020, https://www.elsaltodiario.com/coronavirus/rescate-manta.

falta de regulación laboral, identidad de género, profesión[2]—o todo lo anterior, permanecen invisibles en los márgenes y no cuentan con el reconocimiento necesario para beneficiarse de las medidas gubernamentales. Una precariedad que aumenta con la imposibilidad de trabajar durante el periodo de confinamiento (o, en algunos casos como los temporeros de Lleida, incluso trabajando).[3]

Es en este contexto el que surge la necesidad para estos colectivos de repensar sus mecanismos de supervivencia, de crear redes de solidaridad, cuidados colectivos y apoyo mutuo, frente a los paradigmas individualistas occidentales. Estas acciones se presentan como la única alternativa simbólica y material de los colectivos de no-existentes. La construcción autónoma de estos espacios-red es una forma disidente de establecer relaciones de apoyo en las que sus integrantes pasan de ser víctimas -de un sistema, unas jerarquías, una pandemia, de la imposibilidad de adquirir lo mínimo para vivir- a agentes activos, apropiándose del centro de acción y decisión. Cuando estas redes de colaboración se expanden hacia las plataformas digitales, encontramos muchos perfiles que se caracterizan por su gran conciencia identitaria en relación con las exclusiones y procesos de discriminación nombrados con anterioridad.

Desde la Teoría de Medios (STS) las plataformas se entienden como espacios de mediación, que responden a intereses empresariales y económicos -capitalización de datos, captación de la atención-, por lo que no son elementos neutros, sino que están al servicio del sistema. Es en esta mediación y la estandarización -influencia del diseño de la plataforma- donde reside la clave a la hora de entender las posibilidades de inter(acción) que ofrecen estas plataformas a los diferentes actores que la transitan.

Los discursos políticos y activistas se expanden hacia lo digital, donde se fragmentan y estandarizan por la mediación de estas plataformas, quedando reducidos a imágenes, slogans o pequeños textos a pie de foto. En un contexto dominado por la economía de la atención, se publican consignas agresivas y provocadoras, con una aparentemente alta carga política, buscando generar un mayor impacto y destacar entre la sobresaturación de información. Sin embargo, estos mensajes no pueden presentarse de manera articulada, puesto que las redes sociales no ofrecen la posibilidad de extender los discursos, no dan lugar a que se dibuje un hilo conductor de las reivindicaciones.

Transformando sus narrativas al formato Instagram, las luchas políticas quedan condicionadas por la búsqueda del impacto y la atención. De esta lógica surge la mediada visibilidad, que produce que ciertos perfiles cuenten con mayor visibilidad, mientras que otros perfiles queden aislados en sus comunidades de afines. Esta invisibilización de determinados perfiles hace de Instagram una herramienta de censura y no de amplificación. Las redes y

2 Marta Rodríguez Martínez and Lillo Montalto Monell, 'Cuando Es Imposible Teletrabajar: las Prostitutas Frente a la Crisis del Coronavirus', *Euronews*, 10 April 2020, https://es.euronews.com/2020/04/10/cuando-es-imposible-teletrabajar-las-prostitutas-frente-a-la-crisis-del-coronavirus.

3 Pol Pareja and Sònia Calvó, 'La Pandemia Tensa la Campaña de la Fruta en Lleida: Hay Más Temporeros Durmiendo en la Calle que Nunca', *El Diario*, 21 May 2020, https://www.eldiario.es/catalunya/llegada-temporeros-confinamiento-lleida-durmiendo_1_5972701.html.

plataformas de comunicación tecnológicas suponen, en este sentido, una amenaza para la emancipación de movimientos autónomos. Entonces, retomando nuestra pregunta inicial, cabe cuestionarse ¿qué posibilidades autónomas de resistencia se activan dentro de estas plataformas?.

Para indagar en las posibilidades autónomas que se movilizan dentro de estas plataformas, hemos analizado tres hashtags: #CajaResistencia, #TejidoComunitario y #SolidaridadComunitaria, desde los cuales se ha realizado un muestreo en cadena hasta identificar un total de 40 perfiles (principio de saturación discursiva). Perfiles gestionados por personas o colectivos migrantes o que practiquen un trabajo no regulado, como la venta ambulante, el trabajo sexual, recogida de fruta, etc., establecidos en el Estado Español, y que publicaron llamados a participar en cajas de resistencia durante el confinamiento por COVID-19 en España.

Activismo y Localidad

Los efectos de la estructura, los límites e intereses de las plataformas recaen sobre sus interacciones. Es desde este punto que estos colectivos tienen la necesidad de utilizar las affordances de estos medios para realizar apropiaciones concretas que les permitan la acción. Con relación a las cajas de resistencia hemos percibido cómo estos colectivos, consciente o inconscientemente, ponen el foco en la localidad y en los cuidados. Es decir, superan la fragmentación, centralización e individualización de las redes gracias a que anteponen la localidad, a que se priorizan los lazos comunitarios que hacen de nexo entre diferentes colectividades.

Desde esta perspectiva, resulta necesaria una reconfiguración del término localidad, que pasa de lo físico a lo simbólico, de lo material a lo identitario. Ya no implica necesariamente que se comparta un mismo espacio, sino más bien que se lea a la otra persona como parte del propio grupo de pertenencia. Entendiendo el grupo como las personas tienen un mismo origen, que combaten dentro de las mismas luchas (como antirracismo, disidencia de género, anticolonialismo, transfeminismo, etc.), o que comparten objetivos o prioridades comunes, líneas o espacios de debate, proyectos.

Al publicar (e interesarse por) mensajes y proclamas sobre la misma lucha, perfiles que podrían no llegarse a conectar nunca, debido a las limitaciones espaciotemporales, empiezan a interrelacionarse dentro de los espacios digitales. En la siguiente imagen vemos un ejemplo de cómo la conciencia identitaria resulta una base, un nexo de localidad que, en el caso de la ayuda mutua, tienen claras referencias a las comunidades indígenas que tanta experiencia tienen en este tipo de redes. Reclamos como “tejido comunitario desde los márgenes” o “abrazamos la solidaridad comunitaria para la vida digna” representan esa búsqueda de solidaridad, de acuerpamiento entre iguales. Se subraya la solidaridad como respuesta de contingencia para hacer frente al capitalismo.

Por otro lado, es fundamental la capacidad de las redes sociales para escalar esa localidad, para trascender las barreras locales y nacionales y construir redes de solidaridad globales.

Esto se da gracias a la atemporalidad presente en las redes sociales, entendida como el fenómeno que facilita la comunicación simultánea desde diferentes zonas geográficas (lo que Castells denominó "timeless time"), que hace de las redes un espacio compartido más allá de las limitaciones y barreras de la comunicación presencial. Partiendo de lo local (punto de partida necesario para la construcción de redes disidentes), estos espacios permiten la creación de redes translocales y transnacionales que son, en definitiva, tecnologías preservación colectiva de la vida.

Subrayar el carácter revolucionario de la generación de redes de apoyo mutuo. La mera construcción y subsistencia de estas cajas de resistencia en redes sociales supone una revolución en sí misma, puesto que demuestra que es posible la existencia desde, por y para los márgenes. En esta época lo vemos como una medida urgente, de contingencia frente a la falta de recursos. Sin embargo, la autogestión de tejidos comunitarios podría extrapolarse como solución frente a la centralización capitalista. Con respecto a proyectos de emancipación y autonomía, tenemos mucho que aprender de los paradigmas y estructuras creadas desde las diásporas, de sus tecnologías ancestrales de supervivencia. Se trata de un trabajo de descolonización para sustituir los paradigmas individualistas por proyectos locales y autónomos que busquen una emancipación colectiva, que rompan con la relación de co-dependencia generada a través de los años con los estados y el capital.

References

Andraka, Gorka. 'El Rescate de la Manta', *El Salto Diario*, 27 March 2020, https://www.elsaltodiario.com/coronavirus/rescate-manta.

Pareja, Pol and Sònia Calvó. 'La Pandemia Tensa la Campaña de la Fruta en Lleida: Hay Más Temporeros Durmiendo en la Calle que Nunca', *El Diario*, 21 May 2020, https://www.eldiario.es/catalunya/llegada-temporeros-confinamiento-lleida-durmiendo_1_5972701.html.

Rodríguez Martínez, Marta and Lillo Montalto Monell. 'Cuando Es Imposible Teletrabajar: las Prostitutas Frente a la Crisis del Coronavirus', *Euronews*, 10 April 2020, https://es.euronews.com/2020/04/10/cuando-es-imposible-teletrabajar-las-prostitutas-frente-a-la-crisis-del-coronavirus.

41. CITIZEN SENSING AND ONTOPOLITICS IN THE ANTHROPOCENE: ENGAGING WITH COVID-19 AND CLIMATE CHANGE

MARIE-CATHERINE PETERSMANN[1] & ANNA BERTI SUMAN

Over the past weeks, a plethora of articles explored the relations[2] between the COVID-19 crisis and the climate catastrophe by framing the former as an opportunity to learn lessons for tackling the latter.[3] Among the articles was an essay by Bruno Latour, inviting us to address the current pandemic as a "dress rehearsal" that incites us to prepare for climate change.[4] Elsewhere, Latour argued that the pandemic had "actually proven that it is possible, in a few weeks, to put an economic system on hold everywhere in the world and at the same time, a system that we were told it was impossible to slow down or redirect."[5] Yet, despite the fact that both events constitute globally shared "collective" experiences, immediate societal responses to them vary greatly. While both events have their causes and effects entwined, their different spatio-temporal scales and socio-ecological implications make socio-political responses to them difficult to compare. Of course, this is not to say that links between the two events do not exist. The outbreak of the zoonotic[6] COVID-19 is entangled with multiple[7] and often interacting "threats to ecosystems and wildlife, including habitat loss, illegal trade, pollution, invasive species and, increasingly, climate change."[8]

1 This publication has benefited from the financial support of the Swiss National Science Foundation (SNF) through the author's Early Postdoc Mobility Fellowship (grant P2SKP1_187639).

2 'COVID-19 and the Environment', *Geneva Environment Network*, 19 October 2020, https://www.genevaenvironmentnetwork.org/covid19.html.

3 Dina Townsend, 'What to Read: COVID-19, Human Rights and the Environment', *GNHRE*, 30 March 2020, https://gnhre.org/2020/03/30/what-to-read-covid-19-human-rights-and-the-environment/.

4 Bruno Latour, 'Is This a Dress Rehearsal?', *Critical Inquiry*, 26 March 2020, https://critinq.wordpress.com/2020/03/26/is-this-a-dress-rehearsal/.

5 Bruno Latour, 'What Protective Measures Can You Think of So We Don't Go Back to the Pre-crisis Production Model?', 29 March 2020, www.bruno-latour.fr/sites/default/files/downloads/P-202-AOC-ENGLISH_1.pdf.

6 Olivier Restif, 'Coronavirus: Three Misconceptions About How Animals Transmit Diseases Debunked', *The Conversation*, 16 April 2020, https://theconversation.com/coronavirus-three-misconceptions-about-how-animals-transmit-diseases-debunked-134485.

7 John Vidal, ''Tip of the iceberg': Is Our Destruction of Nature Responsible for Covid-19?', *The Guardian*, 18 March 2020, https://www.theguardian.com/environment/2020/mar/18/tip-of-the-iceberg-is-our-destruction-of-nature-responsible-for-covid-19-aoe.

8 'Coronavirus Outbreak Highlights Need to Address Threats to Ecosystems and Wildlife', *UN Environment*, 3 March 2020, https://www.unenvironment.org/news-and-stories/story/coronavirus-outbreak-highlights-need-address-threats-ecosystems-and-wildlife.

Impacts

On a positive note, we observed a widely shared enthusiasm among the climate scientific community when the measurements[9] of the European Copernicus agency registered an unusual drop in nitrogen dioxide levels in February 2020, as analysed by NASA's ground observation team. COVID-19 is indeed set to have caused the "largest ever annual fall in CO_2 emissions",[10] more than during any previous economic crisis or period of war. Studies[11] also showed, inversely, that low levels of air pollution may be a way to prevent COVID-19 deaths.[12] Finally, the plunging demand for oil brought by the COVID-19 was said to have permanently altered the course of the climate catastrophe.[13] As a result, after 2019 being coined "the year of climate consciousness"[14] with a "growing momentum"[15] for climate activism, the current drop of atmospheric pollution was welcomed by many.

Caution[16] was, however, voiced by those who pleaded for more nuance[17], and requested we refrain from granting agency to the virus itself, pointing instead to the temporary retreat from capitalism's "industrial production and its handmaidens" to explain the current low emissions.[18] Although praised by many as a "catalyst for transformation"[19] that brings about

9 Rafael Cereceda, 'NASA Confirms a Fall in Greenhouse Gas Emissions in China Amid Coronavirus Outbreak', *Euronews,* 4 March 2020, https://www.euronews.com/2020/03/04/nasa-confirms-a-fall-in-greenhouse-gas-emissions-in-china-amid-coronavirus-outbreak.

10 Simon Evans, 'Analysis: Coronavirus Set to Cause Largest Ever Annual Fall in CO2 Emissions', *CarbonBrief*, 9 April 2020, https://www.carbonbrief.org/analysis-coronavirus-set-to-cause-largest-ever-annual-fall-in-co2-emissions.

11 Damian Carrington, 'Coronavirus Detected on Particles of Air Pollution', *The Guardian*, 24 April 2020, https://www.theguardian.com/environment/2020/apr/24/coronavirus-detected-particles-air-pollution?CMP=share_btn_fb&fbclid=IwAR2Yp-U4H1unF8MwYoveoEF-aoFprvvvn37ES1XfHHgXTkpqOsWIKQamd3I.

12 Damian Carrington, 'Air Pollution May Be 'Key Contributor' to Covid-19 Deaths – Study', *The Guardian*, 20 April 2020, https://www.theguardian.com/environment/2020/apr/20/air-pollution-may-be-key-contributor-to-covid-19-deaths-study.

13 Damian Carrington, Jillian Ambrose and Matthew Taylor, 'Will the Coronavirus Kill the Oil Industry and Help Save the Climate?', *The Guardian*, 1 April 2020, https://www.theguardian.com/environment/2020/apr/01/the-fossil-fuel-industry-is-broken-will-a-cleaner-climate-be-the-result?fbclid=IwAR2iCvJa2oQIdII-88VEqvSBCQEa073rxknT8DF6qM_a8SsAN9VkIFg6toQ.

14 Anne-Sophie Brändlin, '2019: The Year of Climate Consciousness', *Deutsche Welle*, 27 December 2019, https://www.dw.com/en/2019-the-year-of-climate-consciousness-wildfires-fridays-for-future-climate-emergency-a-51719968/a-51719968.

15 Fiona Harvey, ''Momentum is Growing': Reasons to Be Hopeful About the Environment in 2019', *The Guardian*, 2 January 2019, https://www.theguardian.com/environment/2019/jan/02/climate-change-environment-2019-future-reasons-hope.

16 Phil Hammond, 'Nature Is Not Sending Us a Message', *Areo Magazine*, 2 April 2020, https://areomagazine.com/2020/04/02/nature-is-not-sending-us-a-message/.

17 François Gemenne, 'Habiter la Terre au Temps des Pandémies', *AOC*, 10 April 2020, https://aoc.media/opinion/2020/04/09/habiter-la-terre-au-temps-des-pandemies/.

18 Joshua Clover, 'The Rise and Fall of Biopolitics: A Response to Bruno Latour', *Critical Inquiry*, 29 March 2020, https://critinq.wordpress.com/2020/03/29/the-rise-and-fall-of-biopolitics-a-response-to-bruno-latour/.

19 Daniel Christian Wahl, 'Phase Shift has arrived! The Pandemic as a catalyst for transformation', *Medium*, 11 March 2020, https://medium.com/age-of-awareness/phase-shift-has-arrived-who-declares-

"an unprecedented opportunity to rethink how our beliefs, values, and institutions shape our relationships"[20], on the long run, the economic crisis triggered by COVID-19 may well lead to a suspension of adopted and prospective climate measures.[21] Circular economists and de-growth advocates also pointed to the short-term risks that the pandemic may have triggered by increasing the use of private transportation means and the consumption of single-use plastic products.[22] This has led cities such as Amsterdam to pro-actively consider the "doughnut" model to mend the post-COVID-19 economy[23], bearing in mind that "calls for solidarity with the weak and disadvantaged must be part and parcel of [such] shifts."[24]

Even in a world that has come to a halt, we still fall short of the emission targets needed to keep global warming from surpassing 1.5 degrees Celsius above pre-industrial levels. Our failure shows the structural and systemic[25] deficiencies we need to deal with and signals "how much further there is to go."[26]

Towards Sensing Engagement

Whether or not the COVID-19 crisis will be beneficial for tackling climate change in the long run (beyond the immediate drop in atmospheric pollution) remains a question open to debate.[27] The outcome will depend on the political will of states, corporations, and citizens. Our purpose here is not to add one more proposal to the existing menu of policy goals for the post-COVID-19 time to come. Neither do we wish to celebrate the environmental impact of the corona crisis, which feels inappropriate at a time when so many are suffering from the disease and its related harms; dead relatives could not be buried[28], bodies have decomposed

pandemic-83da330fdc5d.

20 David Korten, 'From Emergency to Emergence', *CommonDreams,* 27 April 2020, https://www.commondreams.org/views/2020/04/27/emergency-emergence.

21 François Gemenne, 'Pourquoi la Crise du Coronavirus Est une Bombe à Retardement Pour le Climat', *Le Soir*, 28 March 2020, https://plus.lesoir.be/290554/article/2020-03-28/pourquoi-la-crise-du-coronavirus-est-une-bombe-retardement-pour-le-climat.

22 Julia Steinberger, 'Pandenomics: A Story of Life Versus Growth', *openDemocracy,* 8 April 2020, https://www.openDemocracy.net/en/oureconomy/pandenomics-story-life-versus-growth/.

23 Daniel Boffey, 'Amsterdam to Embrace "Doughnut" Model to Mend Post-Coronavirus Economy', *The Guardian*, 8 April 2020, https://www.theguardian.com/world/2020/apr/08/amsterdam-doughnut-model-mend-post-coronavirus-economy?fbclid=IwAR2WmtAHrGDTJGRn4mm2rMdty1TsnxjckQ3JMGT-9smbtCyQs2VzapmoKLI.

24 Ortwin Renn, 'Lessons from the Corona Crisis for Sustainable Crisis Management', *IASS Potsdam*, 21 April 2020, https://www.iass-potsdam.de/en/blog/2020/04/lessons-corona-crisis-sustainable-crisis-management.

25 Eliana Cusato, 'Beyond War Talk: Laying Bare the Structural Violence of the Pandemic', *EJIL: Talk!*, 3 May 2020, https://www.ejiltalk.org/beyond-war-talk-laying-bare-the-structural-violence-of-the-pandemic/?fbclid=IwAR1Aqjx2-zJDcmK9jTzM8jh_O7pmqA5fMLkf7tuU9Hdg_4UNlDfrVjt2Hs8.

26 Shannon Osaka, 'The World Is on Lockdown. So Where Are All the Carbon Emissions Coming From?', *Grist,* 27 April 2020, https://grist.org/climate/the-world-is-on-lockdown-so-where-are-all-the-carbon-emissions-coming-from/.

27 Hervé Gardette, 'Ceci n'est (malheureusement) pas une Répétition Générale', *France Culture*, 1 April 2020, https://www.franceculture.fr/emissions/radiographies-du-coronavirus/ceci-nest-malheureusement-pas-une-repetition-generale.

28 Angela Giuffrida and Lorenzo Tondo, ''A Generation Has Died': Italian Province Struggles to Bury its

in trucks for overflow storage in funeral homes[29], unprecedented unemployment rates exist[30], and queues[31] before food banks and unaffordable medical bills are soaring.[32]

Instead, our objective is to explore how the turn to sensing—as a distinctive mode of engagement with socio-ecological issues—can productively re-imagine and address ongoing events such as the COVID-19 and climate change. In line with Fleur Johns, "[s]ensing, in this context, refers to the work of eliciting, receiving, and processing impressions and information, both in the mode of intuitions or feelings, and in terms of data." Sensing, then "includes all bodily faculties of perception, but is not restricted to corporeal sensation, individual or collective." Sensing, as such, "is never just about the body, as distinct from the mind".[33]

In the next section, we start by theoretically defining and elaborating on the potential of sensing as a way to cope with events like the current pandemic and climate change, which demand a different configuration of existence. We see the turn to sensing as a response to Donna Haraway's invitation to "stay with the trouble" of living and dying together on a damaged earth.[34] We perceive her suggestion as more conducive to a thinking that would provide a means to build more liveable futures. We then turn to specific examples of "citizen sensing" initiatives and conclude by questioning how the insights drawn from such "sensing practices" can fruitfully cope with the risks associated with the pandemic and climate change.[35]

Sensing the Unknown

Both COVID-19 and climate change are examples of "hyperobjects"—a term coined by philosopher Timothy Morton to refer to entities that are so massively distributed in space and time that they defy not only our understanding, but also our control.[36] COVID-19 cannot be seen, yet its latent presence is felt everywhere. In the pandemic, COVID-19 cannot

Coronavirus Dead', *The Guardian*, 19 March 2020, https://www.theguardian.com/world/2020/mar/19/generation-has-died-italian-province-struggles-bury-coronavirus-dead.

29 Alan Feuer, Ashley Southall and Michael Gold, 'Dozens of Decomposing Bodies Found in Trucks at Brooklyn Funeral Home', *The New York Times*, 29 April 2020, https://www.nytimes.com/2020/04/29/nyregion/bodies-brooklyn-funeral-home-coronavirus.html?smid=fb-nytimes&smtyp=cur&fbclid=IwAR2i78-u5xFYYF_Pj4ExA4xS10oU8JX3HNdLd3DhIJDGQykeJvKVRBdrK3k.

30 Justin Wolfers, 'The Unemployment Rate Is Probably Around 13 Percent', *The New York Times*, 3 April 2020, https://www.nytimes.com/2020/04/03/upshot/coronavirus-jobless-rate-great-depression.html.

31 Nicholas Kulish, ''Never Seen Anything Like It': Cars Line Up for Miles at Food Banks', *The New York Times*, 8 April 2020, https://www.nytimes.com/2020/04/08/business/economy/coronavirus-food-banks.html.

32 Adam Gaffney, 'America's Extreme Neoliberal Healthcare System Is Putting the Country at Risk', *The Guardian*, 21 March 2020, https://www.theguardian.com/commentisfree/2020/mar/21/medicare-for-all-coronavirus-covid-19-single-payer.

33 Johns, Fleur, 'Data, Detection, and the Redistribution of the Sensible in International Law', *American Journal of International Law* 111(1).

34 Donna Haraway, *Staying with the trouble*, Durham: Duke University Press, 2016.

35 Jennifer Gabrys and Helen Pritchard, Sensing Practices, in Rosi Braidotti and Maria Hlavajova (eds) *Posthuman Glossary* , NewYork: Bloomsbury, 2018, pp. 394-395.

36 Timothy Morton, *Hyperobjects*, Minneapolis: University of Minnesota Press, 2013.

be contained nor controlled, only its effects can be *mitigated* through specific guidelines[37] and physical distancing[38], a survival tool revealing inequalities spanning class[39], gender[40], race[41] and mental health.[42] Similarly, climate change affects us all unequally[43], despite it being "almost impossible for changes in climate to be perceived through individual experience".[44] Both COVID-19 and climate change share the characteristics that Morton ascribes to hyperobjects.[45] They are "viscous" (they "stick" to us), "nonlocal" (their overall effects are globally distributed across space and time), "phased" (we can only experience local manifestations of them at any one time and place), and "inter-objective" (they are intertwined with other objects to which they cannot be reduced). Their reality and existence challenge human perception and imagination. Hyperobjects remain, in other words, elusive and invisible, although their reality is unquestionable. Even as they defy immediate and unmediated human experience, we can sense their omnipresence.

Against this backdrop, speculative approaches dispense with necessary phenomenological correlations between knowledge and first-person experience, and recognize the limits of human thought and imagination to relate to things that humans do not perceive directly.[46] They instead invite us to empathically relate to such events and sense their effects, even without unmediated access to them. While the realm of experience[47] is limited to actual observations and the process of learning by practical trial or proof, the definition of "sensing"[48] alludes to the faculty of perception and feeling. As such, it refers both to the detection of certain parameters and the emotions associated with what is revealed. Seen through this prism, sensing aspires to emotionally relate to the distress caused by certain events, whether the harm directly or only indirectly impacts us as human beings. In other words, sensing is an invitation to engage creatively, imaginatively, and speculatively with events beyond immedi-

37 John Kennedy, 'Some Coronavirus Guidelines', *New Yorker*, 23 March 2020, https://www.newyorker.com/magazine/2020/03/30/some-coronavirus-guidelines.

38 Saba Aziz, 'Why 'Physical Distancing' Is Better Than 'Social Distancing'', *Al Jazeera*, 30 March 2020, https://www.aljazeera.com/news/2020/03/physical-distancing-social-distancing-200330143325112.html.

39 Colin Gordon, 'Corona: The Inequality Virus', *Jacobin Magazin*, 27 March 2020, https://tinyurl.com/y6esw3yk.

40 Helen Lewis, 'The Coronavirus Is a Disaster for Feminism', *The Atlantic*, 19 March 2020, https://www.theatlantic.com/international/archive/2020/03/feminism-womens-rights-coronavirus-covid19/608302/.

41 Keeanga-Yamahtta Taylor, 'The Black Plague', *New Yorker*, 16 April 2020, https://www.newyorker.com/news/our-columnists/the-black-plague.

42 Nicola Davis, ''Urgent Studies Needed' Into Mental Health Impact of Coronavirus', *The Guardian*, 15 April 2020, https://www.theguardian.com/world/2020/apr/15/urgent-studies-needed-mental-health-coronavirus-lockdown.

43 United Nations Development Programme, 'Climate Change and Inequalities in the Anthropocene', in *Human Development Report 2019*, New York: UNDP, pp. 173-196, hdr.undp.org/sites/default/files/hdr2019_chapter5.pdf.

44 Andrew Bauer and Mona Bhan, *Climate without Nature*, Cambridge, UK: Cambridge University Press, 2018.

45 Timothy Morton, 'Introducing the idea of 'hyperobjects'', *High Country News*, 19 January 2015, https://www.hcn.org/issues/47.1/introducing-the-idea-of-hyperobjects.

46 Graham Harman, *Speculative Realism: An Introduction*, New York: Wiley, 2018.

47 'Experience', Online Etymology Dictionary, https://www.etymonline.com/word/experience.

48 'Sense', Online Etymology Dictionary, https://www.etymonline.com/word/sense#etymonline_v_44064.

ate human representation and experience. As Morton puts it, the mere fact of thinking their existence or sensing their effects requires us to care about such hyperobjects.[49]

Governance

From a governance perspective, a number of studies have showed how a turn to sensing can be productive to re-envisage political perspectives and legal approaches to reconsider the more-than-human worlds we inhabit. As elaborated by David Chandler, sensing as a form of governance is based on correlation rather than causation, and depends on the disposition to "see things in their process of emergence or in real time".[50] Sensing through new technologies can play a decisive role in environmental politics, by inspiring awareness and mobilizing publics. These forms of "material participation" can facilitate the capacity to detect the effects of relational interactions and cast them as either problems or possibilities.[51] As such, biosensory techniques can make imperceptible harms perceptible, knowable and measurable. They can even permit "a growing awareness of planetary life".[52]

The effects of interactions between entities are rendered perceptible through forms of correlational sight, thereby enabling "new forms of (datafied) relational awareness".[53] At a local level, the use of sensory technologies by individuals and communities allows for grassroots, bottom-up, and auto-empowering engagement with threats. Such engagements empower citizens by shifting the infrastructures, technologies, and practices of monitoring to less institutionalised arrangements.[54] From this perspective, "sensing citizens" are seen as part of "material-political arrangements and struggles over who generates, legitimizes, and has authority over data and how data is mobilized to make claims for environmental and other rights".[55] With the burgeoning trend towards a "digitalization of mainstream environmental and climate governance",[56] technology plays a key role in the constitution of socio-ecological assemblages, and promotes a novel ontology that changes the very nature of liberal governance.[57]

---

49 Timothy Morton, 'Introducing the idea of 'hyperobjects''.

50 David Chandler, *Ontopolitics in the Anthropocene. An Introduction to Mapping, Sensing and Hacking*, Abingdon: Routledge, 2018.

51 Noortje Marres, *Material Participation. Technology, the Environment and Everyday Publics,* London: Palgrave Macmillan, 2015.

52 Elizabeth Johnson, 'At the Limits of Species Being: Sensing the Anthropocene', *South Atlantic Quarterly* 116 (2): 275–292.

53 David Chandler, 'Ontopolitics in the Anthropocene. An Introduction to Mapping, Sensing and Hacking'.

54 Jennifer Gabrys, 'Citizen Sensing, Air Pollution and Fracking: From 'Caring About Your Air' to Speculative Practices of Evidencing Harm', *The Sociological Review* 65 (2_suppl, 2017): 172-192.

55 Evelyn Ruppert, Ervin Isin and Didier Bigo, 'Data politics', *Big Data & Society* December 2017. doi:10.1177/2053951717717749.

56 Giovanni Bettini, Giovanna Gioli and Romain Felli, 'Clouded Skies: How Digital Technologies Could Reshape "Loss and Damage" From Climate Change', *WIREs Climate Change* 11(4, 2020): e650, https://doi.org/10.1002/wcc.650.

57 Davide Beraldo and Stefania Milan, 'From Data Politics to the Contentious Politics of Data', *Big Data & Society* July 2019, doi:10.1177/2053951719885967.

Citizens using sensing technologies are thereby recast as a "geo-socially networked community of sensors".[58] As such, they are able to "make visible politically masked risks"[59] and reclaim their agency by shaping responses to the socio-ecological issues at stake. In the next section, we will explore how forms of "citizen sensing" can facilitate individuals and communities who are sensitive to the material, interdependent world they are part of, and act as proactive agents in their own governance.

Citizen Sensing: From Sensing Radiations to COVID-19

In the immediate aftermath of the disastrous earthquake and tsunami that struck eastern Japan on March 11, 2011 and the subsequent meltdown of the Fukushima Daiichi Nuclear Power Plant, accurate and trustworthy radiation information was publicly unavailable.

Against this backdrop, a volunteer-driven non-profit organization called Safecast was formed to enable individuals "to monitor, collect and openly share radiation measurements"[60] and other data on radiation levels. The initiative "mobilized individuals and collectives"[61] in response to risks that were perceived as extremely urgent to monitor, namely the post-Fukushima radiation levels. Safecast can thus be regarded as a shock-driven initiative that constitutes a "successful [example of] citizen [sensing] for radiation measurement and communication after Fukushima."[62] As the Safecast initiative grew in size, scope, and geographical reach, their mission soon expanded to provide citizens worldwide with the tools to inform themselves by gathering and sharing accurate environmental data in an open and participatory fashion. Through a form of auto-empowerment, Safecast participants were able to monitor their own homes and environments, thereby "free[ing] themselves of dependence on government and other institutions for this kind of essential information." As described on Safecast's website, this process gave rise to "technically competent citizen science efforts worldwide."

Responsiveness

Following the outbreak of COVID-19, the Safecast collective rapidly responded to the virus by setting up an information platform on the evolution of the crisis and a map of COVID-19 test-

58 David Chandler, 'Ontopolitics in the Anthropocene. An Introduction to Mapping, Sensing and Hacking', p. 158.

59 Anna Berti Suman, 'Making Visible Politically Masked Risks: Inspecting Unconventional Data Visualization of the Southeast Asian Haze', in Martin Engebretsen and Helen Kennedy, *Data Visualization in Society*, Amsterdam: Amsterdam University Press, 2020, pp. 425-40.

60 Joke Kenens, Michel Van Oudheusden, Go Yoshizawa and Ine Vvan Hoyweghen, 'Science by, With and for Citizens: Rethinking "Citizen Science" After the 2011 Fukushima disaster', *Palgrave Communications* 6, 58 (2020, https://doi.org/10.1057/s41599-020-0434-3.

61 Anna Berti Suman, 'Citizen Sensing for a Co-Governance of the Risk: the Fukushima Safecast case', *LabGov*, 22 September 2017, https://labgov.city/theurbanmedialab/citizen-sensing-for-a-co-governance-of-the-risk-the-fukushima-safecast-case/.

62 Azby Brown, Pieter Franken, Sean Bonner, Nick Dolezal and Joe Moross, 'Safecast: Successful Citizen-Science for Radiation Measurement and Communication After Fukushima', *Journal of Radiological Protection* 36 (2016) S82–S101, doi:10.1088/0952-4746/36/2/S82.

ing[63] that provides a picture of where to obtain testing options. Over the years, Safecast had accumulated much experience and insights on "trust, crisis communication, public perception, and what happens when people feel threatened by a lack of reliable information."[64] Yet, the Safecast collective still struggles to be heard and "many scientists ignore their data."[65] Despite this scarce official recognition, Safecast took advantage of its experience and societal impact to rapidly respond to the current pandemic.

As observed by Safecast volunteers, "[w]e find ourselves again trying to better understand what is happening." In a webinar on "Lessons we are learning from the COVID-19 pandemic for radiological risk communication", Azby Brown—a volunteer at Safecast and director of the Kanazawa Institute of Technology's Future Design Institute in Tokyo—drew several links between the nature of ionising radiations and COVID-19. By alluding to the invisible presence and constant risks posed by such hyperobjects, the invitation to the webinar started by stating that "[y]ou can't see, smell, or taste it, but it may be a problem," which applies equally to radiations as well as viruses. Elsewhere, Brown observed that:

> Fear of the unknown is normal, and radiation and viruses are both invisible threats that heighten anxiety. Most people have almost no way to determine for themselves whether they have come into contact with either of these threats, and they find themselves dependent on specialists, testing devices, and government and media reports. If the government and media do not provide clear, credible explanations and prompt communications, misinformation and mistrust can easily take root and spread.[66]

For Brown, Safecast's risk communication perspective was relevant in the current COVID-19 context because the collective gained experience after the Fukushima disaster. Despite major differences between ionising radiations and COVID-19, similarities in risks communications are worth exploring.

Analogous governmental failures on risk communication were observed regarding shortcomings in rapidly conveying clear messages to the public and communicating strategies based on non-conflicting expert and policy opinions. The ambiguous and incomplete information received from the authorities generated a sense of uncertainty and distrust for many citizens dependent on single sources of official information. Against this backdrop, initiatives such as Safecast that enabled people to control and monitor the presence and degrees of certain risks provided an alternative source of credible crowdsourced information. Beyond the immediate informational benefit for sensing citizens, such tools could further enable holding governments and officials to account.

---

63 Safecast, COVID-19 Testing Map, https://covid19map.safecast.org/views/map.

64 Azby Brown and Sean Bonner, 'What the Fukushima Meltdowns Taught Us About How to Respond to Coronavirus', *Bulletin of the Atomic Scientists*, 13 March 2020, https://thebulletin.org/2020/03/what-the-fukushima-meltdowns-taught-us-about-how-to-respond-to-coronavirus/.

65 Michiel Van Oudheusden, 'Residents Rallied to Measure Radiation After Fukushima. Nine Years Later, Many Scientists Still Ignore Their Data', 10 March 2020, https://www.discovermagazine.com/environment/residents-rallied-to-measure-radiation-after-fukushima-9-years-later-many.

66 Azby Brown and Sean Bonner, 'What the Fukushima Meltdowns Taught Us About How to Respond to Coronavirus'.

A Global Phenomenon

At the time of writing, citizen sensing initiatives tackling COVID-19 are multiplying around the world, as listed by the Australian Citizen Science Association[67], and COVID-19 Italia Help.[68] Such citizen sensing practices "constitute ways of expressing care about environments, communities and individual and public health".[69] As argued by Gabrys, these practices "are not just ways of documenting the presence of [threats]," they are also "techniques for tuning sensation and feeling environments through different experiential registers". Granular monitoring by sensing citizens is particularly valuable in times of emergencies, when governments are faced with urgent, massive and systemic risks of spatial and temporal scales that defy immediate control—such as the current pandemic.

Civic "sentries"[70] can offer relief to affected people through solidarity networks and provide resources to policy-makers and scientists through wider access to grassroots-driven and information. Citizen sensing initiatives also enable lay people, turned into "sensing citizens," to retain a greater degree of agency over the production and use of the data assembled. Against the ever-increasing rise of "bio-surveillance states"[71] and the development of "symptoms-tracking"[72] and "contact-tracing"[73] apps, "bottom-up innovations"[74] might help counter the acceleration of digital surveillance[75] that may be hard to scale back[76] after the pandemic.

Open-access data on citizens' sensing may be considered more transparent and trustworthy by the public, and convey important information on widely shared, lived experiences. By making data about real but invisible threats available through the intermediary of sensing citizens, access to information and agency in knowledge production is redistributed. Finally, the increased "(datafied) relational awareness" and "forms of correlational

67 'Citizen Science and COVID-19', *Australian Citizen Science Association*, 20 April 2020, https://citizenscience.org.au/2020/04/20/citizen-science-and-covid-19/

68 COVID19 Italia, https://covid19italia.help/.

69 Jennifer Gabrys, 'Citizen Sensing, Air Pollution and Fracking: From "Caring About Your Air" to Speculative Practices of Evidencing Harm'.

70 Laura Biffi, 'L'Ambiente Difeso dai Cittadini, Sentinelle del Territorio', *Nuova Ecologia*, 24 January 2018, https://www.lanuovaecologia.it/lambiente-difeso-dai-cittadini-sentinelle-del-territorio/.

71 Jeremy Cliffe, 'The Rise of the Bio-Surveillance State', *New Statesman*, 25 March 2020, https://www.newstatesman.com/science-tech/2020/03/rise-bio-surveillance-state?fbclid=IwAR3XGAuzSpLb6bZP5xb-ThQs-WN7V8ZfuLH4xlnbSdvhee-uqv5rdCsCOTk.

72 COVID Sympton Study, https://covid.joinzoe.com/.

73 Jaap-Henk Hoepman, 'Google Apple Contact Tracing (GACT): a Wolf in Sheep's Clothes', *Xot Blog*, 19 April 2020, https://blog.xot.nl/2020/04/19/google-apple-contact-tracing-gact-a-wolf-in-sheeps-clothes/.

74 Cornelia Dinca, 'Top-down & Bottom-up Innovation in an era of COVID-19', *Amsterdam Smart City*, 1 April 2020, https://amsterdamsmartcity.com/posts/top-down--bottom-up-innovation-in-an-era-of-covid.

75 'Coronavirus Apps: the Risk of Slipping Into a Surveillance State', *Financial Times*, 27 April 2020, https://www.ft.com/content/d2609e26-8875-11ea-a01c-a28a3e3fbd33.

76 Andrew Roth, Stephanie Kirchgaessner, Daniel Boffey, Oliver Holmes, Helen Davidson, 'Growth in Surveillance May Be Hard to Scale Back After Pandemic, Experts Say', *The Guardian*, 14 April 2020, https://www.theguardian.com/world/2020/apr/14/growth-in-surveillance-may-be-hard-to-scale-back-after-coronavirus-pandemic-experts-say.

sight" that are produced can create new appreciations of the connections between human and non-human coexisting lifeforms.[77]

Concluding Thoughts

As hyperobjects, both COVID-19 and climate change defy not only our understanding but also our control.[78] Their causes and effects are so massively dispersed across space and time that they evade unmediated appearance. The impacts of hyperobjects operate through forms of 'slow violence"[79], which are "often attritional, disguised, and temporally latent, making the articulation of slow violence a representational challenge".[80] Only partial, local and deferred manifestations can be captured through experience. Our way of relating and responding to such hyperobjects depends on temporal, spatial and emotional predicaments. The more temporally-immediate, spatially-proximate and emotionally-tangible hyperobjects are, the greater and quicker our responses tend to be. Temporal, spatial, and emotional scales are central to our ability to sense the presence of invisible threats such as viruses and changes in the climate.

While socio-ecological threats posed by climate change have been present for decades, responses remained relatively marginal in light of the risks at stake. Conversely, while the health threats posed by the COVID-19 are relatively shorter-term, these risks triggered immediate and radical responses. The fact that the COVID-19 is sensed as a direct risk to individuals or vulnerable relatives prompts instant reactions. The sensed temporal and spatial proximity of the invisible threat brings us to important questions.

The current pandemic brought to light what climate activists deplored for so long, namely that we tend to care more for risks posed to our individual than collective conditions. A sense of emotional distance is generated by spatial and temporal gaps. This self-centred sentiment is reinforced by an anthropocentric appraisal that limits our ethics of care[81] to the sole concern for the human species, instead of striving to "support the flourishing of other animals and natural things"[82] with which we are intrinsically entangled. While pessimistic projections[83] on climate change have often been framed as triggering a sense of denial, paralysis or aporia, the current pandemic shows how emotions such as fear, anxiety, and dread[84] can also lead to mobilization, collective concern, and action.

77 David Chandler, 'Ontopolitics in the Anthropocene. An Introduction to Mapping, Sensing and Hacking'.
78 Ed Yong, 'Why the Coronavirus Is So Confusing', *The Atlantic*, 29 April 2020, https://www.theatlantic.com/health/archive/2020/04/pandemic-confusing-uncertainty/610819/.
79 Rob Nixon, *Slow Violence and the Environmentalism of the Poor*, Cambridge: Harvard University Press, 2013.
80 Thom Davies, 'Slow Violence and Toxic Geographies: 'Out of sight' to whom?', *Environment and Planning C: Politics and Space* April 2019, doi:10.1177/2399654419841063: 2.
81 María Puig de la Bellacasa, *Matters of Care*, Minneapolis: University of Minnesota Press, 2017.
82 Beth Lord, 'We Are Nature', *AEON*, 28 April 2020, https://aeon.co/essays/even-the-anthropocene-is-nature-at-work-transforming-itself.
83 Fiacga Heneghan, 'Is There a Limit to Optimism When it Comes to Climate Change?', *AEON*, 13 April 2020, https://aeon.co/ideas/is-there-a-limit-to-optimism-when-it-comes-to-climate-change.
84 Jennifer Ladino, 'Who's Afraid of the Climate Crisis? Fear, Anxiety, Dread, and Pandemic Panic', *Edge*

Emotions are, ultimately, about social movement; the root of the word "emotion" is the Latin *emovere*, which implies both movement and agitation.[85] Despite the risks of strategic exploitation of fear or despair by political actors instrumentalizing a "state of exception",[86] such emotions can unleash an enhanced sense of solidarity and cohesion through increased awareness of our fragile state of coexistence and new forms of collective attachment.[87] This is true at the human level and at a "more-than-human" level, by inviting people to be alert and attentive to humans' impact on and interdependence with the natural world we are part of. Such sensibilities can even give rise to a sense of cross-species shared vulnerability, where hope and grief[88] enable us to re-envision different forms of "collaborative survival".[89]

In this chapter, we modestly explored how citizen sensing initiatives can help bridge the temporal, spatial, and emotional distance between human (re)actions. They can present yet-invisible threats through self-production of independent knowledge and agency. As Gabrys reminds us:

> These practices are not just ways to rework the data and evidence that might be brought to bear on environmental problems. They are also ways of creating sensing entities, relations, and politics, which come together through particular ways of making sense of environmental problems.[90]

We argue that, by recasting the actants and subjectivities involved, the technological and data-based sensors used by "sensing citizens" have a world-making effect by facilitating awareness and intelligibility of certain threats. Physical isolation being implemented globally doesn't mean that we need to feel isolated and powerless. Daily citizen science involves re-imagining scales and the potential of working together to provide a sense of connection and purpose.[91] In reconfiguring the "distribution of the sensible"[92]—a "system of self-evident facts of sense perception that simultaneously discloses the existence of something in common and the delimitations that define the respective parts and positions

Effects, 21 April 2020, https://edgeeffects.net/whos-afraid-of-the-climate-crisis-fear-anxiety-dread-and-pandemic-panic/.

85 'Emotion', Online Etymology Dictionary, https://www.etymonline.com/word/emotion.

86 Joseph Owen, 'States of Emergency, Metaphors of Virus, and COVID-19', *Verso,* 31 March 2020, https://www.versobooks.com/blogs/4636-states-of-emergency-metaphors-of-virus-and-covid-19.

87 Sean Illing, 'This Is a Time for Solidarity', *Vox*, 15 March 2020, https://www.vox.com/2020/3/13/21172237/coronavirus-covid-19-albert-camus-the-plague.

88 Lesley Head, *Hope and Grief in the Anthropocene*, Abingdon: Routledge, 2016.

89 Anna Lowenhaupt Tsing, *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*, Princeton: Princeton University Press, 2015.

90 Jennifer Gabrys, 'Citizen Sensing, Air Pollution and Fracking: From "Caring About Your Air" to Speculative Practices of Evidencing Harm'.

91 Australian Citizen Science Association, 'Citizen Science and COVID-19', https://citizenscience.org.au/2020/04/20/citizen-science-and-covid-19/.

92 Allan Parsons, 'Distribution of the sensible', *Compendium*, 5 October 2017, https://compendium.kosawese.net/term/distribution-of-the-sensible/.

within it"[93]—new avenues are opened up for citizens to foresee, understand, visualize threats, and (ac)count for the damages caused.[94]

Beyond the realm of immediate perception and reactions, decentralized, grassroots-driven, and cooperative sensing technologies may also redistribute agency to challenge more official monitoring infrastructures, and galvanize appropriate political responses. Politics, ultimately, "revolves around what is seen and what can be said about it, around who has the ability to see and the talent to speak, around the properties of spaces and the possibilities of time".[95] These configurations of the sensible, we argue, map an important terrain for rethinking the politics of hyperobjects such as COVID-19 and climate change.

References

'Citizen Science and COVID-19', Australian Citizen Science Association, 20 April 2020, https://citizenscience.org.au/2020/04/20/citizen-science-and-covid-19/.

'Coronavirus Apps: the Risk of Slipping Into a Surveillance State', Financial Times, 27 April 2020, https://www.ft.com/content/d2609e26-8875-11ea-a01c-a28a3e3fbd33.

'COVID-19 and the Environment', Geneva Environment Network, 19 October 2020, https://www.genevaenvironmentnetwork.org/covid19.html.

Bauer, Andrew and Mona Bhan. Climate without Nature, Cambridge, UK: Cambridge University Press, 2018.

Beraldo, Davide and Stefania Milan. 'From Data Politics to the Contentious Politics of Data', Big Data & Society (July 2019), doi:10.1177/2053951719885967.

Berti Suman, Anna. 'Making Visible Politically Masked Risks: Inspecting Unconventional Data Visualization of the Southeast Asian Haze', in Martin Engebretsen and Helen Kennedy (Eds), Data Visualization in Society, Amsterdam: Amsterdam University Press, 2020, pp. 425-40.

Berti Suman, Anna. 'Citizen Sensing for a Co-Governance of the Risk: the Fukushima Safecast case', LabGov, 22 September 2017, https://labgov.city/theurbanmedialab/citizen-sensing-for-a-co-governance-of-the-risk-the-fukushima-safecast-case/.

Bettini, Giovanni, Giovanna Gioli and Romain Felli. 'Clouded Skies: How Digital Technologies Could Reshape "Loss and Damage" From Climate Change', WIREs Climate Change 11 (April 2020): e650, https://doi.org/10.1002/wcc.650.

Biffi, Laura. 'L'Ambiente Difeso dai Cittadini, Sentinelle del Territorio', Nuova Ecologia, 24 January 2018, https://www.lanuovaecologia.it/lambiente-difeso-dai-cittadini-sentinelle-del-territorio/.

Boffey, Daniel. 'Amsterdam to Embrace "Doughnut" Model to Mend Post-Coronavirus Economy', The Guardian, 8 April 2020, https://www.theguardian.com/world/2020/apr/08/amsterdam-doughnut-model-mend-post-coronavirus-economy.

Brändlin, Anne-Sophie. '2019: The Year of Climate Consciousness', Deutsche Welle, 27 December 2019, https://www.dw.com/en/2019-the-year-of-climate-consciousness-wildfires-fridays-for-future-climate-emergency-a-51719968/a-51719968.

93 Jacques Rancière, *The Politics of Aesthetics*, New York: Bloomsbury, 2006.

94 Giovanni Bettini, Giovanna Gioli and Romain Felli, 'Clouded Skies: How Digital Technologies Could Reshape "Loss and Damage" From Climate Change'.

95 Jacques Rancière, *The Politics of Aesthetics*.

Brown, Azby and Sean Bonner. 'What the Fukushima Meltdowns Taught Us About How to Respond to Coronavirus', Bulletin of the Atomic Scientists, 13 March 2020, https://thebulletin.org/2020/03/what-the-fukushima-meltdowns-taught-us-about-how-to-respond-to-coronavirus/.

Brown, Azby, Pieter Franken, Sean Bonner, Nick Dolezal and Joe Moross. 'Safecast: Successful Citizen-Science for Radiation Measurement and Communication After Fukushima', Journal of Radiological Protection 36 (2016) S82–S101, doi:10.1088/0952-4746/36/2/S82.

Carrington, Damian. 'Coronavirus Detected on Particles of Air Pollution', The Guardian, 24 April 2020, https://www.theguardian.com/environment/2020/apr/24/coronavirus-detected-particles-air-pollution?CMP=share_btn_fb&fbclid=IwAR2Yp-U4H1unF8MwYoveoEF-aoFprvvvn37ES1XfHHgXTk-pqOsWIKQamd3I.

Carrington, Damian. 'Air Pollution May Be 'Key Contributor' to Covid-19 Deaths – Study', The Guardian, 20 April 2020, https://www.theguardian.com/environment/2020/apr/20/air-pollution-may-be-key-contributor-to-covid-19-deaths-study.

Carrington, Damian, Jillian Ambrose and Matthew Taylor. 'Will the Coronavirus Kill the Oil Industry and Help Save the Climate?', The Guardian, 1 April 2020, https://www.theguardian.com/environment/2020/apr/01/the-fossil-fuel-industry-is-broken-will-a-cleaner-climate-be-the-result?fbclid=IwAR2iCvJa2oQIdII-88VEqvSBCQEa073rxknT8DF6qM_a8SsAN9VkIFg6toQ.

Cereceda, Rafael. 'NASA Confirms a Fall in Greenhouse Gas Emissions in China Amid Coronavirus Outbreak', Euronews, 4 March 2020, https://www.euronews.com/2020/03/04/nasa-confirms-a-fall-in-greenhouse-gas-emissions-in-china-amid-coronavirus-outbreak.

Chandler, David. Ontopolitics in the Anthropocene. An Introduction to Mapping, Sensing and Hacking, Abingdon: Routledge, 2018.

Cliffe, Jeremy. 'The Rise of the Bio-Surveillance State', New Statesman, 25 March 2020, https://www.newstatesman.com/science-tech/2020/03/rise-bio-surveillance-state?fbclid=IwAR3XGAuzSpLb6bZ-P5xb-ThQs-WN7V8ZfuLH4xlnbSdvhee-uqv5rdCsCOTk.

Clover, Joshua. 'The Rise and Fall of Biopolitics: A Response to Bruno Latour', Critical Inquiry, 29 March 2020, https://critinq.wordpress.com/2020/03/29/the-rise-and-fall-of-biopolitics-a-response-to-bruno-latour/.

'Coronavirus Outbreak Highlights Need to Address Threats to Ecosystems and Wildlife', UN Environment, 3 March 2020, https://www.unenvironment.org/news-and-stories/story/coronavirus-outbreak-highlights-need-address-threats-ecosystems-and-wildlife.

Cusato, Eliana. 'Beyond War Talk: Laying Bare the Structural Violence of the Pandemic', EJIL: Talk!, 3 May 2020, https://www.ejiltalk.org/beyond-war-talk-laying-bare-the-structural-violence-of-the-pandemic/?fbclid=IwAR1Aqjx2-zJDcmK9jTzM8jh_O7pmqA5fMLkf7tuU9Hdg_4UNIDfrVjt2Hs8.

Davies, Thom. 'Slow Violence and Toxic Geographies: 'Out of sight' to whom?', Environment and Planning C: Politics and Space (April 2019), doi:10.1177/2399654419841063: 2.

Davis, Nicola. ''Urgent Studies Needed' Into Mental Health Impact of Coronavirus', The Guardian, 15 April 2020, https://www.theguardian.com/world/2020/apr/15/urgent-studies-needed-mental-health-coronavirus-lockdown.

Dinca, Cornelia. 'Top-down & Bottom-up Innovation in an era of COVID-19', Amsterdam Smart City, 1 April 2020, https://amsterdamsmartcity.com/posts/top-down--bottom-up-innovation-in-an-era-of-covid.

Evans, Simon. 'Analysis: Coronavirus Set to Cause Largest Ever Annual Fall in CO2 Emissions', Carbon-Brief, 9 April 2020, https://www.carbonbrief.org/analysis-coronavirus-set-to-cause-largest-ever-annual-fall-in-co2-emissions.

Feuer, Alan, Ashley Southall and Michael Gold. ‘Dozens of Decomposing Bodies Found in Trucks at Brooklyn Funeral Home’, The New York Times, 29 April 2020, https://www.nytimes.com/2020/04/29/nyregion/bodies-brooklyn-funeral-home-coronavirus.html?smid=fb-nytimes&smtyp=cur&fbclid=IwAR2i78-u5xFYYF_Pj4ExA4xS10oU8JX3HNdLd3DhIJDGQykeJvKVRBdrK3k.

Gabrys, Jennifer. ‘Citizen Sensing, Air Pollution and Fracking: From ‘Caring About Your Air’ to Speculative Practices of Evidencing Harm’, The Sociological Review 65 (2 suppl., 2017): 172-192.

Gabrys, Jennifer and Helen Pritchard. 'Sensing Practices', in Rosi Braidotti and Maria Hlavajova (eds) Posthuman Glossary, New York: Bloomsbury, 2018, pp. 394-395.

Gaffney, Adam. ‘America's Extreme Neoliberal Healthcare System Is Putting the Country at Risk’, The Guardian, 21 March 2020, https://www.theguardian.com/commentisfree/2020/mar/21/medicare-for-all-coronavirus-covid-19-single-payer.

Gardette, Hervé. 'Ceci n'est (malheureusement) pas une Répétition Générale', France Culture, 1 April 2020, https://www.franceculture.fr/emissions/radiographies-du-coronavirus/ceci-nest-malheureusement-pas-une-repetition-generale.

Gemenne, François. ‘Habiter la Terre au Temps des Pandémies’, AOC, 10 April 2020, https://aoc.media/opinion/2020/04/09/habiter-la-terre-au-temps-des-pandemies/.

Gemenne, François. ’Pourquoi la Crise du Coronavirus Est une Bombe à Retardement Pour le Climat’, Le Soir, 28 March 2020, https://plus.lesoir.be/290554/article/2020-03-28/pourquoi-la-crise-du-coronavirus-est-une-bombe-retardement-pour-le-climat.

Giuffrida, Angela and Lorenzo Tondo. ’'A Generation Has Died': Italian Province Struggles to Bury its Coronavirus Dead’, The Guardian, 19 March 2020, https://www.theguardian.com/world/2020/mar/19/generation-has-died-italian-province-struggles-bury-coronavirus-dead.

Gordon, Colin. ‘Corona: The Inequality Virus’, Jacobin Magazin, 27 March 2020, https://tinyurl.com/y6esw3yk.

Hammond, Phil. ’Nature Is Not Sending Us a Message’, Areo Magazine, 2 April 2020, https://areomagazine.com/2020/04/02/nature-is-not-sending-us-a-message/.

Haraway, Donna. Staying with the Trouble, Durham: Duke University Press, 2016. Harman, Graham. Speculative Realism: An Introduction, New York: Wiley, 2018.

Harvey, Fiona. ’'Momentum is Growing': Reasons to Be Hopeful About the Environment in 2019’, The Guardian, 2 January 2019, https://www.theguardian.com/environment/2019/jan/02/climate-change-environment-2019-future-reasons-hope.

Head, Lesley. Hope and Grief in the Anthropocene, Abingdon: Routledge, 2016.

Heneghan, Fiacga. ’Is There a Limit to Optimism When it Comes to Climate Change?’, AEON, 13 April 2020, https://aeon.co/ideas/is-there-a-limit-to-optimism-when-it-comes-to-climate-change.

Hoepman, Jaap-Henk. ’Google Apple Contact Tracing (GACT): a Wolf in Sheep's Clothes’, Xot Blog, 19 April 2020, https://blog.xot.nl/2020/04/19/google-apple-contact-tracing-gact-a-wolf-in-sheeps-clothes/.

Illing, Sean. ‘This Is a Time for Solidarity’, Vox, 15 March 2020, https://www.vox.com/2020/3/13/21172237/coronavirus-covid-19-albert-camus-the-plague.

Johns, Fleur. ‘Data, Detection, and the Redistribution of the Sensible in International Law’, American Journal of International Law 111 (January 2017), pp. 57-103, https://doi.org/10.1017/ajil.2016.4.

Johnson, Elizabeth. ‘At the Limits of Species Being: Sensing the Anthropocene’, South Atlantic Quarterly 116 (April 2017): pp. 275–292, https://doi.org/10.1215/00382876-3829401.

Kenens, Joke, Michel Van Oudheusden, Go Yoshizawa and Ine Vvan Hoyweghen. ‘Science by, With

and for Citizens: Rethinking "Citizen Science" After the 2011 Fukushima disaster', Palgrave Communications 6, 58 (2020), https://doi.org/10.1057/s41599-020-0434-3.

Kennedy, John. 'Some Coronavirus Guidelines', New Yorker, 23 March 2020, https://www.newyorker.com/magazine/2020/03/30/some-coronavirus-guidelines.

Korten, David. 'From Emergency to Emergence', CommonDreams, 27 April 2020, https://www.commondreams.org/views/2020/04/27/emergency-emergence.

Kulish, Nicholas. ''Never Seen Anything Like It': Cars Line Up for Miles at Food Banks', The New York Times, 8 April 2020, https://www.nytimes.com/2020/04/08/business/economy/coronavirus-food-banks.html.

Ladino, Jennifer. 'Who's Afraid of the Climate Crisis? Fear, Anxiety, Dread, and Pandemic Panic', Edge Effects, 21 April 2020, https://edgeeffects.net/whos-afraid-of-the-climate-crisis-fear-anxiety-dread-and-pandemic-panic/.

Latour, Bruno. 'Is This a Dress Rehearsal?', Critical Inquiry, 26 March 2020, https://critinq.wordpress.com/2020/03/26/is-this-a-dress-rehearsal/.

Latour, Bruno. 'What Protective Measures Can You Think of So We Don't Go Back to the Pre-crisis Production Model?', 29 March 2020, www.bruno-latour.fr/sites/default/files/downloads/P-202-AOC-ENGLISH_1.pdf.

Lewis, Helen. 'The Coronavirus Is a Disaster for Feminism', *The Atlantic*, 19 March 2020, https://www.theatlantic.com/international/archive/2020/03/feminism-womens-rights-coronavirus-covid19/608302/.

Lord, Beth. 'We Are Nature', AEON, 28 April 2020, https://aeon.co/essays/even-the-anthropocene-is-nature-at-work-transforming-itself.

Lowenhaupt Tsing, Anna. The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins, Princeton: Princeton University Press, 2015.

Marres, Noortje. Material Participation. Technology, the Environment and Everyday Publics, London: Palgrave Macmillan, 2015.

Morton, Timothy. 'Introducing the idea of 'hyperobjects'', High Country News, 19 January 2015, https://www.hcn.org/issues/47.1/introducing-the-idea-of-hyperobjects.

Morton, Timothy. Hyperobjects, Minneapolis: University of Minnesota Press, 2013.

Nixon, Rob. Slow Violence and the Environmentalism of the Poor, Cambridge: Harvard University Press, 2013.

Osaka, Shannon. 'The World Is on Lockdown. So Where Are All the Carbon Emissions Coming From?', Grist, 27 April 2020, https://grist.org/climate/the-world-is-on-lockdown-so-where-are-all-the-carbon-emissions-coming-from/.

Owen, Joseph. 'States of Emergency, Metaphors of Virus, and COVID-19', Verso, 31 March 2020, https://www.versobooks.com/blogs/4636-states-of-emergency-metaphors-of-virus-and-covid-19.

Parsons, Allan. 'Distribution of the sensible', Compendium, 5 October 2017, https://compendium.kosawese.net/term/distribution-of-the-sensible/.

Renn, Ortwin. 'Lessons from the Corona Crisis for Sustainable Crisis Management', IASS Potsdam, 21 April 2020, https://www.iass-potsdam.de/en/blog/2020/04/lessons-corona-crisis-sustainable-crisis-management.

Puig de la Bellacasa, María. *Matters of Care*, Minneapolis: University of Minnesota Press, 2017.

Rancière, Jacques. The Politics of Aesthetics, New York: Bloomsbury, 2006.

Restif, Olivier. 'Coronavirus: Three Misconceptions About How Animals Transmit Diseases Debunked', The Conversation, 16 April 2020, https://theconversation.com/coronavirus-three-misconceptions-about-how-animals-transmit-diseases-debunked-134485.

Roth, Andrew, Stephanie Kirchgaessner, Daniel Boffey, Oliver Holmes, Helen Davidson. 'Growth in Surveillance May Be Hard to Scale Back After Pandemic, Experts Say', The Guardian, 14 April 2020, https://www.theguardian.com/world/2020/apr/14/growth-in-surveillance-may-be-hard-to-scale-back-after-coronavirus-pandemic-experts-say.

Ruppert, Evelyn, Ervin Isin and Didier Bigo. 'Data politics', Big Data & Society (December 2017), doi:10.1177/2053951717717749.

Saba Aziz. 'Why 'Physical Distancing' Is Better Than 'Social Distancing'', Al Jazeera, 30 March 2020, https://www.aljazeera.com/news/2020/03/physical-distancing-social-distancing-200330143325112.html.

Safecast, COVID-19 Testing Map, https://covid19map.safecast.org/views/map.

Steinberger, Julia. 'Pandenomics: A Story of Life Versus Growth', openDemocracy, 8 April 2020, https://www.openDemocracy.net/en/oureconomy/pandenomics-story-life-versus-growth/.

Taylor, Keeanga-Yamahtta. 'The Black Plague', *New Yorker*, 16 April 2020, https://www.newyorker.com/news/our-columnists/the-black-plague

Townsend, Dina. 'What to Read: COVID-19, Human Rights and the Environment', *GNHRE,* 30 March 2020, https://gnhre.org/2020/03/30/what-to-read-covid-19-human-rights-and-the-environment/.

United Nations Development Programme. 'Climate Change and Inequalities in the Anthropocene', in *Human Development Report 2019*, New York: UNDP, pp. 173-196, hdr.undp.org/sites/default/files/hdr2019_chapter5.pdf

Van Oudheusden, Michiel. 'Residents Rallied to Measure Radiation After Fukushima. Nine Years Later, Many Scientists Still Ignore Their Data', Discover Magazine, 10 March 2020, https://www.discovermagazine.com/environment/residents-rallied-to-measure-radiation-after-fukushima-9-years-later-many.

Vidal, John. ''Tip of the iceberg': Is Our Destruction of Nature Responsible for Covid-19?', The Guardian, 18 March 2020, https://www.theguardian.com/environment/2020/mar/18/tip-of-the-iceberg-is-our-destruction-of-nature-responsible-for-covid-19-aoe.

Wahl, Daniel Christian. 'Phase Shift has arrived! The Pandemic as a catalyst for transformation', Medium, 11 March 2020, https://medium.com/age-of-awareness/phase-shift-has-arrived-who-declares-pandemic-83da330fdc5d.

Wolfers, Justin. 'The Unemployment Rate Is Probably Around 13 Percent', The New York Times, 3 April 2020, https://www.nytimes.com/2020/04/03/upshot/coronavirus-jobless-rate-great-depression.html.

Yong, Ed. 'Why the Coronavirus Is So Confusing', *The Atlantic*, 29 April 2020, https://www.theatlantic.com/health/archive/2020/04/pandemic-confusing-uncertainty/610819/

42. LIBERATING COVID-19 DATA WITH VOLUNTEERS IN BRAZIL

PETER FÜSSY

While healthcare workers fight the coronavirus pandemic with drugs and ventilators, journalists and data activists try to tackle the "infodemic" with numbers and visualizations. In Brazil, it is difficult to tell who is winning those battles, as the death toll continues to rise. President Jair Bolsonaro "continues to sow confusion by openly flouting and discouraging the sensible measures of physical distancing and lockdown," according to an editorial from the journal *The Lancet*.[1] Mixing a historical lack of capacity with an attempt to control the narrative of the crisis, the federal government has provided poor quality numbers about COVID-19, reinforcing how data "can also shape perceived realities," as Renzi and Langlois claim.[2]

As a result of federal administration decisions, Brazil is one of the countries that test less for the virus.[3] It also has a peculiar COVID-19 dashboard that shows the number of recovered cases with larger font sizes, then new cases and deaths with smaller fonts.[4] For one week in June 2020, the total toll of cases and deaths was completely removed from the dashboard, only to reappear after intense criticism. The Brazilian government also cancelled the daily press conferences and started to release pandemic reports to the most-watched TV news program in the country. All of these decisions were seen by the media[5] and independent organizations as authoritarian, insensitive attempts to make COVID-19 deaths invisible.[6]

The Ministry of Health provides numbers only by states (in Brazil, one state can be as large as France, Spain and Sweden combined), which means that the local dimensions of the problem are mostly ignored. The government had promised information by cities but never delivered and, to make the data worse, switched the report format from an open format (CSV) to a closed one (Microsoft Excel) in the middle of the pandemic. As I discussed previously, Bolsonaro has been limiting access to information since the beginning of his regime.[7]

1 'COVID-19 in Brazil: So What?', *The Lancet*, 9 May 2020, 9 May 2020, 2020. https://doi.org/10.1016/S0140-6736(20)31095-3.

2 Alessandra Renzi and Ganaele Langlois, 'Data Activism', in Greg Elmer, Ganaele Langlois and Joanna Redden(eds), *Compromised Data: New Paradigms in Social Media Theory*, London: Bloomsbury *(2015),* pp. 202–225.

3 Worldometers, https://www.worldometers.info/coronavirus/#countries.

4 Ministério da Saúde do Brasil, https://covid.saude.gov.br/.

5 Dom Phillips, 'Brazil Stops Releasing COVID-19 Death Toll and Wipes Data From Official Site', *The Guardian*, 7 June 2020, https://www.theguardian.com/world/2020/jun/07/brazil-stops-releasing-covid-19-death-toll-and-wipes-data-from-official-site.

6 Conselho Nacional de Secretários de Saúde, 6 June 2020, https://www.conass.org.br/conass-repudia-acusacao-de-manipulacao-de-dados-sobre-covid-19/.

7 Peter Füssy, 'Data Journalism Without Data: Challenges From a Brazilian Perspective', *DATACTIVE*, 28 April 2020, https://data-activism.net/2020/04/bigdatasur-data-journalism-without-data-challenges-from-a-brazilian-perspective/.

The institutional resistance to transparency has only become more evident with the health crisis.[8] During the pandemic, data activism has assumed governmental functions, providing numbers to substantiate decisions on a variety of levels, from NGOs[9] to policymakers[10], which use open data from activist group Brasil.IO.[11] Trying to reduce the "data gap"[12] characteristic of countries of the Global South, data activists and other civil society organizations are collecting and structuring COVID-19 data. Besides Brasil.IO, journalists from six major newspapers and news portals[13] are working together to provide independent total numbers of COVID-19 deaths and confirmed cases, while a data intelligence consultant[14] is crowdfunding another COVID-19 monitor. Initiatives like these work with primary sources, allowing news production and research to be less dependent on problematic federal reports.

In the case of Brazil, more than making people visible and represented through the concept of data justice or advocating for social change, data activism is essential to challenge the state narrative about the pandemic and prevent more deaths from COVID-19. If Brazilian democracy depends on data activism and data journalism, it will not die in the dark.

Brasil.IO Case

One group of volunteers taking over the Brazilian government's responsibilities is the Brasil.IO initiative. Their COVID-19 project includes data from more than 5.500 municipalities and other sources, such as notaries. This data has been used by major newspapers and news broadcasters, including The New York Times,[15] CNN[16] and The BBC.[17] Scientific research is

8 Guillén Torres, 'Institutional Resistance to Transparency: the Quest for Public Sector Information in Mexico', *Journal of Resistance Studies 5* (2), 2020, https://data-activism.net/wordpress/wp-content/uploads/2020/02/Institutional-Resistance-To-TransparencyPRePrint.pdf.

9 Plataforma de Monitoramento da Situação Indígena na Pandemia do Novo Coronavírus (Covid-19) no Brasil, Instituto Socioambiental, https://covid19.socioambiental.org/. Índice de Vulnerabilidade Municipal - COVID-19, Instituto Votorantim, institutovotorantim.org.br/municipioscontraocorona/ivm/.

10 Atualização dos dados, ICICT, https://bigdata-covid19.icict.fiocruz.br/ (accessed 24 October 2020). Gráficos interativos, Instituto para Redução de Riscos e Desastres de Pernambuco, https://www.irrd.org/covid-19/graficos-interativos/.

11 ESPECIAL COVID-19 - Dados por Município, Brasil.io, https://brasil.io/covid19/.

12 See chapter 1 in this volume. (pp.24-28)

13 'Veículos de Comunicação Formam Parceria Para Dar Transparência a Dados de COVID-19', Globo, 8 June 2020, https://g1.globo.com/politica/noticia/2020/06/08/veiculos-de-comunicacao-formam-parceria-para-dar-transparencia-a-dados-de-covid-19.ghtml.

14 Marcelo Soares, 'Coronavírus nos municípios - Lagom Data', *Catarse*, https://www.catarse.me/lagom_covid.

15 Jin Wu et al., '364,000 Missing Deaths: Tracking the True Toll of the Coronavirus Outbreak', *New York Times*, 16 October 2020, https://www.nytimes.com/interactive/2020/04/21/world/coronavirus-missing-deaths.html

16 Luiz Fernando Toledo, 'Uma a Cada Quatro Cidades do Estado de São Paulo Tem Casos de Coronavírus', *CNN Brasil,* 12 April 2020, https://www.cnnbrasil.com.br/nacional/2020/04/13/1-a-cada-4-cidades-do-estado-de-sao-paulo-tem-casos-de-coronavirus

17 'Coronavírus: Quantos Casos e Mortes por COVID-19 Há em Sua Cidade?', *BBC Brazil*, 29 April 2020, https://www.bbc.com/portuguese/brasil-52472202

also relying on their data to produce comparative studies[18] and forecasting.[19] Figures from Brasil.IO indicate not only underreporting, but also a delay in delivering the official totals of COVID-19 deaths. For instance, the Ministry of Health announced that the country had reached a thousand deaths on April 11, while Brasil.IO's platform reached the same number six days earlier. If undercounting promotes a discourse that minimizes the health crisis, data activism can liberate the true numbers for public scrutiny.

Social Media Call and Operationalization

Seeing the lack of structured data about COVID-19, Álvaro Justen, founder of the non-profit organization Brasil.IO, tweeted a call for volunteers to help with collecting data manually from all the 27 federative units on March 20. Rapidly, 34 volunteers answered the tweet, mostly data journalists and software developers. "Fortunately, I have several friends and contacts who work with journalism and data and it was not difficult to find volunteers," said Justen in an interview I conducted with him over email.

The group spent one whole weekend manually tabulating hundreds of epidemiological bulletins from state health departments since the beginning of the pandemic. Because of the urgency, they started by using Google Spreadsheets to consolidate data. After the first round, the spreadsheets with the most recent numbers started to feed directly into the reformulated Brasil.IO platform, which uses Python, Django and PostgreSQL. All communication is made through an open-source chat platform (Rocket.Chat), while publicization of updates and new insights appear on Twitter and in a Telegram group. Scripts for automated processes such as scraping data, monitoring data, checking data, generating internal reports, and consolidating data are available at GitHub.[20] For example, the group uses a robot to send notifications to the chat when one State Health Secretariat updates COVID-19 numbers.

Improving Data Quality

Due to the issues with data quality, much of the data is collected manually by volunteers. Besides collecting and checking data, volunteers also contact health secretariats to recommend good data practices and ask them to make changes, so the data is more accessible through automated processes. "Not all respond satisfactorily but most of them are willing to collaborate in some way. With time and pressure, some things are improving but not in speed that a pandemic requires," Justen points out.

In order to create an open data culture in Brazil, Justen has worked to improve databases and tools to facilitate data extraction from inaccessible formats since 2013. One emblematic

18 COVID-19 e hospitalizações por SRAG no Brasil: uma comparação até a 12a semana epidemiológica de 2020, *Reports in Public Health*, https://www.scielo.br/pdf/csp/v36n4/1678-4464-csp-36-04-e00070120.pdf

19 Matheus Henrique Dal Molin Ribeiro et al., 'Short-term forecasting COVID-19 cumulative confirmed cases: Perspectives for Brazil', *ScienceDirect*, June 2020, https://doi.org/10.1016/j.chaos.2020.109853

20 GitHub, https://github.com/turicas/covid19-br

example is a dataset that includes more than 43 million companies and their shareholders registered at the Brazilian Internal Revenue Service (Receita Federal). After the 2011 Freedom of Information (FOI) act, that information should be publicly available to automated collection. However, the page hosting the data uses captchas to limit access. After several FOI requests in 2018, their request was denied with a link to a system that sold the data for R$ 506,000. Justen and other data activists then pressured the Receita Federal, which finally sent the dataset in a USB drive.

As everything is done on a voluntary basis and the data are available free of charge for everyone, one of the challenges of the project is locating funding. "We don't have that much time to work on the project and therefore not everything advances at the speed we would like," says Justen. To help with this issue, they started a crowdfunding campaign[21] to hire developers, making it possible to add new datasets that can be useful to "flatten the curve" of coronavirus in Brazil. Brasil.IO's manifesto[22] defines the process of collecting, converting, cleaning, and making data available in a structured and open format as "data liberation." As stated in the manifesto, "liberating" access to public data is to make democracy less elitist. However, during the exceptional circumstances of the COVID-19 response in Brazil, liberating data is fundamental to ensure democracy and save lives.

References

Conselho Nacional de Secretários de Saúde, 6 June 2020, https://www.conass.org.br/conass-repudia-acusacao-de-manipulacao-de-dados-sobre-covid-19/

'Coronavírus: Quantos Casos e Mortes por COVID-19 Há em Sua Cidade?', BBC Brazil, 29 April 2020, https://www.bbc.com/portuguese/brasil-52472202

'COVID-19 e hospitalizações por SRAG no Brasil: uma comparação até a 12a semana epidemiológica de 2020', Reports in Public Health, https://www.scielo.br/pdf/csp/v36n4/1678-4464-csp-36-04-e00070120.pdf

'COVID-19 in Brazil: So What?', *The Lancet*, 9 May 2020, https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31095-3/fulltext#%20

Dal Molin Ribeiro, M. et al., 'Short-term forecasting COVID-19 cumulative confirmed cases: Perspectives for Brazil', ScienceDirect, June 2020, https://doi.org/10.1016/j.chaos.2020.109853

ESPECIAL COVID-19 - Dados por Município, Brasil.io, https://brasil.io/covid19/

Füssy, Peter, 'Data journalism without data: challenges from a Brazilian perspective', DatActive, 28 April 2020, https://data-activism.net/2020/04/bigdatasur-data-journalism-without-data-challenges-from-a-brazilian-perspective/

GitHub, https://github.com/turicas/covid19-br

ICICT, Atualização dos dados, https://bigdata-covid19.icict.fiocruz.br/ (accessed 24 October 2020)

Índice de Vulnerabilidade Municipal - COVID-19, Instituto Votorantim, https://www.institutovotorantim.org.br/municipioscontraocorona/ivm/

21 Brasil.io, https://apoia.se/brasilio.
22 Brasil.io, https://brasil.io/manifesto/.

Instituto para Redução de Riscos e Desastres de Pernambuco, Gráficos interativos, https://www.irrd.org/covid-19/graficos-interativos/

Ministério da Saúde do Brasil, https://covid.saude.gov.br/

Stefania Milan and Emiliano Treré. 'A Widening Data Divide: COVID-19 and the Global South', in Stefania Milan, Emiliano Treré and Silvia Masiero (eds) *COVID-19 from the Margins. Pandemic Invisibilities, Policies and Resistance in the Datafied Society*, Institute of Network Culture, Amsterdam, 2021, pp. 24-28.

Phillips, Dom, 'Brazil stops releasing Covid-19 death toll and wipes data from official site', The Guardian, 7 June 2020, https://www.theguardian.com/world/2020/jun/07/brazil-stops-releasing-covid-19-death-toll-and-wipes-data-from-official-site

Plataforma de Monitoramento da Situação Indígena na Pandemia do Novo Coronavírus (Covid-19) no Brasil, Instituto Socioambiental, https://covid19.socioambiental.org/

Renzi, Alessandra and Langlois, Ganaele (2015) "Data / Activism" Compromised Data: New paradigms in social media theory and methods, Elmer, G. et al. (eds.), London: Bloomsbury, pp. 202–225. Available at https://www.academia.edu/10576440/Data_Activism

Soares, Marcelo 'Coronavírus nos municípios - Lagom Data', Catarse, https://www.catarse.me/lagom_covid

Toledo, Luiz Fernando. 'Uma a Cada Quatro Cidades do Estado de São Paulo Tem Casos de Coronavírus', CNN Brasil, 12 April 2020, https://www.cnnbrasil.com.br/nacional/2020/04/13/1-a-cada-4-cidades-do-estado-de-sao-paulo-tem-casos-de-coronavirus

Torres, Guillén. 'Institutional Resistance to Transparency: the Quest for Public Sector Information in Mexico', *Journal of Resistance Studies* 5 (2), 2020, https://data-activism.net/wordpress/wp-content/uploads/2020/02/Institutional-Resistance-To-TransparencyPRePrint.pdf

Worldometers, https://www.worldometers.info/coronavirus/

Wu, Jin et al. '364,000 Missing Deaths: Tracking the True Toll of the Coronavirus Outbreak', New York Times, 16 October 2020, https://www.nytimes.com/interactive/2020/04/21/world/coronavirus-missing-deaths.html.

43. LA MARCHA DIGITAL DE LAS MADRES DE LOS DESAPARECIDOS EN MÉXICO

THOMAS AURELIANI

Mother's Day is the symbolic anniversary of the disappearance of Mexican youth at the hands of drug cartels. On this day, their mothers—known as desaparecidos—protest by showing their anger and pain to institutions and the media. This chapter explores their efforts to reaffirm a need for justice during the coronavirus pandemic, and protesting while social distancing.

La propagación del COVID-19 y las medidas restrictivas implementadas por los gobiernos de todo el mundo están teniendo un fuerte impacto en las formas de movilización. En México, las medidas de distanciamiento social y la interrupción de muchas actividades consideradas no esenciales están impidiendo que muchos familiares de desaparecidos salgan a buscar a sus seres queridos y a expresar públicamente su ira y dolor. Además, la cuarentena parece haber causado una disminución del trabajo, ya muy retrasado e ineficaz, de las instituciones encargadas de desarrollar las investigaciones y de la búsqueda de los más de 61 mil desaparecidos reconocidos oficialmente por el gobierno de Andrés Manuel López Obrador. De hecho, el país está experimentando una crisis humanitaria sin precedentes debido a la llamada "Guerra contra el Narcotráfico", inaugurada por el expresidente Felipe Calderón Hinojosa (2006-2012) y continuada por el gobierno de Enrique Peña Nieto (2012-2018). La violencia vinculada a la militarización de la seguridad pública, el narcotráfico y los enfrentamientos por el control de territorios ricos en recursos estratégicos han despoblado enteras regiones de México. Muchos de estos territorios están sujetos al poder de las organizaciones criminales paramilitares que operan de forma autónoma o con la colaboración de las instituciones estatales, exacerbando los niveles endémicos de corrupción e impunidad que ya caracterizaban al país latinoamericano. Estos conflictos han causado más de 250 mil asesinatos en 12 años y una serie de violaciones de los derechos humanos, como por ejemplo las ejecuciones extrajudiciales, torturas y, de hecho, desapariciones. Estas últimas son perpetradas por agentes estatales y organizaciones criminales, y las víctimas pueden ser personas con o sin alguna militancia social o política, sospechosos por cualquier circunstancia o señalados por funcionarios públicos de los diferentes gobiernos de pertenecer a bandas del crimen organizado. Las desapariciones pueden afectar indistintamente a hombres y mujeres, niños y niñas, personas indígenas, campesinas, estudiantes, migrantes, defensores y defensoras de los derechos humanos, e incluso funcionarios estatales.

Resistencia Civil

En respuesta a este contexto de violencia se han desarrollado diferentes formas de resistencia civil, movimientos, asociaciones y redes dedicadas a la defensa de los derechos humanos de las víctimas y de sus familiares. El 10 de mayo de 2012, el Día de la Madre, colectivos de familiares y organizaciones civiles del Noreste del país convocaron por primera vez la "Marcha de la Dignidad Nacional, Madres buscando a sus hijos e hijas y buscando justicia", que

se convirtió en el evento colectivo más importante para los familiares de los desaparecidos, especialmente para las madres. Año tras año, más y más madres, padres, hermanas, hermanos, hijos e hijas, abuelos y abuelas se han unido a esta marcha. Se han agregado también los comités y asociaciones de familiares de los desaparecidos de la "Guerra Sucia" de los años '60 -'70 -'80, décadas en las que el estado autoritario mexicano hizo desaparecer a los activistas políticos, estudiantes y trabajadores que se oponían al régimen. Pero no solo eso: cientos de asociaciones, ONG y organizaciones internacionales dedicadas a la protección de los derechos humanos como Amnistía Internacional, la asociación italiana antimafia "Libera", la Cruz Roja Internacional o la Oficina del Alto Comisionado de las Naciones Unidas para los Derechos Humanos cada año se unen a las voces de las madres.

El impacto simbólico del evento es muy fuerte: las madres se reúnen y manifiestan que el 10 de mayo no hay nada que celebrar. Los 10 de mayo ellas desfilan con fotos de sus desaparecidos impresas en las playeras o en grandes pancartas. La gran mayoría de las madres todavía no ha encontrado a sus seres queridos y esperan tanto la verdad como la justicia y la reparación integral de los daños causados por la desaparición de sus hijos y hijas. Muchas madres sufren por la cuarentena porque no pueden salir, armadas con palas y rastrillos, a excavar en los territorios donde suelen encontrar fosas clandestinas y donde se supone que hay miles de cuerpos abandonados o restos humanos. No pueden seguir presionando a los órganos de gobierno y justicia, no pueden participar en las reuniones, conferencias, cursos de capacitación para aprender cómo buscar. Y sufren porque este año la Marcha no se ha podido organizar.

Por este motivo, el Movimiento por Nuestros Desaparecidos en México ha organizado una gran movilización digital durante la pandemia. Cabe señalar que el Movimiento se creó en marzo de 2015 con el propósito de redactar la la primera Ley General en materia de desapariciones en México, y hoy reúne a cientos de colectivos de familiares y organizaciones civiles que luchan por la correcta implementación de la misma Ley (las historias y actividades de estos colectivos, así como las noticias sobre el Movimiento se pueden encontrar en el sitio web).[1] Con los años, el Movimiento se ha convertido en el principal referente nacional sobre el tema de las desapariciones a través de la presión política y de las manifestaciones públicas.

Marcha Digital

Gracias al apoyo de algunas organizaciones civiles con mayor experiencia en el campo del activismo digital, el Movimiento ha impulsado muchas campañas a través de las redes sociales donde exige búsqueda efectiva de los desaparecidos, verdad, justicia y no repetición de los hechos criminales. Una de las primeras y más simbólicas campañas fue el lanzamiento del hashtag #SinLasFamiliasNo, que tenía el propósito de señalar la necesidad de involucrar a los familiares de víctimas en los procesos de redacción y implementación de la Ley a nivel federal y local. La participación activa de ellos siempre ha sido una piedra angular del Movimiento: muchos familiares se han convertido en activistas y defensores de los derechos humanos reconocidos a nivel nacional e internacional.

1 Movimiento por Nuestros Desaparecidos en México, https://movndmx.org/.

Este año la Marcha se ha desarrollado necesariamente en forma digital con el objetivo de "tomar las redes sociales", igual que las calles y las plazas durante todos estos años de lucha: con dignidad, fuerza y un amor incansable. Las familias quieren decir que a pesar del coronavirus no se detiene ni su necesidad de justicia ni la búsqueda de los desaparecidos. Añaden también que México sigue viviendo una emergencia humanitaria en la que hay miles de cuerpos no identificados esperando de ser nombrados y devueltos a sus familiares. En un comunicado, el Movimiento ha invitado a todas las personas solidarias a enviar o publicar en redes sociales su propia imagen usando un cubrebocas con la leyenda: "¿Dónde están?"; videos mensajes o piezas artísticas utilizando el hashtag #CorazonesEnMarcha. La movilización digital tuvo mucho éxito: miles y miles de mensajes, vídeos y fotos inundaron la red y contribuyeron a sensibilizar la opinión pública y a visibilizar la tragedia. Las fotos de perfil se actualizaron con el motivo creado por el Movimiento.

Muchas madres compartieron con orgullo las fotos de sus hijos e hijas como ocurre cada año. Desde diferentes estados de la República, publicaciones con fotografías y música producidas por muchos colectivos se publicaron en Facebook, Twitter e Instagram. Manifestaciones de solidaridad vinieron también de ciudadanos comunes, mexicanos y extranjeros, y de organismos internacionales como Amnistía Internacional, la Oficina del Alto Comisionado de las Naciones Unidas para los Derechos Humanos, el Comité contra las Desapariciones Forzadas y el Grupo de Trabajo de la ONU sobre las Desapariciones Forzadas o Involuntarias. Además, se volvieron virales hashtags como #YoApoyoParaEncontrarles, #HastaEncontrarles, #NosHacenFalta y #10DeMayoNadaQueCelebrar. Esta forma particular de movilización digital ha demostrado una vez más la fuerza de estos familiares, de las madres en particular: ellas no se detienen. Ni siquiera el virus más letal podrá detener sus espíritu de lucha y sus necesidad de justicia. Porque como ellas siempre dicen: ¡Vivos se los llevaron, vivos los queremos!

References

Movimiento por Nuestros Desaparecidos en México, https://movndmx.org/.

44. BRAZILIAN COUNTER-SURVEILLANCE COLLECTIVE ACTION IN A DATA-SENSITIVE ERA: THE CASE OF #VIDASNEGRASIMPORTAM

SIMONE DA SILVA RIBEIRO GOMES

Since early March, 2020, COVID-19 has already taken the lives of more than 144,767 people in Brazil.[1] The invisibilities and resistances of victims of the first pandemic of the datafied society differ greatly according to race and gender. Protests in Brazil declared #VidasNegrasImportam (#BlackLivesMatter) at this year protests, spurred by both US anti-racist protests and the coronavirus's heavy toll on Black Brazilians. This racist toll is especially salient when it comes to Brazil, one of the world's hardest-hit countries where hundreds die daily. President Jair Bolsonaro has been criticized for his poor handling of a pandemic that disproportionately affects Black people—more than half of the countries' population, the result of structural racism that dates back to slavery.[2]

This article reflects on how police violence of the datafied society in plural Global Souths—not limited to the geographical connotation of the concept—shape protest dynamics, through the example of recent events in Brazil.[3] Specifically, I attend to the Black, favela, and periphery residents marching through Rio de Janeiro on June 7, 2020, in the #VidasNegrasImportam (#BlackLivesMatter) protest against racism. For the second Sunday in a row, the streets throughout Brazil were filled by protesters for Black Lives, motivated by protests in the US for George Floyd from late May. The protesters marched in opposition to the State's policies, in reaction to the intensification of social vulnerability amid the country's COVID-19 economic and public health crisis. as well as the unceasing police violence in the favelas during the pandemic.

The protests unfolded in a city where 80% of people killed by police in the first half of 2019 were Black, and state violence keeps increasing in the favelas in the midst of the pandemic.[4] Protests were called in response to the murder of Matheus Oliveira, a young Black favela resident shot by the police while he was returning home. Between January and June 2020, police in the state of Rio de Janeiro killed 881 people, about five per day, a significant increase on the last few years; in 2018, 1,534 people were killed by police officers.[5]

1 'Coronavirus Update (Live)', *Worldometer*, https://www.worldometers.info/coronavirus/#countries, accessed 22 October 2020.

2 'Brazil 2010 Census Shows Changing Race Balance', *BBC News*, 17 November 2011, https://www.bbc.com/news/world-latin-america-15766840.

3 Stefania Milan and Emiliano Treré, 'Big Data from the South(s): Beyond Data Universalism', *Television & New Media* 20, 4, 2019.

4 Thiago Amparo, 'Why America's Protests Resonate So Deeply in Brazil', *Americas Quarterly*, 8 June 2020, https://www.americasquarterly.org/article/why-americas-protests-resonate-so-deeply-in-brazil/.

5 'Police Killings in the State of Rio de Janeiro Are at a 20-Year High', *The Economist*, 3 September 2019, https://www.economist.com/graphic-detail/2019/09/03/police-killings-in-the-state-of-rio-de-janeiro-are-at-a-20-year-high.

In response, Black, poor, favela, and periphery youth filled downtown Rio de Janeiro's main avenue, marching despite rumours of police repression on social media and questions about the merits of risking COVID-19 infection for an in-person protest in the streets. The police frisked protestors on their way to the march in pick-up trucks and on motorcycles, on horseback and on foot. They deployed batons, rubber-bullet rifles, and gas cannons on intimidate protestors.[6] Rio de Janeiro's Military Police also conveyed their orientations in their Twitter account, asking protestors on their way to the march not to bring hand sanitizer in quantities larger than 50ml.[7] However, there is no municipal or state-level decree restricting the quantity of hand sanitizer one can carry for personal use. What police forces do is use this as justification to detain protesters traveling away from the protest. Police forces in Brazil, Mexico, and other Latin-American countries have securitized protests in order to criminalize dissent.[8] Even if studies reveal that digital monitoring may have a dampening effect on police's use of force, videos show the persistence of violations.[9] Surveillance concerns pose different threats for poor Black favela protestors in the Global South. The dynamics of social movements in those contexts thus differ from the North, where resistance does not frequently face "hard" techniques of repression, like pre-emptive arrests, surveillance, riot police, arrests, prosecution, and incarceration.

To avoid trouble, protesters in Brazil relay police warnings. People who could not be on the streets due to the pandemic were asked to share activists' posts and give visibility to their actions. The airing of information in recent protests elucidates the consequences of datafication in collective action. The paradigm shift able to transform "social movement society" here urges scholars to reflect on how it intersects with known protest dynamics. My intention in this chapter is to share reflections on how movements will be organized during the pandemic. My reflections reveal nuances of protesting in pandemic times in Brazil and other areas in the Global Souths. The impact of COVID-19 on the Global Souths relates to both surveillance and grassroots efforts to counter narratives of long-term negotiations between protestors and police forces, especially young, Black favela residents who are surveilled and disrespected daily. In response, they develop counter-surveillance strategies to tackle police abuse, such as large scale "cop watching."[10]

Police violence may strike readers as unprecedented in Global North outside racial protests, but it is ubiquitous in Brazil. A review of protest in pandemic times from a US vantage point,

6 '"Not from Gunshots, Covid, or Hunger! Black People Want to Live!" Favelas Take Streets to Fight Racism', *RioOnWatch*, 8 June 2020, https://www.rioonwatch.org/?p=60105.

7 @PMERJ, 'Fique atento (a) Não leve álcool líquido para nenhuma manifestação. Só serão permitidos frascos de até 50 ml de álcool em gel. Conte com a #PolíciaMilitar. Juntos somos muito mais fortes!! #ServireProteger', Twitter post, 6 June 2020, https://twitter.com/PMERJ/status/1269329336311648257?ref_src=twsrc%5Etfw.

8 'Mexico's 1968 Massacre: What Really Happened?', *NPR*, 01 December 2008, https://www.npr.org/templates/story/story.php?storyId=97546687.

9 Bernard E. Harcourt, *Exposed: Desire and disobedience in the digital age*, Cambridge: Harvard University Press, 2015.

10 Palloma Menezes Valle, 'Monitorar, Negociar e Confrontar: As (Re)Definições Na Gestão Dos Ilegalismos Em Favelas 'Pacificadas', *Tempo Social* 30, 3, 2018.

for example, does not consider what was mentioned above.[11] However, there is an extensive literature on "cop watching" and surveillance in the last few years.[12] In Brazil massive protests in June, 2013 were among the origins of more intensive and rationalized "cop watching."

Some challenges for future protests in the Global South are how they rely on the logic of numbers, and how the relevance of these movements is affected by the prohibition of big gatherings, since they cannot proceed with their usual repertoires of protest. Also, as mass media have played an important part in disseminating information about social movements, and technologies have reinforced monopolies in this pandemic period, we must acknowledge alternative uses of counter-stream technologies, such as police accountability "cop watching". Aside from protesting to end violent policing, there are civil initiatives fighting the government's use of harmful face surveillance technology.[13] Later this month two major vendors—Amazon and IBM—announced that in light of recent protests against police brutality and racial injustice, they would pause or end their sale of surveillance technology to police. The movement to ban facial recognition is increasing, as recent protests have shown activists' strength in fighting tech companies that enable and profit off of a system of racist surveillance and policing.

In Brazil, Optical Character Recognition has been widely supported by the federal government and recently implemented in some states, showing flaws that increased the mass incarceration of young, Black favela habitants. These are the same residents who know first-hand how dire data policies are for them, as 91% of those incarcerated by facial monitoring in Brazil are Black. It is no wonder that surveillance seems to work differently in the global North and South. Counter-surveillance must take into account how social control of movements works—not just repressing activists, but changing the terrain upon which they operate, and transforming the most immediate struggles they must confront in order to succeed.

This chapter has briefly analysed the rise of the securitization of protests in Latin-America to criminalize dissent. I have stated how the dynamics of southern movements—with similar causes, such as racism—still differ from the Global North. In this context, I have highlighted the Brazilian Military Police because its "hard" techniques of repression have gained attention in the shift of its deployment of force. In the last few months, strategies of counter-surveillance collectives such as "cop watching" have gained relevance in social movements that fight human rights abuse. Some challenges for the future include how activists will cope with the consequences of datafication and violence in collective action.

11 Center for Global Health Science and Security, 'Guidance on COVID-19 and Protests', Georgetown University, https://ghss.georgetown.edu/covid19-protests/.

12 Mike King, *When Riot Cops Are Not Enough: The Policing and Repression of Occupy Oakland*, Newark and London: Rutgers University Press, 2017.

13 Matthew Guariglia, 'IBM, Amazon Agree to Step Back From Face Recognition. Where Is Microsoft?', *Electronic Frontier Foundation*, 10 June 2020, https://www.eff.org/deeplinks/2020/06/ibm-amazon-end-and-pause-fr-programs-where-microsoft.

References

'Coronavirus Update (Live)', *Worldometer*, https://www.worldometers.info/coronavirus/#countries, accessed 22 October 2020.

'Brazil 2010 Census Shows Changing Race Balance', *BBC News*, 17 November 2011, https://www.bbc.com/news/world-latin-america-15766840.

'Mexico's 1968 Massacre: What Really Happened?', *NPR*, 1 December 2008, https://www.npr.org/templates/story/story.php?storyId=97546687.

'Not from Gunshots, Covid, or Hunger! Black People Want to Live!' Favelas Take Streets to Fight Racism', *RioOnWatch*, 8 June 2020, https://www.rioonwatch.org/?p=60105>.

'Police Killings in the State of Rio de Janeiro Are at a 20-Year High', *The Economist*, 3 September 2019, https://www.economist.com/graphic-detail/2019/09/03/police-killings-in-the-state-of-rio-de-janeiro-are-at-a-20-year-high.

@PMERJ, 'Fique atento (a) Não leve álcool líquido para nenhuma manifestação. Só serão permitidos frascos de até 50 ml de álcool em gel. Conte com a #PolíciaMilitar. Juntos somos muito mais fortes!! #ServireProteger', Twitter post, 6 June 2020, https://twitter.com/PMERJ/status/1269329336311648257?ref_src=twsrc%5Etfw.

Amparo, Thiago. 'Why America's Protests Resonate So Deeply in Brazil', *Americas Quarterly*, 8 June 2020, https://www.americasquarterly.org/article/why-americas-protests-resonate-so-deeply-in-brazil/.

Center for Global Health Science and Security, 'Guidance on COVID-19 and Protests', Georgetown University, Georgetown University, https://ghss.georgetown.edu/covid19-protests/.

Guariglia, Matthew. 'IBM, Amazon Agree to Step Back From Face Recognition. Where Is Microsoft?', *Electronic Frontier Foundation*, 10 June 2020, https://www.eff.org/deeplinks/2020/06/ibm-amazon-end-and-pause-fr-programs-where-microsoft.

King, Mike. *When Riot Cops Are Not Enough: The Policing and Repression of Occupy Oakland*, Newark and London: Rutgers University Press, 2017.

Menezes, Palloma Valle. 'Monitorar, Negociar e Confrontar: As (Re)Definições Na Gestão Dos Ilegalismos Em Favelas 'Pacificadas', *Tempo Social* 30, 3, 2018: 191–216.

Milan, Stefania and Emiliano Treré. 'Big Data from the South(s): Beyond Data Universalism', *Television & New Media* 20, 4, 2019: 319–35.

45. RESCATAR LO COMÚN. REDES DE CUIDADOS EN ESPAÑA

IRENE ORTIZ

Children from precarious families have been more affected by the coronavirus pandemic because of their poor economic conditions. The organization of citizens through social movements has effectively drawn attention to the lack of public policies that serve the poorest families.

Estos tiempos de pandemia, por su excepcionalidad como acontecimiento, así como de las medidas que los diferentes gobiernos han debido tomar en nombre de salud pública, son tiempos difíciles para todos. Sin embargo, los menores que eran beneficiarios de las becas de comedor de la Comunidad de Madrid, capital de España, alrededor de 11.500 niños, han visto su condición todavía más precarizada. Estos niños percibían estas becas de comedor por la situación de vulnerabilidad en la que se encontraban sus familias, beneficiarias de la renta mínima de inserción, que consiste en una cuantía de entre 512,67 EUR al mes para núcleos familiares de dos personas y de 587,78 EUR para tres personas, con la posibilidad de llegar a un máximo de 950 EUR para todo el núcleo familiar.[1] Estos niños recibían a través de las becas de comedor, en sus centros de estudios, una comida sana al día. La Comunidad de Madrid rescindió los contratos que tenía con las empresas de catering en los centros escolares el 11 de marzo, y seis días después, el 17 de marzo, la presidenta de la comunidad, Isabel Díaz Ayuso, anunció que había firmado un nuevo convenio con las empresas de comida Telepizza y Rodilla. El menú aprobado para los más de 11.000 niños en situación de exclusión consiste en pizzas, hamburguesas, ensaladas y nuggets de pollo, por parte de Telepizza, y sándwiches, ensaladas y bocadillos acompañados de dos piezas de fruta a la semana, ofrecidos por Rodilla.

Además, los niños de familias en situación de vulnerabilidad económica se enfrentan a otro problema: la interrupción de su educación. Al suspenderse las clases presenciales en los colegios e institutos por el COVID-19, los niños y las niñas más vulnerables han sufrido serios problemas para continuar las clases que, desde entonces, son todas online. La falta de ordenadores o tablets, así como la conexión a internet ha mostrado cómo afecta la brecha tecnológica a los más vulnerables (un 3% de las familias con menores en España, según el Instituto Nacional de Estadística). De momento, la oenegé Save the Children ha tenido que atender a más de 1.500 familias para proporcionarles las herramientas necesarias para continuar con el curso.[2]

El confinamiento ha mostrado sin ambages la profundidad de los problemas a los que se enfrentan las familias más vulnerables en España. No es solo la privación material severa

1 Berta Ferrero, Lucía Franco and Fernando Peinado, 'Las Pizzas de Ayuso y Algunos Kilos de Más', *El País*, 3 May 2020, https://elpais.com/espana/madrid/2020-05-03/las-pizzas-de-ayuso-y-algunos-kilos-de-mas.html.

2 'Emergencia Coronavirus: 6.500 Familias en España sin Acceso a Alimentación Básica', Save The Children, https://www.savethechildren.es/atulado.

que se traduce en la imposibilidad de continuar con sus clases, sino también los problemas mentales derivados de la falta de espacio.[3] Según un informe de la oenegé Cáritas, 769 menores viven en una habitación en un piso compartido con su familia en la ciudad de Barcelona dada la imposibilidad de pagar un espacio más grande.[4] No es admisible que algo tan básico como la vivienda se deje en manos de especuladores que convierten al fondo de inversión Blackstone en el mayor casero de España, porque nunca antepondrán el derecho a la vivienda a sus beneficios económicos.

Según la Red Europea de Lucha contra la Pobreza y la Exclusión social, un 21,6% de la población en España se encuentra dentro de la tasa de riesgo de pobreza.[5] La crisis del coronavirus ha hecho visible la fragilidad de los niños de estas familias con escasos recursos económicos. Sin embargo, las familias, las asociaciones, las oenegés y las fundaciones llevan muchos años alertando de la precariedad en la que se encuentran más de 10.000.000 de personas en España, entre ellas el 30% de los niños del país. La pregunta que deberíamos hacernos es por qué se permite que los niños de familias pobres se alimenten con comida basura durante casi dos meses o por qué no ha sido una prioridad del gobierno garantizar la educación de los niños sin recursos.

Tejiendo Redes

Los movimientos vecinales, las asociaciones de padres y madres de los colegios, los diferentes movimientos sociales por la vivienda, así como varias oenegés, han creado redes de apoyo para las familias más vulnerables en estos momentos. Además del apoyo con material tecnológico por parte de Save the Children, algunas Asociaciones de Madres y Padres de Alumnos han querido colaborar donando ordenadores para los niños más vulnerables. También hemos visto cómo algunos vecinos han hecho turnos en los supermercados para solicitar la colaboración ciudadana para donar comida a los bancos de alimentos o cómo se han organizado redes para ir a hacer la compra a las personas que no podían salir de sus casas, entre los que debemos destacar la organización del Sindicato de Vendedores Ambulantes de Barcelona, que ha creado un banco de alimentos para las personas que se dedicaban a la venta ambulante y han visto su actividad interrumpida por las medidas adoptadas durante la cuarentena. Los vecinos voluntarios de Malasaña, Conde Duque y Chueca[6] han creado un banco de alimentos que, de momento, entrega comida a 55 familias a la semana.[7] Todos estos movimientos comparten una

3 Pau Rodríguez, 'Familias Numerosas Hacinadas en Habitaciones y Pisos Pequeños: "El Confinamiento Puede Ser un Infierno"', *El Diario*, 22 March 2020, https://www.eldiario.es/catalunya/Confinar-numerosa-hacinado-momentos-infierno_0_1007199384.html.

4 'VIII Informe FOESSA: La Exclusión Social se Enquista en una Sociedad Cada Vez Más Desvinculada', Cáritas, 12 June 2020, https://www.caritas.es/noticias/viii-informe-foessa-la-exclusion-social-se-enquista-en-una-sociedad-cada-vez-mas-desvinculada/.

5 European Anti Poverty Network, 'El Estado de la Pobreza Seguimiento del Indicador de Pobreza y Exclusión Social en España 2008-2018', October 2019, https://www.eapn.es/estadodepobreza/ARCHIVO/documentos/Informe_AROPE_2019_Resumen_Ejecutivo.pdf.

6 Haciendo Barrio, https://haciendobarrio.es/.

7 Alfonso Congostrina, 'Los Manteros Crean un Banco de Alimentos Para Sobrevivir Durante el Confinamiento', *El País*, 24 March 2020, https://elpais.com/espana/catalunya/2020-03-24/los-manteros-crean-un-banco-de-alimentos-para-sobrevivir-durante-el-confinamiento.html.

tónica común: el recurso de las soluciones tecnológicas para conseguir fines estrictamente sociales. Algunos movimientos que ya existían antes de la pandemia, como el Sindicato de Vendedores Ambulantes de Barcelona o el colectivo Malasaña Acompaña han adaptado sus actividades a las necesidades derivadas de la crisis sanitaria y las redes sociales han desempeñado un papel fundamental durante la crisis a la hora de difundir estas actividades y poder llegar a un mayor número de beneficiarios. Otras iniciativas, surgidas durante la pandemia, se han definido desde el inicio por su marcado carácter digital. Por ejemplo, el colectivo Efecto Llamada es un movimiento rigurosamente digital que está teniendo un impacto, de momento, en más 200 personas. Esta iniciativa ha aprovechado la cuarentena para conectar a través de Twitter a personas migrantes que quieran aprender castellano con voluntarios para conversar. De esta forma, a través de videollamadas, se da toda la libertad a las parejas participantes para ajustar sus horarios y participar de la forma que mejor les convenga. El uso de diferentes hashtags (#despensasolidaria, #RegularizacionYa o #HuelgaAlquileres) ha permitido lanzar campañas para solicitar ayuda, como el caso de los bancos de alimentos, pero también para demandar soluciones institucionales, como es el caso de #RegularizacionYa, que exige la regularización de las personas migrantes que, por su condición administrativa, se ven expulsados del sistema de derecho.

Es necesario poner de relieve que esta crisis sanitaria ha demostrado, una vez más, la importancia del cuidado de la vida desde lo comunitario. Las formas de lo común se han revelado en las diferentes iniciativas de cooperación que se han ido tejiendo en el cuidado de los otros durante la pandemia, curiosamente enmarcados en una época de distanciamiento social. La posibilidad de un mundo común se manifiesta en la existencia de estas redes que niegan la privatización de la existencia. Porque la pobreza de nuestras ciudades no nos puede ser indiferente, sigamos construyendo tejido social.

References

'VIII Informe FOESSA: La Exclusión Social se Enquista en una Sociedad Cada Vez Más Desvinculada', Cáritas, 12 June 2020, https://www.caritas.es/noticias/viii-informe-foessa-la-exclusion-social-se-enquista-en-una-sociedad-cada-vez-mas-desvinculada/.

'Emergencia Coronavirus: 6.500 Familias en España sin Acceso a Alimentación Básica', Save The Children, https://www.savethechildren.es/atulado.

Congostrina, Alfonso. 'Los Manteros Crean un Banco de Alimentos Para Sobrevivir Durante el Confinamiento', *El País*, 24 March 2020, https://elpais.com/espana/catalunya/2020-03-24/los-manteros-crean-un-banco-de-alimentos-para-sobrevivir-durante-el-confinamiento.html.

European Anti Poverty Network, 'El Estado de la Pobreza Seguimiento del Indicador de Pobreza y Exclusión Social en España 2008-2018', October 2019, https://www.eapn.es/estadodepobreza/ARCHIVO/documentos/Informe_AROPE_2019_Resumen_Ejecutivo.pdf.

Ferrero, Berta, Lucía Franco and Fernando Peinad. 'Las Pizzas de Ayuso y Algunos Kilos de Más', *El País*, 3 May 2020, https://elpais.com/espana/madrid/2020-05-03/las-pizzas-de-ayuso-y-algunos-kilos-de-mas.html.

Rodríguez, Pau. 'Familias Numerosas Hacinadas en Habitaciones y Pisos Pequeños: "El Confinamiento Puede Ser un Infierno"', *El Diario*, 22 March 2020, https://www.eldiario.es/catalunya/Confinar-numerosa-hacinado-momentos-infierno_0_1007199384.html.

46. COVID-19 IN ARGENTINA: WHEN THE MICRO-PRACTICES OF ACTIVISM FIT IN A WHATSAPP MESSAGE

RAQUEL TARULLO

Circles of friends, members of sports clubs, parent associations, and work colleagues in Argentina have started to provide food and clothing during the pandemic for thousands of families who live in poverty. These groups—neither social movements nor civic associations—use their WhatsApp contacts and network to promote their food drives to prepare meals that they deliver once a week. Parallel to this trend, teachers of schools with vulnerable student bodies find in WhatsApp a channel for communicating with families and accompanying students in what the government has called a "Pedagogical Continuity Plan"—as most students do not have access to the internet or technological devices. Teachers also use this platform for sharing useful information, such as state assistance payment calendars and the WhatsApp direct line for reporting gender or familiar violence, with students' families.

A Universal Platform

WhatsApp has become Argentina's best ally for activism since the national government established a severe lockdown on March 20. The platform is used by groups of people to organize themselves to prepare meals for poor families that COVID-19 has impacted. WhatsApp is the only channel that teachers of schools with vulnerable student bodies have, not only for interacting with their students' families, but also for being a communication bridge between the government and their students' families. The use of this platform in Argentina is almost universal, and more than 90% of the population use it to stay connected, share statuses, sell goods, and spread news. Currently, it is also used for performing micro repertoires of activism.

More than half of kids and teenagers live below the poverty line in Argentina. According to the last UNICEF report of COVID-19 effects in the country, that percentage will reach 58% by the end of this year. The national government has taken socio-economic measures to keep the situation under control, such as the *Ingreso Familiar de Emergencia* (Emergency Household Income), a state assistance for poor families, and zero interest rate loans for the self-employed with minimum or low income. Despite these efforts, most Argentines have been suffering through crises in recent years that have widened gaps greatly.

Half the country's workforce are employed in an informal economy, working under the table and surviving on changas—one-day jobs that allow for minimal daily sustenance. *Cartoneros*, who live from the sale of recycled garbage, are part of this vulnerable group. This precarious segment has been the most affected by the direct and indirect effects of the pandemic. Social movements and civil associations have warned that these people from the most vulnerable urban areas will be the most affected by COVID-19. *La Garganta Poderosa*, an NGO that has representation in many countries of Latin America, last week launched a social

media campaign #contagiásolidaridad ("#infectsolidarity") to promote collective awareness of the situation.

A Diffusional Space for the Urgency

Olla de Mujeres ("Saucepan of women") is a group formed by five girls, only two of whom knew each other before. They decided to come together after exchanging messages through WhatsApp, and they used this channel to organize themselves. Since April, they have been using this channel to post a flyer in their statuses with information about the goods they need for preparing meals, along with their WhatsApp numbers. As they are very active and social, they use many WhatsApp groups to share this information. The members of these groups replicate their messages, building an informal network of solidarity. "*Olla de Mujeres* receive messages" from unknown people, offering supplies and help. As they have a special permit issued by the authorities and are required to drive around during lockdown, they collect donations all around the city. An NGO lends them its kitchen facilities for cooking. Every Saturday, they distribute the meals to a hundred families.

Fernando is 22 years old and has many friends through WhatsApp. He uses these contacts for food drives. He creates WhatsApp broadcast lists and his parents do the same, helping him to promote his campaign of food donations. Fernando and his lifelong friends cook every Saturday in the kitchen of the club where he plays volleyball. Last Saturday, they distributed more than 200 meals to people who went to a *merendero*—a food bank for low-income residents.

Schools and WhatsApp

School teachers have a fundamental place in this network for diffusions and emergencies. Schools are one of the institutions that have deeply transformed themselves to adapt to the current situation. The majority of schools that are settled in popular and deprived areas of the country offer breakfast, lunch, and afternoon snacks to their students. However, since on-site classes were suspended, teachers are now in charge of delivering a bag of food every other week—a measure that the national government has introduced to replace school meals and increase social assistance to these families. Along with the food provisions, teachers distribute school booklets for students to continue with their education, in order to guarantee the Pedagogical Continuity Plan. Formal class instruction also benefits from communication on WhatsApp. "Far from other schools that can work via Google Classroom, Zoom or other platforms, our unique way of communication with families and students is via WhatsApp. In our community, families do not have neither internet access nor computers. We give them these booklets, and then we try to continue communication using WhatsApp," says Jéssica, head of a school in the province of Buenos Aires.

However, the content of these booklets has received much criticism. The Mapuche's Confederation—the NGO that congregates native people settled in the south of the country—reported that they were described using discriminatory language as a vanished community. The National Ministry of Education then publicly apologized to the community.

Even though browsing the governmental site educ.ar—where students and/or their parents can download these booklets—is free of charge and contents can be downloaded without consuming mobile data, access is almost impossible for families with many kids and only one mobile phone per household. "Besides, most of these parents haven't finished their primary studies. Even if they had mobiles or computers, they wouldn't have the digital skills for accessing to these sites and downloading the pedagogical material," says Valeria, a social worker who uses WhatsApp to help women of impoverished communities by sending them information about State health assistance for them and their kids.

Nevertheless, communication over WhatsApp largely exceeds pedagogical goals. "At the beginning, it was for school purposes, but currently we use it to share useful information that runs in other social media, such as Facebook and Instagram, which families of our school may not have access to," explains Jéssica. In this group formed by teachers and families, schools share information about where they can get free food during the weekends, state assistance payment calendars, and dates food bags will be delivered. For instance, news of a WhatsApp direct line for reporting gender and domestic violence that was launched recently by the government were shared by teachers using WhatsApp groups. The pandemic in Argentina has revealed repertoires, dynamics and resistances of a "backstage activism" that uses WhatsApp for creating networks, organizing solidarities, helping kids with their education, spreading information, and asking for help. All of these micro practices are part of an activism that has become more vital during COVID-19.

47. UNDER OTHER SKIES: ASTRONOMY AS A TOOL TO FACE COVID-19-INDUCED ISOLATION IN THE INDIGENOUS VILLAGE OF ALDEIA VERDE, BRAZIL

ARIANNA CORTESI, CLAUDIA MAGNANI, ROBERTO ROMERO, PAULA C.P. SILVA, SUELI MAXAKALI, ISAEL MAXAKALI, ANA MARIA R. GOMES

Other Skies, a project funded by the International Astronomical Union (IAU) and the Office of Astronomy for Development (OAD), tackles these questions by collecting native narratives, chants, and myths about the sky that have never been written down and recorded before, in collaboration with researchers of the Indigenous Village Aldeia Verde in Brazil.[1] Soon after the project started, all Universities and the majority of services in Brazil shut down due to the rapid diffusion of the pandemic to all the federal states. To protect the indigenous people, the federal government declared the lockdown of the communities.[2] Even so, the first cases of COVID-19 appeared in many indigenous areas of the country, some of which, due to the absence of internet and phone connection, faced severe isolation. Aldeia Nova is one of the indigenous villages of the Maxakali people that suffered this destiny. To overcome the difficulties of communication, Other Skies was modified to grant internet connection to the village, support the independent recording and production of material on indigenous astronomy, and start a virtual gallery for sharing astronomical Maxakali knowledge and their perspective of the world.

Under Other Skies: Dialogues of Different Cosmological Paradigms

The project "Other Skies" focuses on ethno-astronomy, particularly the astronomical knowledge of the Maxakali people, an indigenous population of Brazil. The *Tikmũ'ũn* people, better known as Maxakali, live in one of the smallest indigenous lands in the State of Minas Gerais, Southeast Brazil, which has been completely devastated by the late colonization of the area. Despite the loss of their territory and the increasing contact with the National Society, the richness of the symbolic and ritual dimensions of their world has attracted great ethnographic interest in the last century. A deep look at the Maxakali experience in everyday life, such as in ritual sphere, immediately shows us the complexity of the Maxakali sociality and cosmology. All their knowledge and practices are made by performing shamanic rituals through which they interact with non-human agencies (the *yãmiyxop spirits*) that inhabit their territory, sharing feasts, chants, food, and other many practices with them. From the Maxakali perspective, we can see that there are no clear boundaries between knowledge and practice, between the ancient past and the present, or between everyday life and ritual life. Everything in their

1 Office of Astronomy for Development, http://www.astro4dev.org/.

2 Fundação Nacional do Índio, Boletim de Serviço da Funai--Número Edição Extra, 17 March 2020, http://www.funai.gov.br/arquivos/conteudo/cogedi/pdf/Boletim%20de%20Servicos/2020/Boletim%20Edicao%20Extra%20de%2017.03.2020.pdf.

experience, even astronomical knowledge, is inserted in a space-time continuum, which is activated by the constant power of memory and through the relationship with the multiple non-human subjectivities that inhabit it.

The idea of a dialog between scientific and indigenous knowledge about the sky was born from an encounter between one of the astronomers and two indigenous researchers and sciamans (leaders) of the community. The project will be conducted in Aldeia Nova, a Maxakali Village in Minas Gerais, and involves indigenous researchers, shamans, and elders of the village collaborating with anthropologists and educators of the Federal University of Minas Gerais (UFMG), and astronomers and educators of the University of São Paulo and Rio de Janeiro. The main objective is to collect and translate native narratives, chants and myths about the sky narrated by some of the elders that have never been written down and recorded before.[3]

IAU Office of Astronomy for Development

The project was funded by the Office of Astronomy for Development[4], a joint project of the International Astronomical Union[5] and the South African National Research Foundation (NRF) with the support of the Department of Science and Innovation (DSI). Its mission is to use astronomy to make the world a better place, reminding us that we earthlings[6] live in a pale blue dot orbiting one of the millions of billions of stars of this amazing and expanding universe.[7] Every year, the OAD funds several astronomy-related projects that promote sustainable development through astronomy.

The Potential Risk we Could not Imagine

One of the questions of the OAD selection form is "Describe potential risks and how you will address these?" The words we wrote to answer this question describe several obstacles, without one mention of the world pandemic. The Other Skies project was based on the idea of a dialogue, developed in workshops, meetings, encounters at the margins, that eventually never took place; neither seemed plausible in the nearest future. Yet, we couldn't give up! So we decided to restructure the entire project. To face this situation we altered the project schedule and budget, including the acquisition of an internet radio connection for Aldeia Nova, purchases of of computers and material to record and produce films and audio in the Aldeia. We also planned to create a virtual gallery, following the example of the exhibition *Mundos Indigenas* at Espaço do Conhecimento of the Federal University of Minas Gerais, in Belo Horizonte. These encounters left space for independence, and the audience became global.

3 '2020, Latin America + Caribbean, Under other skies: dialogues of different cosmological paradigms. Overview', *Office of Astronomy for Development*, 13 November 2019, http://www.astro4dev.org/blog/2019/11/13/overview-32/.

4 Office of Astronomy for Development, http://www.astro4dev.org/.

5 International Astronomical Union, https://www.iau.org.

6 'Exclusive interview with TED Prize-winner Jill Tarter of SETI', *TEDx*, 20 February 2009, https://blog.ted.com/an_interview_wi/.

7 Wikipedia contributors, 'Pale Blue Dot', https://en.wikipedia.org/wiki/Pale_Blue_Dot, accessed 27 October 2020.

The Virtual Gallery and the Space of Knowledge

The "Espaço do Conhecimento" (Space of knowledge) of UFMG launched the exhibition *Mundos Indígenas* in December 2019, where the public was presented with ways of living, knowing, and taking care from Maxakali, Pataxoop, Xakriabá, Yanomami and Ye'kwana peoples. It showed that "the history of Brazilian indigenous people is not only one." With the closure of museums in late March due to the COVID-19 pandemic, visits to the exhibition were suspended. The exhibition schedule was extended until July 2021, which expanded the possibility of visitation, after the reopening of the museums will be authorized. Meanwhile, Espaço do Conhecimento UFMG prepared a series of new videos to provide the public with the experience of a virtual visit to the exhibition through YouTube videos, launched on September 21. The six videos of the Virtual Visit to the *Mundos Indígenas* Exhibition are available to the public on the Espaço do Conhecimento UFMG channel on YouTube, alongside messages from indigenous curators and a video on the teheys of Dona Liça Pataxoop.[8]

A Virtual Re-birth

The project Other Skies, supported and inspired by the virtual exhibition *Mundos Indígenas*, will also create a virtual gallery to present Maxakali astronomy. The gallery will also include images taken from the Southern Photometric Local universe Survey collaboration (S-PLUS),[9] a Spanish-Brazilian collaboration, to map the southern sky in twelve colours. The virtual exhibition will exemplify the heterogeneity of astronomical knowledge. Through an intercultural approach, it will promote an understanding of the different astronomical paradigms, and push back against a superficial approach to science and social biodiversity. An example is the story *Star Women*[10]*,* already available in the exhibition Mundos Indigenous. Although COVID-19 marginalized even more Indigenous communities, it created the grounding for the diffusion of their knowledge worldwide. One day we will grab our telescopes and travel up north to the silent dark skies of the Aldeia Nova, to look with different eyes at the same infinite spaces.

References

'2020, Latin America + Caribbean, Under other skies: dialogues of different cosmological paradigms. Overview', Office of Astronomy for Development, 13 November 2019, http://www.astro4dev.org/blog/2019/11/13/overview-32/.

'Espaço do Conhecimento UFMG', YouTube, 23 May 2012, https://www.youtube.com/user/espacoufmg, accessed 27 October 2020.

'Exclusive interview with TED Prize-winner Jill Tarter of SETI', TEDx, 20 February 2009, https://blog.ted.com/an_interview_wi/.

'Visita Virtual à Exposição Mundos Indígenas | Maxakali - Yãy hã mĩy', YouTube, 21 September 2020, https://www.youtube.com/watch?v=6moah9s6HkI&feature=emb_logo.

8 'Espaço do Conhecimento UFMG', *YouTube*, 23 May 2012, https://www.youtube.com/user/espacoufmg, accessed 27 October 2020.

9 S-PLUS, 'Southern Photometric Local Universe Survey', http://www.splus.iag.usp.br/.

10 'Visita Virtual à Exposição Mundos Indígenas | Maxakali - Yãy hã mĩy', *YouTube*, 21 September 2020, https://www.youtube.com/watch?v=6moah9s6HkI&feature=emb_logo.

Fundação Nacional do Índio. Boletim de Serviço da Funai--Número Edição Extra, 17 March 2020, http://www.funai.gov.br/arquivos/conteudo/cogedi/pdf/Boletim%20de%20Servicos/2020/Boletim%20Edicao%20Extra%20de%2017.03.2020.pdf.

S-PLUS, 'Southern Photometric Local Universe Survey', http://www.splus.iag.usp.br/.

Wikipedia contributors, 'Pale Blue Dot', https://en.wikipedia.org/wiki/Pale_Blue_Dot, accessed 27 October 2020.

48. FIGHTING FOR FEMINIST COVID-19 FIGURES: A CALL FOR FEMINIST DATA VISUALIZATIONS DURING THE PANDEMIC

ERINNE PAISLEY

During the COVID-19 global pandemic, we have all had to make signification adjustments to our daily lives. One of these adjustments is reading more news, which contains an endless stream of data. It has been up to government bodies, health organizations, and journalists to sort through this data and create visuals for us to understand it.

These visualizations are crucial to help us sort through the constant noise of data that the pandemic has created. In this way, COVID-19 has created a trend of data visualization. However, even well-meaning COVID-19 images such as "flatten the curve" are not completely objective.[1] Data visualizations make visible certain perspectives and experiences, empowering and disempowering certain demographics. Historically, the experiences of womxn (especially womxn of colour) have not been included.[2]

D'Ignazio and Klein coined the term "feminist data visualizations" to describe data visualizations that empower women by revealing their perspectives and experiences.[3] Feminist data visualization is still not the mainstream way of sorting and presenting data. When it comes to data handling surrounding the COVID-19 pandemic, in March 2020 Wenham et al. explained that were, "not aware of any gender analysis of the outbreak by global health institutions or governments in affected countries or in preparedness phases."[4]

As of early April 2020, non-profits such as Plan International, as well as academic think tanks like the Centre for Feminist Foreign Policy, have begun to support womxn's rights during the COVID-19 pandemic.[5] Journalists like Helen Lewis of *The Atlantic*, with her popular article" The Coronavirus Is a Disaster for Feminism", have also highlighted the experiences of womxn. However, the lack of feminist data visualizations is also evident.[6]

---

1 Mark Wilson, 'The story behind 'flatten the curve,' the defining chart of the coronavirus', *Fast Company*, 13 March 2020, https://www.fastcompany.com/90476143/the-story-behind-flatten-the-curve-the-defining-chart-of-the-coronavirus.

2 "Womxn" is used as an alternative to the English word "women" to include non-cisgender women.

3 Catherine D'Ignazio and Lauren Klein, *Feminist Data Visualization*, Cambridge, MA: MIT Press, 2020.

4 Clare Wenham, Julia Smith and Rosemary Morgan, 'COVID-19: the gendered impacts of the outbreak', *The Lancet*, 6 March 2020, https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30526-2/fulltext.

5 Plan International, 'How Will COVID-19 Affect Girls and Young Women?', https://plan-international.org/emergencies/covid-19-faqs-girls-women; Centre for Feminist Foreign Policy, 'Feminist Resources on the Pandemic', https://centreforfeministforeignpolicy.org/feminist-resources-on-the-pandemic.

6 Helen Lewis, 'The Coronavirus Is a Disaster for Feminism', *The Atlantic*, 19 March 2020, https://www.theatlantic.com/international/archive/2020/03/feminism-womens-rights-coronavirus-covid19/608302/.

To explore the importance of feminist data visualizations amidst the COVID-19 pandemic, I look to two examples of women's perspectives and experiences during this time, exploring specifically the pandemic's impact on increased rates of domestic violence and decreased rates of women's education globally. I will also zoom in on examples of past feminist data visualizations of these two topics that could be used as jumping-off points for health institutions and governments to conduct similar work during COVID-19.

Increased Rates of Domestic Violence

Domestic violence, also referred to as "intimate partner violence (IPV)", is a "pattern of behaviors used by one partner to maintain power and control over another partner in an intimate relationship."[7] Domestic violence is the most prevalent type of violence against womxn and has been categorized by scholars as a "global pandemic" of its own.[8] According to the World Health Organization (WHO), 1 in 3 women worldwide has experienced physical or sexual intimate partner violence.[9]

This global public health problem has historically been under-addressed. This is because the "home" was regarded as "private" until the second wave of the feminist movement in the 1960s and 1970s.[10] During this feminist wave, slogans like "the personal is political," created by Carol Hanisch, encouraged accountability for womxn's rights both in the public and private realm.[11] This accountability included addressing issues such as the allocation of duties within the household, domestic violence, as well as other social and legal rights within womxn's "private" lives. During widespread public emergencies in the past, there has been a clear association between these events and rising rates of domestic abuse. For instance, after the New Zealand Canterbury earthquake in 2010, there was recorded 53% rise in domestic violence. Following Hurricane Katrina in the United States, domestic violence rates in the affected areas nearly doubled.[12]

Existing Feminist Data Visualization's of Domestic Violence

In 2009, researchers at Harvard University created a computer model that automatically detected at-risk patients for domestic abuse.[13] This program sorted through huge amounts

7 National Domestic Violence Hotline, 'Understand Relationship Abuse', https://www.thehotline.org/is-this-abuse/abuse-defined/.

8 Angelica Feldman, 'Cross-border domestic violence: the global pandemic and the call for uniform enforcement of civil protection orders', *Suffolk Transnational Law Review*, Winter 2017, 35+.

9 World Health Organization, 'Violence Against Women', 29 November 2017, https://www.who.int/news-room/fact-sheets/detail/violence-against-women.

10 Sally Ann Drucker, 'Betty Friedan: The Three Waves of Feminism', *Ohio Humanities*, 27 April 2018, www.ohiohumanities.org/betty-friedan-the-three-waves-of-feminism/.

11 Su-Lin Yu, 'Reclaiming the Personal: Personal Narratives of Third-Wave Feminists', *Women's Studies* 40, 7, 2011.

12 Debra Parkinson and C. Zara, 'The hidden disaster: Domestic violence in the aftermath of natural disaster', *Australian Journal of Emergency Management* 28.

13 Frederik Joelving, 'Data-Mining Medical Records Could Predict Domestic Violence', *Wired*, 30 September 2009, https://www.wired.com/2009/09/domestic-abuse-prediction/.

of medical data from US hospital emergency visits and created data visualizations referred to as "risk gel" for physicians to view. The bars represented the patient's medical history, specifically visits to a medical practitioner, colour coded based on the historical association of these injuries to domestic abuse. This visualization of data allowed for further prevention and attention to cases of domestic abuse by physicians. It was a form of feminist data visualization because it challenged the binary of one single visit to a doctor being marked as evidence of domestic abuse or not. Instead, it tracked multiple visits on a scale of injury to create a narrative evidence of abuse. This example of feminist data visualization shows how feminist data visualizations can reveal hidden narratives within existing data, and support womxn's rights.

At-Home Education Effect on Womxn

Most data visualizations of the COVID-19 pandemic assume that its effects will end with the eradication of the virus. Although this will be a significant turning point in the pandemic's trajectory, from a feminist perspective this is not a way to know when the effects of the virus will end. As of April 2020, over 91% of the world's student population has had to stay home from school (UNESCO, 2020). Following historical trends, the role of educating children in the home will fall mostly on womxn.[14] Traditionally, womxn are still those who worldwide take the primary responsibility for children. This increased responsibility in the home may lead to detrimental effects for womxn's own careers once pandemic-related quarantine has ended, as male counterparts will have advanced further during the quarantine period due to fewer home-school responsibilities.

Girls around the world face additional barriers to their educational, and eventually professional, progressions. Feminist data studies on the 2014 Ebola epidemic found that womxn still often have less decision-making power than men, which results in fewer female students returning to school once the institutions are re-opened.[15] Global studies have also shown that the longer a child is out of school, the more likely they are to not return. One of the main reasons that girls do not return to school is the increased rate of unwanted and transactional sex. A study by the United Nations Development Programme on the Ebola epidemic showed that teenage pregnancies in some communities of Sierra Leone went up by 65% because of school closures and increased sexual assault at home.[16]

Feminist Data Visualization: Female Education Rates

In 2018, American researchers experimented with data visualization as part of the annual February celebration of Black History.[17] This challenge to "#VisualizeDiversity" resulted in

14 David Evans, 'How Will COVID-19 Affect Women and Girls in Low- and Middle-Income Countries?', *Center for Global Development*, 16 March 2020, https://www.cgdev.org/blog/how-will-covid-19-affect-women-and-girls-low-and-middle-income-countries.

15 David Evans, 'How Will COVID-19 Affect Women and Girls in Low- and Middle-Income Countries?'

16 Ana Luiza Minardi, Susannah Hares and Lee Crawfurd, 'Containing the Epidemic: Should Schools Close for Coronavirus?', *Center for Global Development*, 28 February 2020, https://www.cgdev.org/blog/containing-epidemic-should-schools-close-coronavirus.

17 Cole Nussbaumer Knaflic, 'Introducing the 2018 #SWDchallenge', *Storytelling with Data*, 2 January

a feminist data visualization submitted to the project by a researcher named Sharon.[18] The visualization took the data from the United States' Department of Education fourth grade basic reading skills and re-organized it. The presentation of the data showed a hidden narrative: most minorities in America struggle to read at grade level and, more broadly, there are systemic barriers that prevent them from excelling. Sharon's data visualization showed the potential of feminist data visualizations to reveal a narrative that the initial sorting of data may not have focused on. By re-sorting the data to focus on minority status, the data went beyond categories of "literate" and "illiterate" and began to show the multiplicity of reasons for literacy gaps. In these ways, the data visualization acknowledged the historical exclusion of these marginalized groups in traditional hierarchical power structures.

Conclusions

The COVID-19 global pandemic has led to a larger consumption of data visualizations. It is clear that data visualizations are needed not just for an understanding of the crisis at hand, but to instruct the public on what actions are the most crucial to take. Most viral data visualizations of the pandemic to date have focused on the spread of the virus—including images such as "Flatten the Curve" and its accompanying #stayhome social media campaign. We must continue to question the objectivity of these viral data visualizations asking questions such as: When the curve ends, is this really the end of the pandemic's impact? Is #stayhome really helping everyone stay safe? So far, viral COVID-19 pandemic data visualizations have focused on a narrow perspective and largely exclude the experience and risks for womxn around the world. However, this also creates an opportunity for feminist data visualizations as they rise in popularity. The world is watching for data visualizations, asking how to help, and supporting one another. It's time to include womxn.

References

Centre for Feminist Foreign Policy. 'Feminist Resources on the Pandemic', https://centreforfeminist-foreignpolicy.org/feminist-resources-on-the-pandemic.

D'Ignazio, Catherine and Lauren Klein. *Feminist Data Visualization*, Cambridge, MA: MIT Press, 2020.

Evans, David. 'How Will COVID-19 Affect Women and Girls in Low- and Middle-Income Countries?', *Center for Global Development*, 16 March 2020, https://www.cgdev.org/blog/how-will-covid-19-affect-women-and-girls-low-and-middle-income-countries.

Feldman, Angelica. 'Cross-border domestic violence: the global pandemic and the call for uniform enforcement of civil protection orders', *Suffolk Transnational Law Review*, Winter 2017, 35+.

Joelving, Frederik. 'Data-Mining Medical Records Could Predict Domestic Violence', *Wired,* 30 September 2009, https://www.wired.com/2009/09/domestic-abuse-prediction/.

Lewis, Helen. 'The Coronavirus Is a Disaster for Feminism', *The Atlantic*, 19 March 2020, https://www.theatlantic.com/international/archive/2020/03/feminism-womens-rights-coronavirus-covid19/608302/.

2018, www.storytellingwithdata.com/blog/2018/1/2/introducing-the-2018-swdchallenge.

18 Cole Nussbaumer Knaflic, 'Education Visualized', *Storytelling with Data*, 15 February 2018, www.storytellingwithdata.com/blog/2018/2/9/education-visualized.

Minardi, Ana Luiza, Susannah Hares and Lee Crawfurd, 'Containing the Epidemic: Should Schools Close for Coronavirus?', *Center for Global Development*, 28 February 2020, https://www.cgdev.org/blog/containing-epidemic-should-schools-close-coronavirus.

National Domestic Violence Hotline, 'Understand Relationship Abuse', https://www.thehotline.org/is-this-abuse/abuse-defined/.

Nussbaumer Knaflic, Cole. 'Introducing the 2018 #SWDchallenge', *Storytelling with Data*, 2 January 2018, www.storytellingwithdata.com/blog/2018/1/2/introducing-the-2018-swdchallenge.

Nussbaumer Knaflic, Cole. 'Education Visualized', *Storytelling with Data*, 15 February 2018, www.storytellingwithdata.com/blog/2018/2/9/education-visualized.

Parkinson, Debra and C. Zara. 'The hidden disaster: Domestic violence in the aftermath of natural disaster', *Australian Journal of Emergency Management* 28: 28-35.

Plan International. 'How Will COVID-19 Affect Girls and Young Women?', https://plan-international.org/emergencies/covid-19-faqs-girls-women.

Sally Ann Drucker. 'Betty Friedan: The Three Waves of Feminism', *Ohio Humanities,* 27 April 2018, www.ohiohumanities.org/betty-friedan-the-three-waves-of-feminism/.

Wenham, Clare, Julia Smith and Rosemary Morgan. 'COVID-19: the gendered impacts of the outbreak', *The Lancet*, 6 March 2020, https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30526-2/fulltext.

Wilson, Mark. 'The Story Behind 'Flatten the Curve,' the Defining Chart of the Coronavirus', *Fast Company*, 13 March 2020, https://www.fastcompany.com/90476143/the-story-behind-flatten-the-curve-the-defining-chart-of-the-coronavirus.

World Health Organization. 'Violence Against Women', 29 November 2017, https://www.who.int/news-room/fact-sheets/detail/violence-against-women.

Yu, Su-Lin. 'Reclaiming the Personal: Personal Narratives of Third-Wave Feminists', *Women's Studies* 40, 7, 2011: 873-889.

BIOGRAPHIES

Thomas Aureliani earned his PhD in Studies on Organized Crime at the University of Milan, Italy. His thesis focuses on the social mobilization of the relatives of missing persons in Mexico. His research interests include organized crime, civil resistance against violence, social movements and human rights. He is a member of the Monitoring Center on Organized Crime at the University of Milan, and a member of the Siracusa International Institute for Criminal Justice and Human Rights.

Anat Ben-David is Senior Lecturer in the department of Sociology, Political Science and Communication at the Open University of Israel.

Anna Berti Suman is a NWO (Dutch Research Council) Rubicon post-doctoral researcher at the Tilburg Institute for Law, Technology, and Society, seconded at the European Commission Joint Research Centre. Anna investigates the potential of Citizen Sensing for environmental litigation and mediation (http://sensingforjustice.webnode.it/). She obtained her PhD from Tilburg University with a project aimed at investigating the policy uptake of grassroots-driven Citizen Sensing. Anna has a background in Law from the University of Bologna and Transnational Law from the University of Geneva. Her specializations are International and European Environmental Law, Health Law, Technology, and Participation Studies. She tweets at @Abesuman.

Claudio Agosti is a technologist, free software developer, and a research associate of the DATACTIVE project at the University of Amsterdam. Formerly, he was a digital security trainer and a developer of Global Leaks (https://globaleaks.org). Since 2016 he is lead Developer and Project Leader of Tracking Exposed (https://tracking.exposed). Claudio works to build a worldwide community to enable connected citizens to audit social media platforms and critically think about new forms of digital power.

Luiza Bialasiewicz is a political geographer and Professor of European Governance at the University of Amsterdam, where she also acts as co-director of the Amsterdam Centre for European Studies. Since 2013, she has been a permanent Visiting Professor at the College of Europe, Natolin, where she teaches European Geopolitics. Her research focuses on the geopolitics of European border and migration management, and on EU foreign policy and external action more broadly. She is co-editor of the journal *Environment and Planning C: Politics and Space*, an international journal of critical and heterodox research into the relations between the political and the spatial.

Nicola Bidwell is an adjunct professor at the International University of Management, Namibia, and a researcher at University College Cork, Ireland. She has applied her expertise in community-based, action research for technology design in the Global South for the past 15 years, and catalysed thought about indigenous-led digital design and decolonality. Nic is an associate editor for the journal *AI & Society: Knowledge, Culture and Communication*.

Tiziano Bonini is Associate Professor in Sociology of Media and Culture at the Department of Social, Political, and Cognitive Sciences at the University of Siena, Italy. He teaches Sociology of Communication (MA), Mass Media, Digital Culture and Society (BA), and Big Data and Society (BA). His research interests include the political economy of the media, platform studies, media production studies, and digital cultures.

Olga Bronnikova has a PhD in Geography and is Associate Professor at Université Grenoble Alpes and member of the research project ResisTIC (Net resisters - Criticizing and escaping digital coercion in Russia, https://www.resistic.fr/en/), funded by the French National Agency for Research.

Jelke Bosma is a PhD candidate in the Department of Media Studies, University of Amsterdam. His research is part of the project Platform Labor, funded by the European Research Council, which investigates dynamics of value on Airbnb. He has a background in Urban Studies and his research interests include platform urbanism, housing and urban theory. He tweets at @ jelkejelke.

Diego Cerna Aragon is a graduate student in Comparative Media Studies at the Massachusetts Institute of Technology, United States. At MIT he also worked as a research assistant in the Global Media Technologies and Cultures Lab.

Herkulaas Michael Combrink is a medical biological scientist with more than six years data science experience with "Big Data" of institutional databases. Over the past seven years, he has been active in both healthcare and education. Herkulaas has won several awards for his work in Data Science, Data management and Healthcare. During the COVID-19 outbreak in the Free State, he has been seconded to assist the Free State Department of Health in data science and surveillance support. Additionally, Herkulaas is a PhD candidate in computer science at the University of Pretoria, South Africa.

Julián Cordoba Pivotto is currently pursuing a Political Science BA at the Catholic University of Córdoba in Córdoba, Argentina. He is a volunteer at the Center for the Implementation of Public Policies Promoting Equity and Growth and intermittently writes about comparative politics and federalism. He tweets at @jucopiv.

Donna Cormack (Kāi Tahu, Kāto Mamoe) is a teacher and researcher with joint positions at Te Kupenga Hauora Māori, University of Auckland and Te Rōpū Rangahau Hauora a Eru Pomare, University of Otago, Aotearoa. Her work focuses on Māori health, racism, and Māori data sovereignty. She is a member of Te Mana Raraunga (Māori Data Sovereignty Network) and Te Rōpū Whakakaupapa Urutā (National Māori Pandemic Group). She is committed to critical, decolonial research practices and approaches that support Māori self-determination.

Arianna Cortesi holds a PhD in astronomy and is currently a post-doc at the Observatory of Valongo in Rio de de Janeiro, Brazil. In the last several years, she has been part of several outreach projects that combine art, music, and astronomy.

Angela Daly/Aingeal Ní Dhálaigh is Senior Lecturer in Law & Technology and Co-Director of the Strathclyde Centre for Internet Law & Policy at the University of Strathclyde/Oilthigh Shrath Chluaidh in Scotland/Alba. She is co-editor of the open access *Good Data* book published by the Institute of Network Cultures in 2019. She has been advising the Scottish Government/Riaghaltas na h-Alba as a member of its COVID-19 Data Taskforce and board member of Research Data Scotland, while also pushing for more transparency about, and human rights protections for, data the Scottish Government is collecting. She tweets at @nidhalaigh.

Françoise Daucé is Professor at The School of Advanced Studies in the Social Sciences, Paris, and Director of the Center for Russian, Caucasian and East-European Studies. She coordinates the research project ResisTIC (Net resisters - Criticizing and escaping digital coercion in Russia - https://www.resistic.fr/en/), funded by the French National Agency for Research (2018-2021). You can find Françoise on the web at https://www.cercec.fr/membre/francoise-dauce/.

Soumyo Das is a doctoral student at Emlyon Business School, France. His research interests include Information Systems & Organisational Change, Critical Management Studies, and communication technology for development (ICT4D). He was formerly associated with the Center for IT & Public Policy, IIIT Bangalore, as a Research Scholar. He tweets at @soumyoin.

Philip Di Salvo is a post-doc and lecturer at the Media and Journalism Institute of Università della Svizzera italiana in Lugano, Switzerland. His areas of research include leaks, the relationship between journalism, hacking, and internet surveillance. His latest books are *Leaks. Whistleblowing e hacking nell'età senza segreti* (LUISS University Press, 2019) and *Digital Whistleblowing Platforms in Journalism. Encrypting Leaks* (Palgrave Macmillan, 2020). He tweets at @philipdisalvo

Niels van Doorn is Assistant Professor of New Media & Digital Culture at the University of Amsterdam. He is also the Principal Investigator of the European Research Council-funded *Platform Labor* research project (2018-2023). His current work focuses on the platformization of labor and social reproduction in post-welfare societies.

Alexandra Elliott grew up in Sydney, Australia before moving to England to complete her BA degree at Warwick University. She is currently pursuing a Research Masters in Media Studies at the University of Amsterdam. Through this course, she became involved with the DATACTIVE project and the Big Data from the South Research Initiative.

Ksenia Ermoshina is a Russian-born researcher, blogger, and Internet Freedom activist who works at the intersection of STS, surveillance studies, usable security, and political science. She is Associate Research Professor at CNRS, Centre for Internet and Society, and formerly associated with the Citizen Lab, University of Toronto. She works as the UX-designer at the Delta.Chat project, a decentralized messaging app. Ksenia is a member of the ANR-funded ResisTIC research project and co-chair of the Emerging Scholars Network of the International Association of Media and Communication Research.

Marta Espuny is a digital humanist and researcher committed to the critical and sociopolitical analysis of digital spaces through Social Network Analysis. Their research focuses on the intersection between technology and social change, particularly platform politics and the emergence and coordination of resistance movements online. They tweet at @martaespuny.

Maria Faust received her MA in Communication/Media Studies and Culture Studies, and is a doctoral candidate at Leipzig University, Germany, Research Associate at TU Chemnitz, and Lecturer at TU Berlin. In 2014, she was a Visiting Scholar at Renmin University, Popular Republic of China. In 2016, her works were recognized with a Best Paper Award at the International Association for the Development of the Information Society conference. She publishes on digital media, authoritarian contexts, temporal change, de-Westernization, China, BRICS, the Global South(s), theory-building and visual culture(s). She tweets at @_Maria_Faust_.

Peter Füssy is a journalist trying to explore digital media in-depth, from everyday practices to the unexpected consequences of a highly connected environment. With a BA in Social Communication and another in Philosophy, for more than ten years he worked as reporter and editor for digital outlets in Brazil. He moved to the Netherlands to graduate from the Research Masters in Media Studies at the University of Amsterdam, where he was a research assistant within the DATACTIVE project. He seldom tweets at @pfussy.

Nicolás Fuster holds a BA in Politics and International Relations from Sapienza University of Rome in Italy and is pursuing his MA in Politics at the University of Amsterdam, while writing a thesis on voters of populist parties in Argentina. He intermittently writes for Argentine and Spanish newspapers. He tweets at @mellamonicolas.

Alex Gekker is Assistant Professor in New Media and Digital Culture at the University of Amsterdam. He writes about how sociotechnical systems are designed to influence users, and his research touches upon maps and surveillance, quantification, the datafication of society, the experience economy, and interface critique. He has co-edited two Open Access books, *Time for Mapping: Cartographic Temporalities* (Manchester University Press, 2018) and *Playful Mapping in the Digital Age* (Institute of Network Cultures, 2016). In the past he has worked in a variety of media positions, as journalist, editor, and spokesperson.

Ana Maria R. Gomes received her PhD in Education at University of Bologna, Italy. She was a post-doc at the National Museum of Rio de Janeiro, Brazil, and at the University of St. Andrews, Scotland. Currently, she is Professor at the Faculty of Education, Universidade Federal de Minas Gerais, Brazil, in the PhD program Education Program for Knowledge and Social Inclusion. She is also the coordinator of the Intercultural Training Course for Indigenous Educators from 2008 to 2011 and currently part of the teaching team on Socio-Environmental Knowledge (Social Sciences). She researches cultural practices and learning in different socio-cultural contexts, ethnography, cosmopolitics, and sustainability.

Ana Guerra is an MA student at Universidade Federal de Minas Gerais, Brazil. She currently researches platform and algorithmic labor, with an emphasis on Uber's surge pricing and the experiences of Uber drivers. She tweets at @anagvguerra.

Arne Hintz is Reader at Cardiff University's School of Journalism, Media and Culture and Co-Director of its Data Justice Lab. His research focuses on digital citizenship and the future of democracy and participation in the age of datafication. He is Co-Chair of the Global Media Policy Working Group of the International Association for Media and Communication Research and co-author of *Digital Citizenship in a Datafied Society* (Polity, 2019).

Hossein Kermani, PhD in Social Communication Science (University of Tehran, Iran), studies social media, digital repression, computational propaganda, and political activism in Iran. His research mainly revolves around the discursive power of social media in making meaning, shaping practices, changing the microphysics of power and playing with the political, cultural and social structures in Iran. His first book, entitled *The studies of Iranian users on social media,* has been published in November 2020. He tweets at @Hossein_Kermani.

Shyam Krishna is a Doctoral Candidate in the School of Business and Management at Royal Holloway, University of London, and contributes to The Digital Organisation and Society Research Centre (https://dosrhul.org). He studies the social justice impact of surveillance and datafication. He uses auto-ethnographic and ethnographic methodologies to research digital identities in India, the practices within the "gig economy," and their overlap. He has a background in electronic and communication engineering, and holds MAs in both management and ICT4D. He tweets at @digiflaneur.

Tahu Kukutai (Ngāti Tiipa, Ngāti Kinohaku, Te Aupōuri) is Professor of Demography at the National Institute of Demographic and Economic Analysis, Aotearoa New Zealand. Tahu specialises in Māori and indigenous demographic research, and has written extensively on issues of Māori population change, official statistics, and ethnic and racial classification. Tahu is a founding member of the Māori Data Sovereignty Network Te Mana Raraunga and the Global Indigenous Data Alliance. She has co-edited *Indigenous data sovereignty: Toward an agenda* (ANU Press, 2016) and *Indigenous data sovereignty and policy* (Routledge, 2020). She was previously a journalist.

Justin Lau is a research assistant at the Citizen Lab and a student in the Munk School of Global Affairs & Public Policy's Master of Global Affairs program, University of Toronto in Toronto, Canada.

Yoren Lausberg is a PhD candidate working on the project *Processing Citizenship* at the University of Bologna, Italy. For this project, he studies how people on the move are classified and captured in various registries and databases of national authorities and organizations. Through ethnographic engagements and content analyses of various registries, he aims to highlight the post-colonial dynamics of migration management in the European Union, and how Europe is maintained in light of its ongoing "crises." He tweets at @YJatoch.

Joan Lopéz is a researcher in privacy and public policy at the Fundacion Karisma, a Colombian civil society organization that promotes human rights and social justice in digital environments. He is a historian with an MA in sociology from Bielefeld University, Germany.

Sol Luca de Tena has over a decade of experience in strategic project management within technology development, capacity building, social impact, and policy, with a focus on utilising technologies to address environmental and social challenges. She is currently the acting CEO of Zenzeleni Networks Not for Profit company, supporting the operation and seeding of community networks in rural communities in South Africa. She also leads various projects which seek to address the digital divide in a human centre approach, and collaborates on various working groups and forums on Community Networks in Africa and around the world.

Larissa G. de Magalhães holds a PhD in Political Science from the University of Campinas, Brazil. She is a researcher and consultant in public policy, governance and open data. She is also a post-doc researcher at the CyberBRICS program of the Faculty of Law of the Getúlio Vargas Foundation, where she researches internet access infrastructure, digital policies, innovation, and the impact of technology in the developing countries and the Global South.

Claudia Magnani holds a degree in Anthropology of the University of Bologna, Italy, and a PhD in Education from the Federal University of Minas Gerais, Brazil. Currently she is a high school literature teacher and an independent researcher of Amerindian ethnography, gender studies, and female shamanism. She has been studying Maxakali traditions and culture since 2014.

Vukosi Marivate (https://dsfsi.github.io/) is the ABSA UP Chair of Data Science at the University of Pretoria. A large part of his work over the last few years has been in the intersection of Machine Learning and Natural Language Processing. Vukosi is interested in Data Science for Social Impact, and uses local challenges as a springboard for research. Vukosi is a co-founder of the Deep Learning Indaba, the largest Artificial Intelligence grassroots organisation on the African continent, aiming to strengthen African Machine Learning. He tweets at @vukosi.

José Otávio Martins is an undergraduate student at the Faculty of Administration at the Federal University of Rio de Janeiro, Brazil, and also a research intern in the PEP-ROHM Program (http://pep-rohm.facc.ufrj.br). He tweets at @joseotavioalm.

Silvia Masiero is an Associate Professor of Information Systems in the Department of Informatics, University of Oslo. Her research operates within the area of information and ICT4D, with a focus on the role of digital platforms in socio-economic development processes. Silvia is Secretary of the International Federation for Information Processing IFIP 9.4 Working Group on Implications of Information and Digital Technologies for Development, a member of the Association for Information Systems, and a member of the Editorial Board at *Information Technology for Development*.

Isael Maxakali is a filmmaker and visual artist. He holds a BA in Indigenous studies from the Federal University of Minas Gerais, Brazil. In his films, he reveals aspects of the traditional culture of the Maxakali—their stories, songs, ceremonies and rituals, as well as the choices that these people have been making to live in a modern world. Isael works with his wife and filmmaker Sueli Maxakali. Together, with the help of the elders and shamans in their village, they record many aspects of their culture and help preserve and disseminate the values of the Maxakali way of life.

Sueli Maxakali is a filmmaker, photographer and artist. A strong tikmũ'ũn leader, she made the films *When the yãmiy come to dance* (2011), *Kõnã'ãg xeka: Dilúvio Maxakali* (Pajé Filmes, 2016) and *Yãmiyhex: women-spirit*. She has participated in important film festivals throughout Brazil, such as Forumdoc.bh, Tiradentes Cinema Exhibition, Olhar de Cinema and Cine Kurumin, presenting and commenting on tikmũ'ũn audiovisual productions. Together with other women in her village, she produced a book of photographs, entitled koxukxop. Sueli is also an indigenous teacher and researcher, teaching, singing, and translating songs and stories of the yãmĩyxop.

Kinoko Merini is a PhD candidate currently living in The Netherlands. She holds an MA in Media & Communication from Goldsmiths, University of London. Following this MA, she obtained a Research Master in New Media and Digital Culture at University of Amsterdam.

Stefania Milan (stefaniamilan.net) is Associate Professor of New Media and Digital Culture at University of Amsterdam and Faculty Associate at the Berkman Klein Center for Internet & Society, Harvard University. Her work explores the interplay between digital technology, activism, and governance. Stefania is Principal Investigator of the DATACTIVE project, funded by the European Research Council. In 2017, she co-founded the Big Data from the South Research Initiative, investigating the impact of datafication on the disempowered. Stefania is the author of *Social Movements and Their Technologies: Wiring Social Change* (Palgrave Macmillan, 2013/2016) and co-author of *Media/Society* (Sage, 2011). She tweets at @annliffey.

Eva Mos is a PhD candidate working in the Platform Labor project at the University of Amsterdam. With a BA and MA in Sociology, Eva traces and studies intersections between welfare state transformation and the platform economy. She does so through ethnographic study of *post-welfare platforms* operating in Amsterdam and Berlin. She tweets at @EvaMos5.

Oarabile Mudongo is a technologist and an Artificial Intelligence Policy Researcher, and a Media Democracy Fund / Ford Foundation Technology Exchange (Tx) Fellow. He works with Research ICT Africa as a Research fellow on the Africa AI Policy Project mapping Artificial Intelligence usage and associated governance issues affecting the African continent. He holds a Bachelor's degree (Hon) in Computing, and is studying towards his Masters (MA) in ICT Policy and Regulation. His work intersects between technology, society and public policy. He tweets at @o_mudongo.

Francesca Musiani (https://cis.cnrs.fr/francesca-musiani/) is Associate Research Professor at the French National Center for Scientific Research and Deputy Director of its Center for Internet and Society. She is an associate researcher at the Center for the Sociology of Innovation (i3/MINES ParisTech) and a Global Fellow at the Internet Governance Lab, American University in Washington, DC. She is a member of the research project ResisTIC (Net resisters - Criticizing and escaping digital coercion in Russia), funded by the French National Agency for Research. She tweets at @franmusiani.

Elaine Nsoesie is an Assistant Professor at the Boston University School of Public Health. She has a PhD in Computational Epidemiology, an MS in Statistics, and a BS in Mathematics. Her research is focused on the use of digital data and technology to improve health in global communities. Her work has also addressed bias in digital data. She is on the advisory boards of Data Science Africa and Data Science Nigeria. She is also the founder of Rethé (rethe.org), an initiative that provides scientific writing tools and resources to student communities in Africa to increase representation in scientific publications.

Adriaan Odendaal is a content writer and web designer from Cape Town, South Africa. He is co-founder of the Rotterdam-based research & design studio internet teapot (https://internetteapot.com). He currently works for an open-source start-up in Amsterdam, as well as a podcasting company from Johannesburg, South Africa. He holds a BA in Visual Studies and Sociology and an MA in Media Arts Cultures. He has a keen interest in critical and creative coding as well as digital rights. Most recently, he led the production of the *Kill Switch* podcast for Access Now as part of their #KeepItOn campaign fighting internet shutdowns.

Niels ten Oever is a post-doctoral researcher at the University of Amsterdam (The Netherlands) and Texas A&M University (USA), associated also with the Centro de Tecnologia e Sociedade at the Fundação Getúlio Vargas, Brazil. His research focuses on how norms such as human rights get inscribed, resisted, and subverted in the Internet infrastructure through transnational governance. Previously, Niels has worked as Head of Digital for ARTICLE19 and served as programme coordinator for Free Press Unlimited. He holds a cum laude MA in Philosophy and a PhD in Media Studies from the University of Amsterdam. He sometimes maintains his website at https://nielstenoever.net. He tweets at @nielstenoever.

Irene Ortiz Gala holds a PhD in Philosophy of the Universidad Autónoma de Madrid, Spain, and a MA in Criticism and Philosophical Argumentation. She is a member of the research group 'Genealogías del pensamiento contemporáneo' at the Universidad Autónoma de Madrid. She is interested in biopolitics and Italian Thought.

Bella Ostromooukhova holds a PhD in the Social Sciences, and is Associate Professor of Russian studies at Sorbonne Université in Paris, France. She is a member of the research project ResisTIC (Net resisters - criticizing and escaping digital coercion in Russia), funded by the French National Agency for Research.

Erinne Paisley is a Research Media MA student at the University of Amsterdam. Prior, she completed her BA in Peace, Conflict and Justice/Book and Media Studies at the University of Toronto, Canada. She is the author of three books on youth social media activism for Orca Book Publishing.

Annalisa Pelizza is Professor of Science and Technology Studies, and chair in Sociology of Communication, at the University of Bologna, Italy. Prior, she was Associate Professor at the Science, Technology and Policy Studies department, University of Twente (The Netherlands), where she is now Visiting Professor. Her interests are the sociotechnical aspects of data infrastructures (including ontologies and interoperability); ethnographic, digital and mixed

methods; governance of and by technology; data infrastructures, populations, institutions; and network cultures. She has received international and European Commission excellence science grants and currently leads the Processing Citizenship research group, funded by the European Research Council. She tweets at @Nisa00.

Marie-Catherine Petersmann is a Postdoctoral Research Fellow (SNF) at the Copernicus Institute of Sustainable Development at Utrecht University, The Netherlands. Her main research interests are legal theory, eco-philosophy, political ecology, and Anthropocene law. She is interested in exploring law's aesthetics in the Anthropocene by looking at the role performed by legal concepts and practices in generating greater care for, and relational sensibilities towards, the more-than-human world we inhabit. She holds a PhD in International Law from the European University Institute, Italy, and an MA from the Graduate Institute of International and Development Studies, Geneva, Switzerland. She tweets at @MariePetersmann.

Irene Poetranto is Senior Researcher at the Citizen Lab and a PhD Candidate at the University of Toronto's Department of Political Science in Toronto, Canada.

Preeti Raghunath is Assistant Professor at the Symbiosis Institute of Media and Communication in Pune, India. Her research and praxis have been in the realm of critical media policy studies in South Asia. She is the author of *Community Radio Policies in South Asia: A Deliberative Policy Ecology Approach* (Palgrave Macmillan, 2020). She serves as a Vice-Chair of the Global Media Policy Working Group of the International Association of Media and Communication Research. She tweets at @preetiraghunath.

Massimo Ragnedda (PhD) is a Senior Lecturer in Mass Communication at Northumbria University, United Kingdom, where he researches the digital divide and digital media. He is the co-vice chair of the Digital Divide Working Group of the International Association of Media and Communication Research, and co-convenor of the Northumbria Internet and Society Research Group. He has authored or edited thirteen books, and his research has appeared in numerous peer-reviewed journals and book chapters in English, Spanish, Italian, Portuguese, and Russian. He tweets at @massimoragnedda.

Ricardo Rohm (http://pep-rohm.facc.ufrj.br) is Associate Professor at the Faculty of Administration of the Federal University of Rio de Janeiro, Brazil. He is a psychologist, and holds an MA Public Administration and a PhD in Administration. Prior, he was a post-doc researcher in Digital Humanities. He is the founder and coordinator of the Research Program in Human Development, Transformational Leadership Training and Social Governance. He tweets at @RicardoRohm.

Roberto Romero is an ethnologist. He obtained a PhD in Social Anthropology at the National Museum and is part of the Núcleo de Antropologia Simétrica, Brazil. He has researched the Tikmũ'ũn (Maxakali) population since 2011. He is part of the association Filmes de Quintal and he is one of the organizers of forumdoc.bh, a festival of documentaries and ethnic movies of de Belo Horizonte. He served as Assistant Director of the lungometraggio 'Yãmĩyhex: as mulheres-espírito' (Sueli e Isael Maxakali, 2019).

Maria Laura Ruiu obtained her second PhD from Northumbria University, UK where she is Lecturer in Sociology. Her research interests fall into environmental and media sociology with specific focus on climate change communication, social capital, and digital media.

Javier Sánchez Monedero is a Research Associate at Cardiff's School of Journalism, Media and Culture and the Data Justice Lab in Cardiff, Wales. With a background in Computer Science, his current research aims to fill the knowledge gap between social and media researchers and technology as well as to perform technological auditing and design proposals in the intersection of intelligent information systems and social justice. He tweets at @javisamo.

Paula C. P. Silva is a designer and doctoral student in Education at the Federal University of Minas Gerais, Brazil. She has been developing ethno-design works and research among the Tikmũ'ũn since 2015. She is part of the Maxakali research group "Humm Yĩkopit (Asking the Earth)," of the Água Boa Territory, and of the "Study and Research Group on Indigenous Intercultural School Education" (GEPEEI). She has experience in graphic design projects in the areas of corporate internal communication, visual identity, and indigenous editorials.

María Soledad Segura is Professor at the Universidad Nacional de Córdoba and researcher at the Consejo Nacional de Investigaciones Científicas y Técnicas, Argentina. Her latest books are *De la resistencia a la incidencia: Derecho a la comunicación y sociedad civil en Argentina* (Ediciones UNGS, 2018) and *Estado, sociedad civil y políticas culturales* (co-edited with V. Prato, RGC Ediciones, 2018).

Raquel Tarullo holds a PhD in Social Sciences and Humanities from the Universidad Nacional de Quilmes, Argentina, and a MA in Communication, Culture and Society from Goldsmiths, University of London, United Kingdom. Currently, she is a lecturer at Universidad Nacional del Noroeste de la Provincia de Buenos Aires and Universidad de San Antonio de Areco, Argentina. She coordinates the research group Repertoires and Flows of Communication in Digital Spaces. She is currently a Visiting Research Fellow in the Sociology Department at Goldsmiths, University of London, UK. She tweets at @unflordeviaje.

Emiliano Treré is Senior Lecturer in Media Ecologies and Social Transformation in the School of Journalism, Media and Culture (JOMEC) at Cardiff University, United Kingdom. In 2011-2016, he was Associate Professor at the Autonomous University of Querétaro, Mexico. He is the author of *Hybrid Media Activism* (Routledge, 2019), winner of the Outstanding Book Award of the ICA Activism, Communication and Social Justice Interest Group. He is a member of the Data Justice Lab, the co-founder of the Big Data from the South Initiative, and the vice-chair of the Communication and Democracy Section of ECREA. He tweets at @EmilianoTrere.

Simone da Silva Ribeiro Gomes is Assistant Professor of Social Sciences at Universidade Federal de Pelotas (UFPel) in Pelotas-RS, Brazil. She coordinates the Laboratório de estudos sobre ação coletiva, movimentos e violência (LAMOV). She tweets at @sims_zg.

Teresa Villaseñor is a MSc student in Economic Development and International Cooperation at the Autonomous University of Puebla, Mexico. She is a feminist and a library scientist, and she is interested in how technology can affect the world.

Silvio Waisbord is Director and Professor in the School of Media and Public Affairs at the George Washington University, USA. His most recent books are C*ommunication: A Post-Discipline* and *The Communication Manifesto*, both published by Polity in 2019.

Karla Zavala Barreda holds an MA in Media Arts Cultures, and is a PhD student at University of Amsterdam in the Department of Media Studies. Her research focuses on software studies, interface criticism, game studies, algorithmic literacy, and critical design. She is interested in the intersection between software, design, and education. She tweets at @karlazavala.

Anna Zaytseva holds a PhD in Sociology. She is Associate Professor of Russian Studies at Université Toulouse 2 Jean Jaurès, France, and a member of the research project ResisTIC (Net resisters - Criticizing and escaping digital coercion in Russia), funded by the French National Agency for Research (ANR).

Nicolo Zingales is Professor of Information Law and Regulation, and coordinator of the E-Commerce research group at Fundação Getulio Vargas (FGV) Law School in Rio de Janeiro, Brazil. He is also a founding member of MyData Global—an organization promoting empowerment by improving the effectiveness of the right to informational self-determination—and coordinator of its Brazilian Hub. Fascinated by the interaction of law, technology, and markets, his research revolves around the roles and responsibilities of digital platforms and intermediaries in the online ecosystem.

Yiran Zhao lived in China for almost twenty years and then moved to Taiwan to pursue a Bachelor's degree. Currently, she is in the Netherlands as a Research Master student in Media Studies at the University of Amsterdam.