The Pandemic Visual Regime

Visuality and Performativity in the Covid-19 Crisis

Edited by Julia Ramírez-Blanco & Francesco Spampinato

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Fig. 1. Detail from Hieronymus Bosch, *Ship of Fools* (1490–1500)

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The Invisible Made Visible

Julia Ramírez-Blanco and Francesco Spampinato

Since the pandemic's beginning, the Covid-19 virus was referred to as an invisible enemy, at least invisible to the human eye. However, never before as during the pandemic were we more overwhelmed with images, whose accelerated circulation is also the result of increasing use of web applications and digital technologies employed to produce surrogates of activities traditionally conducted in presence. Exploring the role and functioning of images regarding the pandemic is fundamental to understanding its psychological and social effect. To do so, this book adopts the transdisciplinary lens of visual studies, borrowing tools also from contemporary art theory, performance studies, design, sociology, and media studies.

Together with visuality, a significant part is played by performativity. The central role of the human body as both victim and carrier of the virus has translated into the importance assigned to social distancing. Meanwhile, pandemic times have seen many initiatives of protest, solidarity, and community bonding developed to cope with the crisis and react to imposed forms of lockdown and quarantine. The pandemic also visualized human fragility and social inequalities because it affected more those with lower income and without health care, which

are linked to gender and racialization. These problems took on an enormous scale in populous countries such as Brazil and India, but they were also present in the Global North, including countries such as the United States.

Visuality and its relationships with the performative had such a significant role in the Covid-19 pandemic that we can even speak of the emergence of a "pandemic visual regime," a new way of seeing and representing the world under this global emergency. The concept of "visual regime"—or "scopic regime"—is based on the premise that power systems enact control through forms of visualization. From the invention of perspective in the Renaissance to Michel Foucault's references to the architectural model of the panopticon, "scopic regimes" produce what Foucault called "docile bodies," or else people indoctrinated to behave according to specific paradigms and regulations.[1] Since the advent of the neoliberal economy, pro-sumer technologies, and later the internet, the situation has mutated.

In 1992, the same year the World Wide Web was launched, Gilles Deleuze acknowledged the arrival of a new type of society, a "control society" based on data collection and surveillance.[2] Reality is increasingly managed through and reduced to codes. Through the internet, users think they are in control, but they are, in fact, increasingly manipulated and surveilled. In the early twenty-first century, South Korean-German philosopher Byung-Chul Han described ours as an "achievement society,"[3] where citizens have become entrepreneurs, bosses of themselves. However, their compulsory and compulsive excess of positivity and hyperactivity might lead to mental suffering

1   Michel Foucault, *Surveiller et punir: Naissance de la prison* (Paris: Gallimard, 1975); first translated into English as *Discipline and Punish: The Birth of the Prison,* trans. Alan Sheridan (New York: Pantheon, 1977).

2   Gilles Deleuze, "Postscript on the Societies of Control," *October* 59 (1992): 3–7.

3   Byung-Chul Han, *The Burnout Society* (Redwood City: Stanford University Press, 2010), 8.

and pathologies, such as depression, personality disorder, and burnout syndrome.

With the arrival of the Covid-19 pandemic, some dynamics at work in the "control society" and the "achievement society" underwent a process of acceleration. In a recent interview, Han argued:

> In the face of the pandemic, we are heading for a biopolitical surveillance regime. Not only in our communication but also in our bodies: our health will be subject to digital surveillance[. …] The virus is a mirror. It shows what society we live in. We live in a survival society that is ultimately based on fear of death […]. In our hysteria of survival, we completely forget what a good life is. For survival, we willingly sacrifice everything that makes life worth living: sociability, community and proximity.[4]

More than just a psychological reflection, the pandemic was also a mirror to very material inequalities in society, because it exposed those with lower income, bodily fragility, and less access to health care to a much more significant threat to survival. It also tested living conditions when imposing lockdowns on people who inhabited crowded houses and were subject to varied kinds of domestic and intrafamily violence. Thus, the same discourses and policies applied to very different contexts also became violent in themselves. The pandemic regime was a regime of visibility and invisibilities: much of it remained unspoken and, most of all, unseen. The fear of death of Covid-19, then, for some people, was less intimidating than other threats.

The evolution of society since the advent of prosumer technologies and the internet is marked by what W.J.T. Mitchell has

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4   Carmen Sigüenza and Esther Rebollo, "Byung-Chul Han: COVID-19 Has Reduced Us to a 'Society of Survival,'" *EUROACTIV,* May 25, 2020, https://www.euractiv.com/section/global-europe/interview/byung-chul-han-covid-19-has-reduced-us-to-a-society-of-survival/.

acknowledged as a shift from a text-based to a picture-based culture, a shift he called "pictorial turn," which is

> a postlinguistic, postsemiotic rediscovery of the picture as a complex interplay between visuality, apparatus, institutions, discourse, bodies, and figurality. It is the realization that spectatorship (the look, the gaze, the glance, the practices of observation, surveillance, and visual pleasure) may be as deep a problem as various forms of reading (decipherment, decoding, interpretation, etc.) and that visual experience or "visual literacy" might not be fully explicable on the model of textuality.[5]

The term "regime" usually refers to a government or ruling system in power, but it has been increasingly used to denote antidemocratic governments and dictatorships. The concept of the "pandemic visual regime" acknowledges the prominent role played by visuality during the Covid-19 pandemic, in general, and how pictures, more than ever, are now symptomatic of what Mitchell has called "a complex interplay between visuality, apparatus, institutions, discourse, bodies, and figurality."[6] However, the expression also carries an implicit negative connotation, that is, we are now inhabitants of what Han has called a "survival society," in which those in power employ specific images to provoke "the fear of death."[7]

A Double Twofold Viewpoint

This book addresses the role of visuality and performativity related to Covid-19 from a twofold viewpoint, considering issues of racialization, class, and gender. On the one hand, there are those ways of seeing and being imposed on citizens by power

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5   W.J.T. Mitchell, "The Pictorial Turn," in *Picture Theory: Essays on Verbal and Visual Representation* (Chicago: University of Chicago Press, 1994), 16.
6   Ibid.
7   Sigüenza and Rebollo, "Byung-Chul Han."

structures, notably corporations, governments, and media. These include infographics, urban signaling systems, and forms of biosurveillance, such as temperature-checking and facial recognition. On the other hand, the book analyzes those visual and performative responses developed globally by citizens, often collectively, to cope with the effects of epidemic-control measures, such as social distancing and domestic isolation, which many countries adopted. These are community practices, such as performances on balconies, speculative design projects, bottom-up forms of solidarity networks, and online and offline artistic interventions.

A crucial element for understanding this pandemic visual regime is the continuous shift between online and offline activities, proof of the central role digital technologies and the internet play in this new uncanny scenario. Issues of reality versus virtuality are not new. From the invention of perspective to photography, from television to the internet, every time a new technology for representation is introduced, the concept of reality as something objective, something that stands in front of our very own eyes, is put in danger. With the acceleration in the use of digital technologies during the pandemic, virtuality overcame "objective" reality. This is a framework in which various forms of state-enforced and citizen-created forms of visuality emerge and develop.

One of the paradoxes of the pandemic visual regime is that it is centered on something invisible to the naked human eye. This is why representations become so important. The virus has been represented in various ways, and some include scientific illustrations, which are adapted through graphic design or even caricatures. Anthropomorphized versions of the Covid-19 virus are also propagated as a humoristic outlet and as a way of understanding and emotionally processing it. The increased use of the virus emoji during the pandemic was meaningful for understanding our need to include the virus in our visual language. Meanwhile, some visual artists attempted to shape the elusive, an example being Luke Jerram's 23 cm glass sculptural

Fig. 1. Luke Jerram, Glass COVID-19 sculpture, 2020. Courtesy of the artist.

rendering of the virus, which makes it 2 million times larger than its actual size (fig. 1).

On the other hand, the visual languages for communicating complex information about the illness's propagation took the form of charts — static or interactive — web applications, diagrams, and various other types of infographics. Their rhetoric of objectivity did not include the emotions of populations affected by the illness. Also, the data were conveyed through pictorial and graphic configurations of symbols, colors, and visual elements, which are far from neutral; for example, how deploying contagion in red or blue makes a significant difference in generating fear. On the other hand, infographic literacy strongly influences how people experience these depictions. Thus, they can be read as either informative or threatening images, impossible to decipher through reason and thus appealing directly to emotion.

In opposition to infographics and their appearance of truth, we saw the proliferation of conspiracy theories about the virus's origins and even its very existence. Some of these narratives are

racist, such as the one according to which the disease is a Chinese "creation." Others speculated on geopolitical world-scaled plots involving corporations and linking it with the dissemination of internet-related digital technologies and broadband cellular networks, such as 5G. In particular contexts, there was also an antistate discourse linking "freedom" with a lack of restrictions. Their visual forms were crystalized through memes and manipulated images conveying narratives, which can be related to the creative use of the internet that was theorized as guerrilla communication in the 1990s and later appropriated by the so-called alt-right.

As many countries enforced long periods of lockdown and quarantine, the dichotomy between online and offline also turned into the dichotomy between the domestic and the public sphere. The home turned into the main space for living, working, studying, or conducting leisure activities, such as cooking, practicing yoga, or developing do-it-yourself projects, all broadcast on social media through Zoom and other apps. The need for physical contact was practiced on balconies, liminal spaces between the public and the private. Balconies turned into spaces for communication and community bonding, becoming the stage of flash mobs, film projections, hopeful banners, flags, coordinated applauses, spontaneous concerts, or dances. However, all these images tended to hide differences of class and gender and domestic violence, invisibilizing those cases in which the home scenario was anything but cozy.

As seen through balconies and windows, the public space constituted a place of desire for those at home, but it was also a locus of threat for those forced to go out to work or buy groceries. With the pandemic, homelessness became even more visible in the empty city. A case point was that of a Las Vegas parking lot turned into an improvised shelter in March 2020, with homeless people occupying specific spots in a grid drawn on the floor: a visualization of social distancing. Later, when citizens had the opportunity to repopulate the public sphere, they found a new set of norms, visualized by signs, which implied and, in some cases, enforced new behaviors and lifestyles. While

politicians were shaping controlled forms of behavior, architects and urban planners developed design projects based on social distancing criteria and buildings that took the existence of the illness as a premise. Either officially or illegally, public art, graffiti, and street performance took the street too, processing the collective trauma in real time.

All these phenomena can be considered threads of what constituted the pandemic visual regime, woven between the public and the private, online and offline, information and conspiracy theory, visibility and invisibility, generating different kinds of depictions both of the illness and of everyday life in times of dread. A myriad of citizen initiatives continually contested impositions of power in an endless conversation moving from top down to bottom up. Then, the concept of a pandemic visual regime included both the ways of seeing and being enacted by governments and hegemonic media and the grassroots responses to them. It thus constituted a complex system of images in perpetual tension and contradiction.

Visualities and Invisibilities

The contributors to this volume have been invited to address some of the most pressing issues of the pandemic visual regime. In Chapter 1, Nicholas Mirzoeff discusses the coincidental interweaving of the Covid-19 crisis with another revolutionary phenomenon, the advent of Black Lives Matter. Already known for discussing issues of visuality from an activist angle, Mirzoeff highlights the racist nature of public infrastructures in the United States or what he calls a "white seeing-space." According to Mirzoeff, the "immunopolitics" developed by the US government to cope with the pandemic emergency reinforced dynamics of separation, discrimination, and policing ingrained in a society built on its colonial past and slavery. He remarks how the role of police brutality and surveillance was central in racializing human life during the pandemic, reinforcing hierarchical conditions of white dominance over African American citizens and other minorities.

Dahlia Schweitzer, in Chapter 2, compares novels and movies with social and political responses to Covid-19 and other contagious diseases. She shows the influence of fiction on practical measures taken to manage the situation, one example being how some UK and US crisis-response teams referred to the film *World War Z* (2013) as a "study in the social effects of epidemics." Schweitzer exposes the processes of "othering" as the basis of the outbreak narrative and shows how, in film and literary culture and reality, this translates into racist violence and xenophobia. It also results in communities of those who have been infected versus of those who have not. Meanwhile, the pandemic made evident how economic inequalities dramatically affect access to treatment and quality of life in a situation that makes the planet's richest richer. Other fiction tropes, such as the idea of punishment or the fixation on visualizing the illness, are repeated in the "real" world.

Several dystopian design projects aimed at protecting and/or isolating users were developed during the Covid-19 pandemic, including masks, helmets, visors, wearable tech, and even body bubbles. These allowed avoiding actual contact with the surrounding space and other people who could be possible carriers of the virus. In Chapter 3, Francesco Spampinato explores the uncanny analogies between speculative design projects based on futuristic scenarios, on the one side, and practical design solutions developed to cope with actual risks of contamination, on the other. A brief history of wearable protections against "contagions" is outlined, from the black death to futurism, from World War I to the Cold War, from the evolution of medical masks to cybernetic bodies. Spampinato considers issues of vision and visuality, or how this new genre of "screens" reinforced psychological conditions of isolation, alienation, dread, and distrust.

Data visualizations and infographics play a major role in the pandemic visual regime. What better way to induce anxiety and fear and desensitize people than turning thousands of dead bodies into numbers, symbols, and colors diagrammed in charts? In Chapter 4, Anna Feigenbaum and Alexandra Alberda explore a new genre of grassroots data visualizations made by

comic artists and illustrators in response to the official charts produced and circulated by mainstream media. Inevitably, these counter-data visualizations propose metalinguistic reflections on the very role and mechanisms of the official narratives of the pandemic while at the same time humanizing data and showing alternative ways of processing the trauma and mourning. Tackling issues of storytelling in comic art in general, the discussion is based on acknowledging comics illustration's communication power and central role in an increasingly visual mediascape.

In Chapter 5, Manuel Olveira examines the emergence of a new paradigm linked to pandemic times and manifested through different forms: emergency responses (such as the transformation and construction of hospitals, and specific designs for structures adapted to the pandemic), expressions of altruism and solidarity (such as the design of 3D printable protections and medical materials, or organizing activities in balconies), and postconfinement devices (such as portable pedals for public bathrooms). Olveira also reflects on how the reimagining of objecthood and functionality raised attention to already existing and previously unnoticed elements of our daily lives, such as doorknobs or toilet paper rolls, which suddenly became scarce. Drawing on the experience of previous pandemics, such as the AIDS crisis, the projection on objects speaks of the desire for connection and hope.

A crucial role in the pandemic visual regime is played by surveillance, namely, strategies of data collection, developed by American internet companies such as Microsoft, Apple, Google, Facebook, and Amazon, and put at the service of health authorities and law enforcement. In Chapter 6, Ramón Reichert explores iconographies of body control based on AI mobile tracking and public CCTV systems. Of particular interest are the new forms of facial recognition based on cameras with integrated thermal scanners, such as those developed by the Chinese company SenseTime, and their alleged connections with social networks, including Facebook and TikTok. Reichert draws from ideas of disciplinary and control society to frame these new data visualization and collection practices as forms of

biosurveillance, a new panoptic aesthetic of containment developed in the name of immunity and community safety.

In Chapter 7, Marina Sitrin draws on her experience of editing *Pandemic Solidarity: Mutual Aid during the COVID 19 Crisis* (Pluto Press, 2021) as part of the Coletiva Sembrar, an international group of activists and writers, mostly women. Here, she explores the networks of mutual aid that emerged during the pandemic. These practices of care and solidarity follow horizontal and nonhierarchical structures and are read as forms of prefigurative politics that build a new world in the shell of the old one. Through the weaving of narrative with direct interviews, Sitrin gives voice to those involved in activities that, though compensating for government and NGO shortcomings, demonstrate other possible ways of providing for each other.

In Chapter 8, Julia Ramírez-Blanco reads the complex representations of the "natural" realm that have taken place during those times in which people felt further than ever from other forms of life, human or nonhuman. Confinement in many cities gave rise to empty streets and vacant buildings, creating images of uncanny beauty that can be perceived as a kind of "pandemic sublime." However, many people trapped at home became evermore nostalgic for an idealized nature, perceived through their computers and phones, which mediated in different fictionalized or direct ways with the nonhuman realm. Through videos, phone calls with nonhuman animals, or even a "back-to-the-land" movement after confinement, Ramírez-Blanco traces how the "pandemic sublime" led to the construction of what can be termed a "pandemic pastoral." She clarifies how, in its sentimental and nonideological dimensions, this imagery needs to be politicized if we want to respond to the next global emergency — present climate change and environmental destruction that led to the pandemic in the first place.

Sometimes it is about visualizing the invisible. On other occasions, it invisibilizes the obvious. Traditions such as science fiction are summoned in everyday imageries. The public and the private merge and are redefined and populated with new signs, iconographies, and objects. In this context, the public sphere

turns into a battlefield for different positions, and surveillance and the omnipresence of screens and technology become prevalent. In this moment of fear and uncertainty, a new iteration of the sublime adopts the forms of a beautiful, empty world, a world without us. In front of this last image, we are faced with the necessity of collectively imagining other kinds of futures for our shared planet. These are only possible lines of inquiry to understand the ways of seeing — and not seeing — of the pandemic *Zeitgeist.*

References

Deleuze, Gilles. "Postscript on the Societies of Control." *October* 59 (1992): 3–7. https://www.jstor.org/stable/778828.

Foucault, Michel. *Discipline and Punish: The Birth of the Prison.* Translated by Alan Sheridan. New York: Pantheon, 1977.

———. *Surveiller et punir: Naissance de la prison.* Paris: Gallimard, 1975.

Han, Byung-Chul. *The Burnout Society.* Stanford: Stanford University Press, 2010.

Mitchell, W.J.T. "The Pictorial Turn." In *Picture Theory: Essays on Verbal and Visual Representation,* 9–34. Chicago: University of Chicago Press, 1994.

Sigüenza, Carmen, and Esther Rebollo, "Byung-Chul Han: COVID-19 Has Reduced Us to a 'Society of Survival." *EUROACTIV,* May 25, 2020. https://www.euractiv.com/section/global-europe/interview/byung-chul-han-covid-19-has-reduced-us-to-a-society-of-survival/.

Pandemic Visuality: Immunopolitics, White Seeing-Space, and the Police

Nicholas Mirzoeff

The spatialized politics and practices of white seeing became starkly visible during the Covid-19 pandemic in the United States. In what follows, I offer a preliminary narrative of the intersection of the infrastructures of white seeing-space with the politics of immunity over the first year of the pandemic (March 2020 to March 2021). Anthropologist Brian Larkin defines "infrastructures" as "built networks that facilitate the flow of goods, people, or ideas and allow for their exchange over space."[1] This is the "roads, bridges and internet" sense of infrastructure that is offered by politicians. Larkin continues to suggest that infrastructures also "emerge out of and store within them forms of desire and fantasy […] the collective fantasy of society."[2] It is in this second sense that I consider whiteness to be a form of infrastructure, a set of material forms that connect,

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1   Brian Larkin, "The Politics and Poetics of Infrastructure," *Annual Review of Anthropology* 42 (2013): 328.
2   Ibid., 329.

distribute, enable, and store the set of desires and fantasies that make whiteness. In this sense, I think of white in its old sense as a verb, meaning "to make something white," which includes a specific connotation of racialization. The range of apparatuses that make white in the present-day United States extend from statues, monuments, museums, and flags; to vehicles such as pickup trucks and high-end suvs; and weapons such as semi-automatic rifles or handguns. In more systemic terms, making white extends from the infrastructures of culture, memory, and patriotism, to fossil-fuel extraction-based means of transportation and circulation, the spread of counterinsurgency over the past twenty years from elite military tactics in places such as Afghanistan and Iraq, and to vernacular politics. Infrastructure is often considered to be something kept out of sight, which only becomes noticed when it fails. That is not the case when it is producing racialization. In *The Wretched of the Earth,* Franz Fanon observed that "in the colonies the economic infrastructure is also a superstructure. The cause is effect: you are rich because you are white, you are white because you are rich."[3] In present-day South Africa, wealth and racialization are sufficiently interconnected that a person can become white or lose whiteness according to one's financial status with no relation to their personal appearance or ancestry.[4] The broader implication is that when the function of the apparatus is racializing whiteness, it is highly unstable, producing anxiety and anger as much as identification.

In 2020, these infrastructures of whiteness intersected with those of immunity as desire, fantasy, and material form. More precisely, the long-standing immunopolitics of settler colonial regimes became visible in the crisis of immunity caused by the

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3 Franz Fanon, *The Wretched of the Earth,* trans. Richard Philcox (New York: Grove Press, 2008), 34.

4 See Francis B. Nyamnjoh, *Insiders and Outsiders: Citizenship and Xeno-phobia in Contemporary Southern Africa* (Dakar and London: Codesria Books and Zed Books, 2006), and *#RhodesMustFall: Nibbling at Resilient Colonialism in South Africa* (Langaa: RPCIG, 2016), 59–112.

coronavirus.[5] In ancient Rome and subsequent imperial states modeled on Rome, "immunity" meant an exemption from service, obligation, or duty, derived from the classical Latin *immūnis*, "exempt from tribute, taxation, duties, or obligations." By extension, sovereign states have immunity from prosecution, as do their agents, such as the qualified immunity provided to police. From the seventeenth century on, immunity also took on the meaning of being resistant to disease or other dangerous agents. In the nineteenth century, it acquired the modern sense of biological immunity, via vaccination or prior exposure to disease.[6] Law, the state, the common, and disease combine to render "immunity as a matter which combines juridical and biological concepts of self and not-self."[7] Unsaid here is the extent to which settler colonialism centered on racialized means to distinguish self and not-self. It is clear that "one's immunity is in ontological relation with one's community and vice versa. Immunity, then, is always a question of how to manage the reliance of embodied self on its political contexts."[8] What are those politics? If, as Emily Martin has shown, the immune system is imagined as a fortress,[9] or, as Ed Cohen has it, as a system of defense,[10] it is a militarized colonial infrastructure. Like whiteness, immunity is spatialized in this imaginary. Space is the foundation of all colonial politics, forming "the raw material of sovereignty and of the violence it bears within it."[11] Such sovereignty deploys racial-colonial power through technologies of "racializing surveillance."[12] The resulting policed space is also

5   Ed Cohen, *A Body Worth Defending: Immunity, Biopolitics and the Apotheosis of the Modern Body* (Durham: Duke University Press, 2009).

6   Cohen, *A Body Worth Defending.*

7   Mark Davis et al., "Immunity, Biopolitics and Pandemics: Public and Individual Responses to the Threat to Life," *Body & Society* 22, no. 4 (2016): 131.

8   Ibid., 135.

9   Emily Martin, *Flexible Bodies: Tracking Immunity in American Culture — From the Days of Polio to the Age of AIDS* (Boston: Beacon, 1994).

10   Cohen, *A Body Worth Defending.*

11   Achille Mbembe, *Necropolitics* (Durham: Duke University Press, 2019), 78.

12   Simone Browne, *Dark Matters: On the Surveillance of Blackness* (Durham: Duke University Press, 2015), 16.

what is designated as public space, but "the public" never refers
to all those people present. Whether through formal segrega-
tion, redlining, or the financial compulsion of gentrification,
public space is normatively white space. Frédéric Neyrat states
that "sovereignty is the means by which modern politics deals
with the question of life; and its dealings are, fundamentally,
immunological."[13] What was learned in the pandemic was how
the racializing and hierarchizing of human life produced by the
infrastructures of whiteness is central to immunopolitics and
sovereign space.

Rarely are all these lines of force visible at once. The epidemic
was a test of the settler colonial state, making these white see-
ing-spaces intensely visible through its collective components:
the case, risk, danger, and the crisis.[14] If there are only a few
cases, there is no risk or danger, and no crisis. The "state" can be
defined as "all the space subject to police power."[15] Police here
are not limited to the uniformed agents of the state so much as
the combined "technology of state forces," including what was
known in the eighteenth century as the "medical police."[16] The
police form the public in symbiotic colonial relation. This prin-
ciple is laid out in Sir Robert Peel's seventh principle of policing,
issued in 1829 and derived from his work as a colonial official
in Ireland: "Police, at all times, should maintain a relationship
with the public that gives reality to the historic tradition that
the police are the public and the public are the police; the police
being only members of the public who are paid to give full-time
attention to duties which are incumbent on every citizen in the
interests of community welfare and existence" (my emphasis).
This definition of the policed public designates who may appear

13 Fréderic Neyrat, "The Birth of Immunopolitics," *Parrhesia* 10 (2010): 32
    (original emphasis).

14 Michel Foucault, *Security, Territory, Population: Lectures at the Collège de
    France 1977–1978,* trans, Graham Burchell (New York: Palgrave Macmil-
    lan, 2007), 60–61.

15 Mark Neocleous, *A Critical Theory of Police Power: The Fabrication of the
    Social Order* (New York: Verso, 2021).

16 Foucault, *Security, Territory, Population,* 367.

in and as the public and who may not. At the same time, white "people experience the State as an intrusive element, it is unconditionally rejected in the name of so-called individual liberty."[17] White people acting as police and rejecting the supposed intrusion of the state have been signature elements of the pandemic.

In the United States, these spatialized distinctions are inevitably racialized as part of the long legacy of slavery. W.E.B. Du Bois called his assessment of the repression of Reconstruction (1863–77) "Back to Slavery." He highlighted the systemic effort to forge a new modality of racialized capitalism by keeping wages of the newly emancipated as low as possible and thereby dragging down white wages. The goal was to have "Southern white laborers [...] prefer poverty to equality with the Negro."[18] This required extending "the police power" to clandestine groups such as the Ku Klux Klan and giving free rein to electoral fraud, racialized violence, and lynching. These dispossessions were then sanctioned by the us Supreme Court. The poor whites, who remained poor as intended, "were compensated in part by a sort of public and psychological wage. They were given public deference and titles of courtesy because they were white. They were admitted freely with all classes of white people to public functions, public parks, and the best schools. The police were drawn from their ranks, and the courts, dependent upon their votes, treated them with such leniency as to encourage lawlessness."[19] To use David Roediger's shorthand for this analysis, they received the "wages of whiteness,"[20] paid in kind. They were fully members of the public and as such were also the police. Public space is white police(d) space. When today's police commanders routinely quote Peel's principles in the

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17   Davis et al., "Immunity, Biopolitics and Pandemics," 134.

18   W.E.B. Du Bois, *Black Reconstruction in America 1860–1880: An Essay toward a History of the Part Which Black Folk Played in the Attempt to Reconstruct Democracy in America* (New York: Harcourt Brace and Co., 1935), 680.

19   Du Bois, *Black Reconstruction in America,* 700.

20   David R. Roediger, *The Wages of Whiteness: Race and the Making of the American Working Class* (New York: Verso, 1999).

name of "broken windows" policing, following the lead of former NYPD commissioner William Bratton, they are also issuing an implied call to sustain racial division. In the context of the pandemic, this racialized spatial politics both became fully visible and took on new resonance when white supremacist insurgents broke windows at the US Capitol on January 6, 2021, to gain entry.

To make sense of what happened during the pandemic in terms of the infrastructures of whiteness and immunopolitics requires engaging with grounded intersections of how immunopolitics became (in)visible in police(d)/public/white space. In what David Morley has called the "viral conjuncture," the very constitution of (white) settler-colonial power was being remade. In a settler colony, power is made by the claiming of dominion by adverse possession — simply put, by conquest. The forcible claim to constituent power is then formalized in a constitution, granting constituted power, as manifested by the police, courts, and other agencies, including those of public health. "Constituent power" is in the end "the power capable of creating a system of laws."[21] The result has been a "modernity [...] characterized by the antagonistic play between constituent power and constituted power,"[22] produced by enforcement as much as by consent.

This antagonistic consent — Democrats and Republicans, for example — is manifested in the symbolic order of constituted power, from flags to monuments and rituals. In the settler colony, "whiteness" was written into slave law and political theory alike, as a key modality of constituent power and its imaginaries. With that power, the infrastructures of whiteness have produced both the physical separation of people and the lived experience of racialized hierarchy. In 2020, it became apparent that for those identifying with white supremacy, maintaining the constituent power of whiteness was the absolute priority, above the

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21 David Graeber, *The Utopia of Rules: On Technology, Stupidity, and the Secret Joys of Bureaucracy* (New York: Melville House, 2015), 213.

22 Toni Negri, *Insurgencies: Constituent Power and the Modern State,* trans. Maurizia Boscagli (Minnesota: University of Minnesota Press, 1999).

survival of any person in the pandemic. Sometimes maintaining that power was connected to the necessity for Black and brown labor to continue "essential" work; sometimes it demanded statues be defended; sometimes it deployed the monopoly of public-police violence; and sometimes it demanded deference to its icons, such as the flag or national anthem. In each case, the opposite was said to be anarchy, meaning the alternative to white constituent power as "nasty, brutish and short" existences in "savage" conditions, such as those of the preconquest Americas. When examining the case made by anthropologist Pierre Clastres that Amazonian peoples resisted the institution of the state, David Graeber suggested it might have been more exact to say that Amazonian men feared the imposition on them of the kind of violent power they deployed over women.[23] The same can be said of whiteness: in its imaginary, there is no meaning attached to practices of freedom.

It can only imagine its own violent hierarchy reversed, such that the out-of-control killings it practices, whether via the police or by single-person mass shootings — which notably revived once Trump left office — would now be visited on "white" persons. Constituent power can be countered by "the constituent power of lived imagination."[24] Imagination is simply "the power to bring new things and new social arrangements into being,"[25] but one that is not backed by the police. In the yearlong pause brought on by the pandemic, everything happened at once. White constituent power both failed and deployed its maximum violence. Those people strongly identifying as white reacted to media reports of uneven rates of Covid-19 infection and death by claiming the police(d)/public/white "space of appearance"[26]

23 David Graeber, *Fragments of an Anarchist Anthropology* (Chicago: Prickly Paradigm Press, 2004), 23.

24 Stevphen Shukaitis and David Graeber, with Erika Biddle, *Constituent Imagination: Militant Investigations//Collective Theorization* (Oakland: AK Press, 2007), 9.

25 Graeber, *Utopia of Rules,* 219.

26 Hannah Arendt, *The Human Condition* (Chicago: University of Chicago Press, 1958), 199.

for political action was a space of medical immunity. This immunity was derived by association with the qualified immunity of police from prosecution, especially when related to violence against BIPOC (Black, Indigenous, people of color) suspects.[27] It was not logical but it moved people to protest and ultimately to insurgency. In this context, the murder of George Floyd resonated as visible proof of systemic racism in unprecedented fashion. In equally unprecedented manner, the transubstantiation of white into "blue," meaning police(d)/public/white space as "the people," enabled the insurgency of January 6, 2021, to imagine itself as a present-day update of the claim to constituent power made during both the American Revolution and the Southern Confederacy. The phrase "defund the police" encapsulates the present antagonism in constituted power. For those who do not identify as part of the public police, it means constituting power via care, reparations, restitutions, and sustaining. For those who see themselves as part of the public police, it conveys the wildest chaos imaginable. These are the stakes of the viral conjuncture.

What follows are six scenes from its formation.

Scene 1: New York Necropolis (March 2020)

As of March 30, 2020, there had been 1,218 deaths from Covid-19 in New York State, 253 of which came on the previous day. Almost 200 of those deaths were in New York City. The shock of these numbers finally made it emotionally real to me: the predicted catastrophe was now underway. A year later there had been 795,000 cases in New York City alone, more than 30,000 people had died. Only a megalopolis such as São Paulo, Brazil, exceeded these raw numbers, with 2.3 million cases and more than 67,000 dead (March 21, 2021). But there was little evidence of collective shock or mourning. In March 2020, New York City, capital of the twentieth century, appeared to be terminal. More exactly, it had become a new kind of necropolis, the city of the dead. The term comes from archaeology and usually applies to

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27 Neocleous, *A Critical Theory of Police Power,* 73.

formal spaces for the dead set aside from spaces for the living, of which cemeteries are the modern variant.[28] To call New York City a necropolis in March 2020 was not to say it had collapsed. A new spatial, visual, and imaginative relation to the dead, death, and dying was in formation, part of a new distribution of the sensible. Rather than a politics that prioritized the maintenance of life and population — known as "biopolitics" — there was a return to the politics of death that had supported slavery, known as "necropolitics," meaning "subjugating life to the power of death."[29] It was in this way that the twenty-first-century city was becoming a necropolis (fig. 1).

Though the virus is invisible, its immunopolitics quickly created a palpable redistribution of the sensible across the necropolis. There was a new soundscape, composed of ambulance sirens and distancing instructions broadcast by the NYPD into the unaccustomed urban quiet. Visually, there were a series of shocks, from the eighty-five FEMA refrigerated trucks for bodies, to universities such as Stony Brook and CUNY Staten Island converted to emergency hospitals, and the US Navy hospital ship *Comfort* moored in the Hudson River, intended to take the overflow of non-Covid patients. As they have long done, prisoners dug graves for those who could not afford a funeral on Hart Island off the Bronx in the Long Island Sound, but this time they wore personal protection equipment (PPE) and earned $6 an hour instead of the usual pennies. When a journalist used a drone to photograph burial space, it caused tremendous shock. All these new infrastructures were intended to enable death and dying on the mass scale in the necropolis that never sleeps.

At the same time, long-sedimented layers of the necropolis became newly visible. For necropolitics was a colonial technology. The settler-colonial city of New Amsterdam was a necropolis, siting itself over the erased the deaths of the indigenous Lenape. The forced labor of enslaved Africans in New York did

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28 Joseph Roach, *Cities of the Dead: Circum-Atlantic Performance* (New York: Columbia University Press, 1996).

29 Mbembe, *Necropolitics,* 92.

Fig. 1. A supertall skyscraper in New York City. Photo by the author.

not cease even in death, as their bodies became physically part of the infrastructure of Wall Street. No less than 15,000 bodies extend underground around the African Burial Ground Museum downtown, centered on Broadway and extending across to the World Trade Center site, where African human remains were discovered after the 9/11 attack. Other such burial grounds of the enslaved have been located under present-day infrastructure, such as in a Bronx park, under the New Museum, and a Harlem railyard. Those ghosts have walked the streets of the necropolis and, at long last, it is time to talk with them. The settler dead were kept closer at first. Trinity Church Wall Street, still one of the largest landowners in the city, buried its dead in and around the church until 1826. Nineteenth-century Gotham, capital of Manifest Destiny, pushed the dead out to remote cemeteries. Unlike Paris, where people visit Oscar Wilde or Marcel Proust in Père Lachaise Cemetery, perhaps pausing at the Mur des Fédérés where the last Communards were shot in 1871, New Yorkers do not visit Woodlawn or Green-Wood. There is no cenotaph, as in London or in Arlington National Cemetery. Twentieth-century New York was the city of the modern, and the modern, always about imagined futures, never takes the time to see who had lost out in the past and was excluded in the present. That New York state of mind will not be mourned.

Prepandemic New York was above all a so-called world city, one of those cities more connected to each other than to their nation-states. New York has always been ranked first among such cities in the United States, meaning the most connected, leading inexorably to its status as most infected. New York is literally dying of globalization. As a world city, it long ignored human infrastructure, from sewers to cemeteries and affordable housing, in favor of networked communications, like ever-quicker connections to the New York Stock Exchange servers. The signature creations of the world city were the blue-glassed supertall buildings that have sprouted in the past decade, as if someone scattered giant-building seeds. Almost no one lives in these shiny middle-finger-to-the-world follies, owned by anonymous and untraceable shell companies. Their advertising satu-

rated the glossy magazines in the 2010s, promoting the supertall tower as a self-contained sanctuary, with security, restaurants, gyms, and cinemas in- house. In short, it was the perfect white world: private, secure, entitled. Prepandemic, the superwealthy were already self-isolating and social distancing as a lifestyle. During the pandemic it emerged that these towers, mostly unoccupied at the best of times, were plagued with structural problems, from the noise of the wind, to frequent floods from burst pipes and repeated elevator breakdowns. To take just one symbol of how this networked world city collapsed, the Four Seasons hotel, favored haunt of power brokers, offered free rooms in March 2020 to healthcare workers concerned that they might infect their households if they went home. By March 2021, it was simply closed.

Outside the blue-glassed towers, half of the world's population now lives in urban regions for the first time in human history. About a quarter of those live in "informal housing." When it became clear that New York City schools would have to close, authorities fatally hesitated. Despite the city's wealth, they knew that 750,000 of the city's 1.1 million schoolchildren live in poverty, including 114,000 homeless children. For this New York majority, school is the source of food, shelter, and even laundry, not to mention day care. Mayor Bill de Blasio waited until March 15 to close. It was later estimated that had he done so just a week earlier, a startling 17,500 lives would have been saved.[30] Close to my apartment, the street outside was being dug up to install fiber-optic cable, even as crowded soup kitchens were running out of supplies and calling for $50 million to feed the newly unemployed.

It quickly became clear that the virus acted like a tracer dye for inequality. The epidemic spread fastest in the invisibilized structures built to warehouse people, above all places for older people and prisons. Activists had been calling for the closure of

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30 James Glanz and Robinson Campbell, "Lockdown Delays Cost at Least 36,000 Lives, Data Show," *New York Times,* May 20, 2020, https://www. nytimes.com/2020/05/20/us/coronavirus-distancing-deaths.html.

Rikers Island, where at least 200 prisoners were infected, and "no new jails." By the end of March 2021, just under 400,000 cases of Covid had been reported in prisons nationwide, including more than 6,000 in New York State, according to figures collated by the Marshall Project. Only 35 died in New York but more than 2,500 nationwide.[31] There were no sit-ins or occupations to protest senior living facilities or nursing homes, where 1.5 million people live in the United States. By March 2021, more than 15,000 people had died in nursing homes and other care facilities.[32] The virus was in the actual warehouses, too. Amazon fired an organizer in its Staten Island warehouse for the suggestion that people who were ill should not work. More dramatically still, BIPOC became disproportionately sick from the very first days. Even in Covid-ravaged New York City, the worst affected areas were densely populated minority neighborhoods where many people could not work remotely. Case rates for Black and "Hispanic-Latino" populations in New York were comparable to cases among Asians and whites (with Hispanic-Latinos having the highest rates), but the rates of hospitalization and death were far worse for Black and especially Hispanic- Latino groups.[33]

Scene Two: Racializing the Virus (April 2020)

The awareness of this racial disparity prompted the reemergence of the Far Right in national politics, as seen at the fatal 2017 "Unite the Right" rally in Charlottesville, Virginia. What they wanted was the right (for you) to die. The old settler-colonial slogan coined by Patrick Henry in the run-up to the American Revolution, "Give me liberty or give me death," was revamped

31 The Marshall Project, "A State-by-State Look at Coronavirus in Prisons," *The Marshall Project,* January 4, 2021, https://www.themarshallproject.org/2020/05/01/a-state-by-state-look-at-coronavirus-in-prisons.

32 Long Term Care Community Coalition, "New York Covid-19 Fatality Data: Nursing Homes & Adult Care Facilities," *Long Term Care Community Coalition,* https://nursinghome411.org/ny-nursinghome-covid-data/.

33 "New York City Covid-19 Data," *NYC Health,* 2021, https://www1.nyc.gov/site/doh/covid/covid-19-data-totals.page.

into "my (white) Liberty in exchange for your Death." In one week in April, the virus became racialized. The far-right activism followed from a perverse and reverse act of self-recognition. Those white people inclined to make an overt declaration of white supremacy became aware that Black, brown, and Indigenous people were being disproportionately affected. Hearing this, they concluded that they were immune. When these "protestors" against lockdown measures were asked if they thought the epidemic was real, they agreed that it was but claimed that they were protected by a "higher power." This phrase comes from the rhetoric of Alcoholics Anonymous and other twelve-step groups, not from Christianity. It was used to carry a double meaning in the familiar dog-whistle locutions of us white supremacy: the higher power is God, manifested as whiteness. For these white groups, the "invisible enemy" constantly evoked by Trump in the first weeks of the pandemic mutated into visibly nonwhite people. Across a ten-day span in April 2020, the virus became racialized domestically, congruent with the ongoing xenophobia attached to the disease as being "Chinese."

Forbes magazine predicted in March 2020 that minorities would suffer disproportionate economic loss.[34] But it was not until April that media began to report on the disproportionate rates of death and infection in these communities. A wave of national media reports began on April 7, following a White House briefing. *USA Today* correspondent Deborah Barfield Barry ran a piece giving some of the first precise numbers, such as that 70 percent of deaths in Louisiana were African Americans.[35] On that day, Los Angeles County released its first data on the pandemic giving racial and ethnic numbers. The next day,

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34 Kori Hale, "The Economic Impact of COVID-19 Will Hit Minorities the Hardest," *Forbes,* March 17, 2020, https://www.forbes.com/sites/kori-hale/2020/03/17/the-economic-impact-of-covid-19-will-hit-minorities-the-hardest/.

35 Deborah Field Barry, "Black People Dying from Coronavirus at Much Higher Rates in Cities across the USA," *USA Today,* April 7, 2020, https://www.usatoday.com/story/news/nation/2020/04/07/who-dying-coronavi-rus-more-black-people-die-major-cities/2961323001/.

the *Los Angeles Times* ran a critical editorial.[36] By April 17, the Centers for Disease Control and Prevention (CDC) was reporting that of those cases where racial and ethnic identity was known, 30 percent of Covid-19 patients were African American and 18 percent were "Hispanic/Latino" (the federal designation). The unintended consequence of this reporting was a surge of white supremacist immunopolitics. White nationalists concluded from these reports that they were immune and that only communities of color had the virus.

Just a week after this media wave broke, the first white "protest" against stay-at-home measures took place in Michigan on April 15. Organized by Trump front groups such as the Michigan Conservative Coalition (MCC), the event was quickly co-opted by the Far Right (insofar as there was a distinction between the two). The MCC called for people to stay in their cars and participate in a motorcade protest, first devised by activist Saul Alinsky. Instead, maskless rifle-carrying men in combat gear posed on the steps of the state capitol, making a claim to public space as white space, policed by white men. This unpermitted, armed action was allowed to continue and garner wall-to-wall media coverage. Photo-ops arranged smiling white men carrying automatic rifles and wearing tactical vests into clusters on the statehouse steps. US flags were prominent, alongside yellow "Don't Tread on Me" Tea Party flags. The ubiquitous Trump merchandise seen at all later events had yet to make an appearance. Some of the men wore masks or bandannas, but the majority did not. The primary talking point was the assertion that the US Constitution invalidated all the state stay-at-home orders, a surprising reversal of the standard white supremacist "states' rights" argument. This white immunopolitics allowed an emotional cathexis of a volatile mix of anger, resentment, and fear of failure, combined with rhetorics of violence, especially against women. The 2016 slogan "Lock Her Up" was again in use at the Michigan

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36 "Editorial: COVID-19 Is Disproportionately Killing Minorities. That's Not a Coincidence," *Los Angeles Times,* April 8, 2020, https://www.latimes.com/opinion/story/2020-04-08/coronavirus-racial-disparity.

protest, directed against Governor Gretchen Whitmer. Guns were its iconographic form. Its vocabulary was selectively drawn from the 1776 settler-colonial American Revolution. Looking back, this first pro-Trump lockdown protest prefigured the January 6, 2021, insurgency in all areas, except that by January, white nationalists were ready to actually be violent. No sooner had a Fox News segment on April 17 covered the event than Trump sent out a "LIBERATE MICHIGAN" tweet, among similar exhortations to other potentially important states in the presidential election, such as Minnesota and Virginia.[37] As at Charlottesville, the Far Right received presidential endorsement, but the MCC Facebook page urged its followers not to attend follow-up Operation Gridlock events later that month. But the Betsy Devos–funded Michigan Freedom Fund, a co-organizer of the event, was still all in, calling the stay-at-home order "arbitrary and capricious."[38] In other words, the president and a leading cabinet member had begun to conspire against the policies of their own administration. This paradoxical claim to be outside politics while in the very offices being criticized became the strategy of Trump's immunopolitics right up to January 6.

If Michigan was a display of assault rifles, two days later, on April 19, 2020, Denver saw a white woman in a top-end Dodge RAM 1500 confronting one of two medical workers in masks and scrubs who were blocking an antirestrictions motorcade with their bodies. The moment was widely seen on social media, depicted in a photograph by freelancer Alyson McClaran that became the number one Reuters Photo of the Month for April 2020.[39] Amidst a barrage of honking, the woman leaned right

37 Craig Mauger and Beth Leblanc, "Trump Tweets 'Liberate' Michigan, Two Other States with Dem Governors," *Detroit News,* April, 17, 2020, https://www.detroitnews.com/story/news/politics/2020/04/17/trump-tweets-liberate-michigan-other-states-democratic-governors/5152037002/.

38 Tony Daunt, "Leadership by Insult," *Michigan Freedom Fund,* 2020, https://web.archive.org/web/20220129112758/https://www.michiganfreedomfund.com/leadership_by_insult.

39 Reuters, "Photos of the Month: April," *Reuters,* April 2020, https://www.reuters.com/news/picture/photos-of-the-month-april-idUSRTX7GUMJ.

out of her vehicle in order to tell the nurse to "go to China." Not because he was Chinese, but because — in the white nationalist worldview — social distancing is communism, and the virus "is" Chinese. It follows, in this view, that any person supporting stay-at-home or masking policies should be deported, just as McCarthyism had told those it designated communists to go back to the Soviet Union.

Given the size and immaculate condition of her expensive vehicle, her new USA t-shirt, and carefully maintained blonde hair, it seems unlikely that this woman was suffering personally. She felt herself to be a brave anticommunist, but she did not in fact dare to walk the streets. The next day in Kentucky, as cases reached a new peak in the state, an all-white rally chanted "Facts Not Fear," a slogan taken directly from Fox News that only made sense if facts can be selected. There was, then, something of a range of class and political positions among the white activists, across that gap between the right extreme and the extreme right. What they shared was the long-standing fear that whiteness was being undone, or "replaced" as the Far Right puts it, in the emergency created by the pandemic. When they said — as they all did — that they would rather work than receive a government "handout," it expressed the long-standing belief that welfare is only for people of color and "white trash." So much of the policed white space of the public is and has been about the prevention of so-called idleness that it undoes the logics of whiteness to support people not working. Being required to stay home and receive government funds provoked a furious backlash at being designated a dependent person, which in the rhetoric of white nationalism means a person of color, rather than a "free" person, meaning white. Slavery and its afterlives are never far away in the United States.

Believing themselves to be free of the risk of infection, this new immunopolitics of white supremacy manifested in the symptomatic refusal to wear face coverings. To put on a material mask veils the whiteness of what Fanon called the "white masks"

that are white faces.[40] If whiteness conveys immunity, then to wear a mask is to be identified as nonwhite. In turn, in the worldview of the neoconfederate politics of 2020, masking was a form of "white slavery" by impeding absolute liberty of action. Mask-wearing further evoked the veil and the long history of Orientalist unveiling, intersecting with post-9/11 Islamophobia, whereby a face covering is itself perceived as a terrorist act. The mask cathected misogynist and homophobic fears of concealed embodiment and identity. Even the concept of mutual protection (your mask protects me, my mask protects you) was against the strict individualism of white settler-colonialism 2020-style. In March 2021, antimaskers burned masks outside the Idaho state capitol, even though the state did not have a mask mandate in place.

It all had an effect. On April 9, 2020, *Newsweek* reported a Quinnipiac poll showing 81 percent of Americans supported stay-at-home policies, including 68 percent of Republicans.[41] A week later (April 16), Pew Research found 66 percent were concerned that the country would reopen too quickly.[42] By April 19, NBC found that support had dropped to 58 percent, with less than 40 percent of Republicans in support.[43] Other polls came in close to that number with some as high as 64 percent.[44] A CDC survey in early May found support had returned as high as 80

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40 Fanon, *Wretched of the Earth.*

41 James Walker, "More than 80 Percent Support National Stay-at-Home Order Being Issued: Poll," *Newsweek,* September 4, 2020, https://www.newsweek.com/americans-back-national-stay-at-home-order-1496997.

42 Pew Research, "Most Americans Say Trump Was Too Slow in Initial Response to Virus Threat," *Pew Research Center,* April 16, 2020, https://www.people-press.org/wp-content/uploads/sites/4/2020/04/PP_2020.04.16_Trump-and-COVID-19_FINAL.pdf.

43 Mark Murray, "In New Poll, 60 Percent Support Keeping Stay-at-Home Restrictions to Fight Coronavirus," *NBC News,* April 19, 2020, https://www.nbcnews.com/politics/meet-the-press/poll-six-10-support-keeping-stay-home-restrictions-fight-coronavirus-n1187011.

44 Jonathan Bernstein, "Americans Support the Shutdown, Not the Protests," *Yahoo Finance,* April 20, 2020, https://finance.yahoo.com/news/americans-support-shutdown-not-protests-113023903.html.

percent.[45] But after April 17, there was always a disparity in the numbers with majorities of self-declared Republicans against all measures to contain the virus. It was not surprising in light of these numbers that Vice President Mike Pence did not wear a mask when visiting the Mayo Clinic in Rochester, Minnesota, against all medical recommendation and the clinic's own policy. In AP photographer Jim Mone's photo documentation of the visit,[46] one image evoked to me a painting from an older epidemic,   Antoine-Jean Gross epic 5 × 7 meter canvas *Bonaparte Visiting the Plague Victims of Jaffa* (Musée du Louvre, 1804) (fig. 2). Both the photograph and the painting show the leaders in houses of the sick with an arm extended, both performing lack of fear of the disease around them. Napoleon was imitating the healing touch attributed to the French monarchy, whereas Pence was simply performing to please Donald Trump. Reflecting on the parallel between the first emperor Napoleon and his nephew Louis Napoleon, Marx famously remarked in his *Eighteenth Brumaire of Louis Bonaparte* that "Hegel remarks somewhere that all the great events and characters of world occur, so to speak, twice. He forgets to add: the first time as tragedy the second as farce." Napoleon visited the plague house on 27 Ventôse an VII (11 March 11, 1799), so the Mayo Clinic visit was the 27 Ventôse of Mike Pence, the farce to Napoleon's tragedy. There was, needless to say, nothing comic about the buffoonish failure to respond to the pandemic with anything other than fantasies of divine healing power.

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45 "United States COVID-19 Cases, Deaths, and Laboratory Testing (NAATs) by State, Territory, and Jurisdiction," *Centers for Disease Control and Prevention, COVID Data Tracker,* https://stacks.cdc.gov/view/cdc/107545.

46 Jim Mone, "Maskless Mike Pence Stands Out in the Worst Way at Mayo Clinic," *Boston Globe,* April 30, 2020, https://www.bostonglobe.com/2020/04/30/opinion/maskless-pence-stands-out-worst-way-mayo-clinic/.
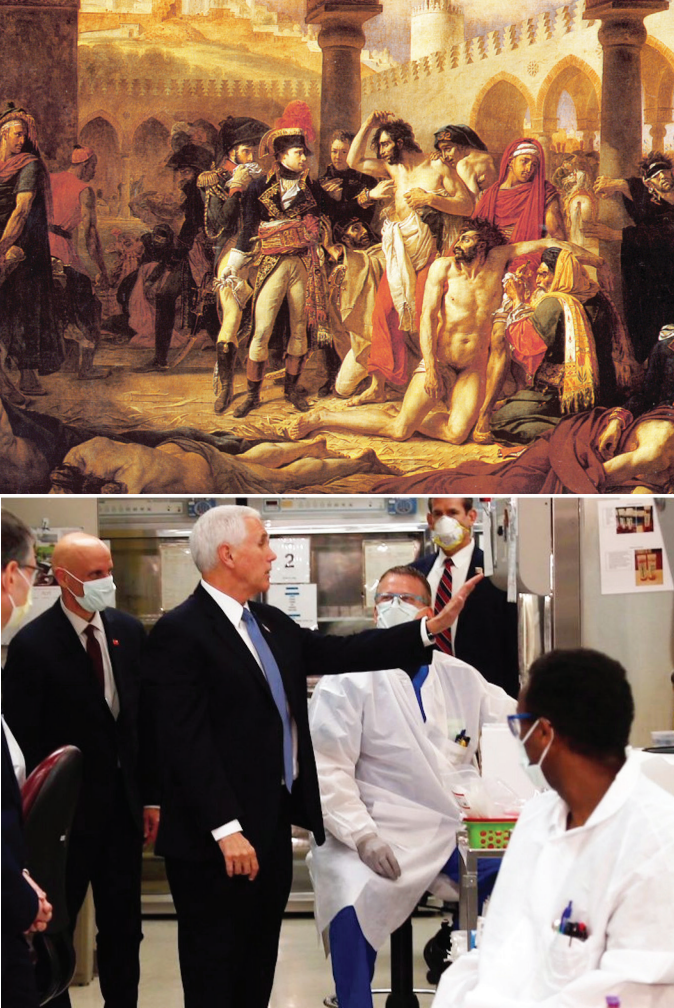
Fig. 2. A montage of Antoine-Jean Gros's *Bonaparte Visiting the Plague Victims of Jaffa* (1805) with Jim Mone's AP photo of Mike Pence in the Mayo Clinic in April 2020. Montage by Nicholas Mirzoeff.

Scene Three: Necropolitical Protest (May 2020)

The immunopolitics of 2020 all centered around claims to public space. At a series of Long Island, New York, protests in May 2020 organized by a pro-Trump group called Setauket Patriots, local TV news reporter Kevin Vessey was hounded verbally and intimidated by maskless people getting close up to him.[47] He posted a video on Twitter. Trump then reposted it — twice — celebrating those targeting the journalist, with each post getting more than 100,000 retweets. These actions claimed that stay-at-home policies were nazism, whose implementation is communism. In Illinois, a person wanting to see things reopened challenged the state governor, who was Jewish, with a sign reading "Arbeit Macht Frei," the notorious statement above the gates of the Auschwitz concentration camp.[48] Given that the sign-maker was arguing precisely that her freedom required that she be allowed to work but that the nazi slogan was a sarcastic misdirection at an extermination camp, the "message" was at best confused in its particulars. The general message was that any restriction on white freedom of action was totalitarian. At a similar action on May 16, 2020, in Humboldt, a small city in northern California, signs claimed "crisis does not excuse Communism." That event became notorious because drama teacher Gretha Stenger carried a sign featuring a text claiming "muzzles are for dogs and slaves, I am a free human being."[49] Although she was photographed wearing a bandanna, presumably as a

47 News 12 Staff, "Protesters in Commack Confront News 12's Kevin Vesey at Reopening Rally," *News 12,* May 14, 2020, https://longisland.news12.com/protesters-in-commack-call-for-reopening-of-long-islands-economy-amid-pandemic-42130922.

48 David Mack and Olivia Niland, "A Woman at an Anti-Lockdown Protest Held a Sign from a Nazi Concentration Camp," *Buzzfeed.News,* May 2, 2020, https://www.buzzfeednews.com/article/davidmack/auschwitz-condemns-nazi-coronavirus-protest-sign.

49 Shomik Mukherjee, "Humboldt County Coronavirus Protester's 'Slaves' Sign Goes Viral," *Times Standard,* May 18, 2020, https://www.times-standard.com/2020/05/18/humboldt-county-coronavirus-protesters-slaves-sign-goes-viral/.

face covering, her sign equated masks with such muzzles. Her further parallel of restraints on animals with those on human beings was distastefully visualized by her use of the top search return on Google images for "mask+slavery." It depicted an enslaved African wearing a metal muzzle across the mouth and an iron collar with a spike. This extremely violent image was an illustration to Jacques Arago's *Memoirs of a Blind Man* (1839), a travel narrative written when the author had become blind. It is said to show Escrava Anastàcia, a young woman healer and resistance leader among the Brazilian enslaved, who is now a popular folk saint. Not that Stenger would have cared, but her use of the image was doubly insulting to present-day believers (even though the Catholic Church has denied she even existed). Several copies of the sign had been made, using an office printer or photocopier to place two A4 sheets next to each other, and another woman called Larkin Small was also photographed carrying one. But it was a cropped photograph of Stenger by local journalist Kym Kemp that went viral on social media.[50] Stenger tried to claim that she had only held the sign because she did not bring one of her own, even though her folded homemade sign can be clearly seen under her arm and in another one of Kemp's photographs. As this was the third week of such small right-wing gatherings at the courthouse, Stenger probably assumed no one outside her local circle would ever know. These small-scale actions across the country, combined with mass online discussion, had created a toxic and volatile white immunopolitics. By May 20, it had made public a display of everything from Confederate flags to nazi imagery,[51] prefiguring the takeover of the US Capitol in January 2021.

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50   Kym Kemp, "At the Courthouse Friday, a Group Protested against Stay-At-Home Orders," *Redheaded Blackbelt,* May 16, 2020, https://kymkemp.com/2020/05/16/at-the-courthouse-friday-a-group-protested-against-stay-at-home-orders/.

51   Nicholas Mirzoeff, "Antifascist Visual Tactics," *nicholasmirzoeff.com,* May 20, 2020, http://www.nicholasmirzoeff.com/bio/antifascist-visual-tactics/.

Scene Four: The George Floyd Uprising

On May 25, 2020, police in Minneapolis killed George Floyd. But for the happenstance that Darnella Frazier was not only a bystander with the presence of mind to record the brutal event — she had both a smartphone with the capacity to record 9 minutes 29 seconds of video and a data plan sufficient to allow her to post that footage — George Floyd might be just another statistic. Yet for Eric Garner, Tamir Rice, and many others, similar visibility had not been enough to have police even indicted. Alerted by weeks of far-right white supremacist claims to freedom and public space — explicitly contrasted to enslavement and confinement visualized as African slavery in the Americas — Floyd's senseless killing sparked a nationwide uprising. It mattered that this killing took place in the context of the pandemic and its visible culture of white supremacy. The video itself is gruesome and awful, not least because it seems to repeat the videoed murder of Eric Garner in 2014, another Black man who died saying, "I can't breathe." Again, a police officer was seen leading the assault as if it was the most casual thing in the world. Many have watched some or all of this video. The Oglala Lakota poet Layli Long Soldier wrote a powerful response, first published on June 1, 2020, bringing together her shocked response to the murder with personal and collective memories. She retells the story of the Wounded Knee Massacre of Lakota in 1890, a disturbing story of deception and mass murder that she finds to be a collective memory: "From our senses, we remember what's stored within us already. Maybe, sometimes, I/we cannot put words to it, but we feel something. I might call it instinct. It's an old sensation that cannot be named, for which there is no textual record or language to help us understand. Yet, it is there just below the skin and just like that."[52]

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52 Layli Long Soldier, "Layli Long Soldier on Wounded Knee and the Murder of George Floyd," *Literary Hub,* June 3, 2020, https://lithub.com/layli-long-soldier-on-wounded-knee-and-the-murder-of-george-floyd/.

Yet she does not just address this insight to Lakota readers: "I ask you, warmly, to return to accounts from our Lakota ancestors, quoted previously. Take your time. Because, in their words, you may sense an old, yet very present energy when you read, 'A herald cried out that the soldiers would take us to the agency and take good care of us.'" That "you" here I must read as "you, white people." Taken together, she is gently suggesting that I and other settlers consider whether there is something stored within us that leads to acts of violence against those perceived to be different, above all those perceived to be not-white. If Derek Chauvin kneeling on George Floyd's neck with his hands in his pockets for 9 minutes and 29 seconds does not show that "old, yet very present energy," then what does it show?

The George Floyd uprising that followed his murder made that connection. It saw his death as being linked to that of other recent victims, such as Garner and Jacob Blake, who came after him, as manifestations of systemic violence. And it understood how that violent energy was stored from its past manifestations in monuments and statues. Despite the risks of the pandemic, protestors challenged the long-standing demarcation and equivalence of public space as policed white space. The uprising, composed of the Black Lives Matter movement, its accomplices, and allies, at once understood that the systemic claim, sustained over time, to all space as policed white space enabled the possibility of such killings. In addition to the trial of those responsible, the infrastructure that sustained this white supremacy needed to be disrupted. On May 25, 2020, there were 19,000 new cases of Covid, a long way down from the April peak of 34,000 a day. It was not until mid-June that case numbers began rising again nationally. This pause within the pandemic allowed space for people to address systemic racism without undue fear of infection. Although the murder seems to mark a clear break in retrospect, it did not restrain Trump from retweeting on May 27 conservative columnist Lee Smith, who argued that masks represent a "culture of silence, slavery, and social death."[53] As social

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53 Eliza Relman, "Trump Shares Tweet That Argues Face Masks Represent 'Silence, Slavery, and Social Death,'" *Business Insider,* May 28, 2020, https://

death is best known as sociologist Orlando Patterson's definition of enslavement, the racializing argument was being made twice.

The removal of Confederate and other racist monuments was at once understood as a vital act of contemporary redress and repair. In Louisville, Kentucky, on May 29, a protestor removed the right hand of the statue of Louis XVI, after whom the city is named. There was also a graffito on the plinth: "All Cops Uphold White Supremacy." The action and the tag condense a historical understanding of sovereignty in settler-colonial plantation culture into a single image. Let's unpack this work. The king's surrogate in the plantation was the overseer, whose hand could be raised to punish or kill. Like the king, the overseer had two bodies: his own, and a second one that never died and never slept. This second body embodied what was known in the period as "the plantation machine." It became the emblem of white supremacy, a statue that sustained the racialized surveillance of the plantation. In Louisville, Louis XVI as the emblem of white supremacy continues to survey what Black geographer Katherine McKittrick calls the "plantation future," which is to say, "a conceptualization of time-space that tracks the plantation toward the prison and the impoverished and destroyed city sectors."[54] The tag on Louis's base understands that the cop and the prison guard are the plantation futures of the sovereign-overseer. Removing the hand of the king was an act of what Christina Sharpe calls "redaction," a gesture that erases in order to make it fully clear what there is to see.[55]

It was in affiliation with such redaction that, on the same day, protestors in Philadelphia were attempting to overthrow the oversized statue of notorious racist police officer Frank Rizzo. Black Lives Matter had targeted the statue in 2016, and most residents agreed it should be (re)moved. But it wasn't. The statue

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www.businessinsider.com/trump-shares-tweet-that-says-masks-represent-slavery-and-social-death-2020-5.

54 Katherine McKittrick, "Plantation Futures," *Small Axe* 17, no. 3 (2013): 2.

55 Christina Sharpe, *In the Wake: On Blackness and Being* (Durham: Duke University Press, 2016), 117.

resisted the renewed efforts to topple it, and city authorities rushed to clean it the next day. But having said that removing the statue was not even in his top-100 priorities, Philadelphia mayor Jim Kenney reversed course overnight on June 2 and had the Rizzo statue removed. Now it had become clear to Kenney that the statue represented "bigotry, hatred and oppression." And that this was just a beginning. The removal of the Rizzo statue showed that who and what is, and is not, remembered does matter, in affiliation with the thought experiment (for people identified and identifying as white) "Black Lives Matter." Since George Floyd's murder, more than 160 Confederate statues and monuments have been removed or are scheduled to be removed, according to the Southern Poverty Law Center (SPLC).[56] About 700 Confederate monuments remain. The question is not if and when they will all be removed, but how many "nodes" in this infrastructure of white supremacy must be removed for it to fail as a network. A year later, former police officer Derek Chauvin was on trial for murder, and other police testified against him, if only in the effort to contain the responsibility to one "bad apple" cop not following procedure.

Scene Five: White to Blue (June–November 2020)

After the George Floyd uprising, whiteness transubstantiated. It became blue. The white-to-blue shift moved the axis of personal and political identity from ancestry to affiliation with law enforcement. It changed the equivalence of the (white) public as police to the police, pure and simple. To be "white-to-blue" is now to accept and endorse the necropolitical authority of police. It is to bring together all the tangled desires and frustrations connoted by whiteness into a spatialized subjugation to police authority, in which the former demarcation of public policed white space now extends across the entire country. The resulting

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56 See SPLC, "SPLC Reports over 160 Confederate Symbols Removed in 2020," *Southern Poverty Law Center,* February 23, 2021, https://www.splcenter.org/presscenter/splc-reports-over-160-confederate-symbols-removed-2020.

form of identification is a new form of nationalism. It has flags; it demands violence; it exults in its own presumed superiority. This shift was visibly evident in the performance of the presidential election campaign of 2020 by Trump's followers, with their trucks, flags, guns, and banners.

Since the challenge to segregation in the 1950s, policing has presented itself as a "thin blue line" against disorder — a dog whistle connecting the civil rights movement to the mobility of Black people and to white fears about the loss of a permanent, racialized social hierarchy. The repeated descriptions of us cities where protests were organized against police violence as "anarchist" in the summer and autumn of 2020 followed that logic. Unspoken but understood was that the areas the blue line protects are white spaces: the largely segregated regions where white people mostly live. The white-to-blue shift expanded the thin line to take over the entire space. It did not form a coherent geographic space but rather what George Lipsitz calls the "white spatial imaginary,"[57] or the psychogeography of whiteness. In 2016, this imaginary went MAGA with the substitution of a wall for the thin blue line. And now, rather than there being one single divider, marking both geographical and racialized borders, the entire spatial imaginary had gone blue. The resulting white-to-blue space articulates white supremacy to those domains of the state most directly involved in the war on Black lives, and to immigration enforcement, border patrol, and the apparatus of mass incarceration.

The "Back the Blue" flag that became highly visible in 2020 had its origins in the white resistance to the 2014–16 Black Lives Matter movement and the slogan that resistance generated: "Blue Lives Matter." It reproduces the us flag in black and white with one blue line across it. For its designer Andrew Jacob, the black space below the blue represents "criminals." That is to say, it spatializes in visual form the "color line" between Black and white that Du Bois identified as the great American "prob-

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57 George Lipsitz, *How Racism Takes Place* (Philadelphia: Temple University Press, 2011), 13.

lem" and claims that "blue," the police in all senses, is what prevents chaos. Above the line is now the white-to-blue space. As a segregationist emblem, "Back the Blue" has become the flag of the imaginary neo-Confederacy, a gated community with aspirations to become a nation. It contains within it a visualized reference to slavery. A blue line can be a simple designation of the sea. The below-the-line criminals are then those in the "hold" of the slave ship, while the virtuous white people above are the slavers. It makes sense, then, that the Back the Blue flag had appeared at Charlottesville in 2017. After the George Floyd uprising, it became visible almost everywhere, attracting mainstream media coverage from June on. When an outsized version was flown in place of the Stars and Stripes at an October Trump rally in Wisconsin, many saw this as a way to make an unsubtle allusion to his desire to be a leader of those who want white supremacy. White-to-blue space was formed and claimed by its own set of public performances, beyond the Trump rallies limited by Covid-19. Most prominent were the "Trump caravans," formed by long lines of F-150 trucks, SUVs, and other cars taking over the roadways. These caravans first began appearing during the resistance to Covid-19 shutdowns in April. Over the summer, participants also put together boat caravans on the coasts and lakes in pro-Trump districts. But it was mostly cars and trucks, with the most expensive at the front and rear to conceal the humbler sedans in between. The caravans are meant to convey wealth and power, not the status or state of affairs of the middle class evoked by these smaller cars. But as a whole, the motorcades were a flaunting of fossil-fuel intensive vehicles in yet another summer of climate-change-driven wildfires. Driving slowly, like biker gangs, the caravans filled all lanes of traffic on several converging roads so that it was hard to avoid them. The caravans traversed a psychogeography of the Far Right. In October, for example, the Setauket Patriots organized a caravan that set off from a parking lot where there is an inconspicuous 9/11 memorial, traveling via the site of a Revolutionary War battle, to a pizzeria that Trump had tweeted about because it flew his banners. In addition to Back the Blue flags and Trump

banners — mass-produced paraphernalia preferred to home-
made — vehicles flew "Fuck Your Feelings" banners. This slogan
is a condensation of the conservative influencer Ben Shapiro's
slogan, "Facts don't care about your feelings." The slogan is both
vague and forceful at once. It shifts the generic pronoun in Sha-
piro's remark to a direct attack on "you." The "you" here would
be anyone who had feelings but especially anyone whose feel-
ing is that Black or other nonwhite lives matter. Social media
announced these events and amplified them, bringing support-
ers out to photograph the caravans and post the pictures. The
caravans and flags intersected with a plethora of low-produc-
tion-values TV attack ads, featuring cops denouncing Demo-
cratic candidates as radicals. "Defund the police" was the nega-
tive punchline, whether the candidate had said it themselves or
not. Because the police were now the primary form of white-to-
blue identification, the move to defund state or city agencies was
felt as personal violence by those so identifying.

Scene Six: Constituent Power (January 2021)

As if to forestall such imaginaries, the insurgency at the US
Capitol on January 6, 2021, was a monumental act with mul-
tiple intent. The Capitol is, after all, a monument, perhaps the
monument of monuments, combining historic significance and
the seat of legislative power. The January 6 insurgency of white
nationalists responded to the removal of racist statues since the
George Floyd uprising with a mediated and visible affirmation
of its power. Its self-appointed mission was an act of domes-
tic counterinsurgency, because, in their view, the election result
was a false imposition on what they called "America," mean-
ing their worldview. Like the US Army in Vietnam, this coun-
terinsurgency had to destroy the Capitol in order to save it. In
2017, the Unite the Right rally at Charlottesville was a defense
of Confederate statues as the symbolic infrastructure of white
supremacy. Four years later, the Capitol insurgency aggressively
claimed the capacity to reconstitute power itself by forming a
digitally mediated variant of "we, the (white) people." This peo-

ple is the "America" that should rule. The Capitol monument action was both the site of the claim to this constituent power and the platform by which it was disseminated. The insurgency failed in its attempt to create a new form of constituted power by overturning the presidential election.

"Storming the Capitol," as the insurgents called January 6, as if it were a performance (and there will, of course, be a movie) was a self-conscious reenactment of the American Revolution, defined by exclusion. Many saw its affiliations with the live-action role-playing craze, but its roots lie in Civil War reenactment. At such events, the insurgents had long practiced the overturning of history, the highest form of fake news (as they see it), in line with their understanding of the US Constitution as a supremacist document, a view many on the left share, while drawing very different conclusions. January 6 was an assertion of constituent power for the digital age. It was endorsed by its watching audience online and on television, in the same way that the invited audience and spectators endorse a coronation or inauguration. For this function of the insurgency, the much-derided selfies and live-streaming were the point, not a sideshow. The live-streamed "people" depicted themselves to themselves and their audience as the newly and properly constituted form of "we, the (white) people." In the live streams and video stories, insurgents loudly and persistently claimed to be America; 146 elected US representatives voted later that day in support of this reconstitution of the people. These dramas were condensed into the simple slogan "1776," chanted inside and outside the Capitol that day. This "1776" is not the narrative already monumentalized at the Capitol. Consider those widely photographed scenes of insurgents in the tear-gassed Rotunda. Through the sfumato of the gas, John Trumbull's oversized paintings of the American Revolution can be seen in the background. Two moments of British surrender emphasize American military dominion; facing paintings of the Declaration of Independence and Washington resigning his commission showed how this power was then formally constituted. The insurgents ignored all these scenes

of white supremacy.[58] They used the statues as coat racks and dragged excrement around the building like burglars.

Constituted power withstood the first challenge on January 6, 2021, with the US Capitol Hill attack, but it will be necessary to reconstitute the imagined "people," as the insurgency becomes constituted in new Jim Crow voting laws. To see how to do so, look south. In 2019, a strike over transport costs in Chile unfolded into a challenge first to monuments, as Mapuche people took down the statues of conquistadors, and then to the constitution inherited from the fascist era of General Pinochet. A referendum earlier in 2021 to call a new constituent assembly was successful. Taking down monuments was a necessary part of changing constituent power because constitutions are monuments to that power, which entails a new consideration of power itself.

The feminist strike in Argentina that brought about the legalization of reproductive rights in 2020 set aside the Spanish *poder,* meaning "static, constituted power," such as that in the state and the statue. It adopted instead the word *potencia,* which has a "dynamic constituent dimension [...] our power to do, to be affected and to affect others."[59] For activist scholar Verónica Gago, the strike is a "lens," or way of seeing, through which to both analyze and take practical action: "mapping the strike thus becomes a tool for visibilizing hierarchies."[60] This *potencia* of the strike is situated, feminist, and connected as a "practical cartography" of counterpower. In this perspective, the pandemic opened what Arundhati Roy has called a possible "portal, a gateway between one world and the next."[61] Such a portal would be both digital and material. A portal is not quite a frame. It may have edges but not borders. It creates a sense of relation not of exclusion. Let's go.

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58 Vivien Green Fryd, *Art and Empire: The Politics of Ethnicity in the United States Capitol, 1815–1865* (New Haven: Yale University Press, 1992).

59 Liz Mason-Deese, "Translator's Foreword," in Verónica Gago, *Feminist International: How to Change Everything* (New York: Verso, 2020), ix.

60 Gago, *Feminist International,* 13.

61 Arundhati Roy, "The Pandemic Is a Portal," *Financial Times,* April 2, 2020, https://www.ft.com/content/10d8f5e8-74eb-11ea-95fe-fcd274e920ca.

References

Arendt, Hannah. *The Human Condition.* Chicago: University of Chicago Press, 1958.

Barry, Deborah Field. "Black People Dying from Coronavirus at Much Higher Rates in Cities across the USA." *USA Today,* April 7, 2020. https://www.usatoday.com/story/news/ nation/2020/04/07/who-dying-coronavirus-more-black-people-die-major-cities/2961323001/.

Bernstein, Jonathan. "Americans Support the Shutdown, Not the Protests." *Yahoo Finance,* April 20, 2020. https://finance. yahoo.com/news/americans-support-shutdown-not-protests-113023903.html.

Booker, Maia. "'Everyone Was Screaming at Them.' The Story behind Those Photos of the Counter-Protesting Health Care Workers." *Time,* April 20, 2020. https://time.com/5824465/ healthcare-workers-protest/.

Browne, Simone. *Dark Matters: On the Surveillance of Blackness.* Durham: Duke University Press, 2015.

CDC. "United States COVID-19 Cases, Deaths, and Laboratory Testing (NAATS) by State, Territory, and Jurisdiction." *Centers for Disease Control and Prevention, COVID Data Tracker.* https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html (accessed April 17, 2020).

Cohen, Ed. *A Body Worth Defending: Immunity, Biopolitics and the Apotheosis of the Modern Body.* Durham: Duke University Press, 2009.

Collins, Chuck. "Updates: Billionaire Wealth, U.S. Job Losses and Pandemic Profiteers." *Inequality.org.* https://inequality. org/great-divide/updates-billionaire-pandemic/.

Czeisler, Mark É., Michael A. Tynan, Mark E. Howard, Sally Honeycutt, Erika B. Fulmer, Daniel P. Kidder, Rebecca Robbins, Laura K. Barger, Elise R. Facer-Childs, Grant Baldwin, Shantha M.W. Rajaratnam, and Charles A. Czeisler. "Public Attitudes, Behaviors, and Beliefs Related to COVID-19, Stay-at-Home Orders, Nonessential Business Closures, and Public Health Guidance — United States, New

York City, and Los Angeles." *Centers for Disease Control and Prevention,* June 19, 2020, https://www.cdc.gov/mmwr/volumes/69/wr/mm6924e1.htm.

Daunt, Tony. "Leadership by Insult." *Michigan Freedom Fund.* 2020. https://web.archive.org/web/20220129112758/https://www.michiganfreedomfund.com/leadership_by_insult.

Davis, Mark, Paul Flowers, Davina Lohm, Emily Waller, and Niamh Stephenson. "Immunity, Biopolitics and Pandemics: Public and Individual Responses to the Threat to Life." *Body and Society* 22, no. 4 (2016): 130–54. DOI: 10.1177/1357034X14556155.

Du Bois, W.E.B. *Black Reconstruction in America 1860–1880: An Essay toward a History of the Part Which Black Folk Played in the Attempt to Reconstruct Democracy in America.* New York: Harcourt Brace and Co., 1935.

Esposito, Roberto. *Immunitas: The Protection and Negation of Life.* Cambridge: Polity, 2011.

Fanon, Franz. *The Wretched of the Earth.* Translated by Richard Philcox. New York: Grove Press, 2008.

Foucault, Michel. *Security, Territory, Population: Lectures at the Collège de France 1977–1978.* Translated by Graham Burchell. New York: Palgrave Macmillan, 2007.

Fryd, Vivien Green. *Art and Empire: The Politics of Ethnicity in the United States Capitol, 1815–1860.* New Haven: Yale University Press, 1992.

Gago, Verónica. *Feminist International: How to Change Everything.* New York: Verso, 2020.

Glanz, James, and Campbell Robinson. "Lockdown Delays Cost at Least 36,000 Lives, Data Show." *New York Times* May 20, 2020. https://www.nytimes.com/2020/05/20/us/coronavirus-distancing-deaths.html.

Graeber, David. *Fragments of an Anarchist Anthropology.* Chicago: Prickly Paradigm Press, 2004.

———. *The Utopia of Rules: On Technology, Stupidity, and the Secret Joys of Bureaucracy.* New York: Melville House, 2015.

Hale, Kori. "The Economic Impact of COVID-19 Will Hit Minorities the Hardest." *Forbes,* March 17, 2020. https://

www.forbes.com/sites/korihale/2020/03/17/the-economic-impact-of-covid-19-will-hit-minorities-the-hardest/.

Kemp, Kym. "At the Courthouse Friday, a Group Protested against Stay-at-Home Orders." *Redheaded Blackbelt,* May 16, 2020. https://kymkemp.com/2020/05/16/at-the-courthouse-friday-a-group-protested-against-stay-at-home-orders/.

Larkin, Brian. "The Politics and Poetics of Infrastructure." *Annual Review of Anthropology* 42 (2013): 327–43. DOI: 10.1146/annurev-anthro-092412-155522.

Lipsitz, George. *How Racism Takes Place.* Philadelphia: Temple University Press, 2011.

Long Term Care Community Coalition. "New York Covid-19 Fatality Data: Nursing Homes & Adult Care Facilities." *Long Term Care Community Coalition.* https://nursinghome411.org/ny-nursinghome-covid-data/.

Mack, David, and Olivia Niland. "A Woman at an Anti-Lockdown Protest Held a Sign from a Nazi Concentration Camp." *Buzzfeed,* May 2, 2020. https://www.buzzfeednews.com/article/davidmack/auschwitz-condemns-nazi-coronavirus-protest-sign.

Martin, Emily. *Flexible Bodies: Tracking Immunity in American Culture — From the Days of Polio to the Age of Aids.* Boston: Beacon Press, 1994.

Mason-Deese, Liz, "Translator's Foreword." In Verónica Gago, *Feminist International: How To Change Everything,* 11–26. New York: Verso, 2020.

Mauger, Craig, and Beth Leblanc. "Trump Tweets 'Liberate' Michigan, Two Other States with Dem Governors." *Detroit News,* April, 17, 2020. https://www.detroitnews.com/story/news/politics/2020/04/17/trump-tweets-liberate-michigan-other-states-democratic-governors/5152037002/.

Mbembe, Achille. *Necropolitics.* Durham: Duke University Press, 2019.

McKittrick, Katherine. "Plantation Futures." *Small Axe* 17, no. 3 (2013): 1–15.

Mirzoeff, Nicholas. "Antifascist Visual Tactics." *nicholasmirzoeff.com,* May 20, 2020. http://www.nicholasmirzoeff.com/bio/antifascist-visual-tactics/.

Mone, Jim. "Maskless Mike Pence Stands Out in the Worst Way at Mayo Clinic." *Boston Globe,* April 30, 2020. https://www.bostonglobe.com/2020/04/30/opinion/maskless-pence-stands-out-worst-way-mayo-clinic/.

Morley, David. "In a Viral Conjuncture." *Cultural Politics* 17, no. 1 (2021): 17–28. DOI: 10.1215/17432197-8797473.

Mukherjee, Shomik. "Humboldt County Coronavirus Protester's 'Slaves' Sign Goes Viral." *Times Standard,* May 18, 2020. https://www.times-standard.com/2020/05/18/humboldt-county-coronavirus-protesters-slaves-sign-goes-viral/.

Murray, Mark. "In New Poll, 60 Percent Support Keeping Stay-at-Home Restrictions to Fight Coronavirus." *NBC News,* April 19, 2020. https://www.nbcnews.com/politics/meet-the-press/poll-six-10-support-keeping-stay-home-restrictions-fight-coronavirus-n1187011.

Negri, Toni. *Insurgencies: Constituent Power and the Modern State.* Translated by Maurizia Boscagli. Minnesota: University of Minnesota Press, 1999.

Neocleous, Mark. *A Critical Theory of Police Power: The Fabrication of the Social Order.* New York: Verso, 2021.

News 12 Staff. "Protesters in Commack Confront News 12's Kevin Vesey at Reopening Rally." *News 12,* May 14, 2020. https://longisland.news12.com/protesters-in-commack-call-for-reopening-of-long-islands-economy-amid-pandemic-42130922.

Neyrat, Fréderic. "The Birth of Immunopolitics." *Parrhesia* 10 (2010): 31–38. http://www.parrhesiajournal.org/parrhesia10/parrhesia10_neyrat.pdf.

Nyamnjoh, Francis B. *Insiders and Outsiders: Citizenship and Xenophobia in Contemporary Southern Africa.* Dakar and London: Codesria Books and Zed Books, 2006.

———. *#RhodesMustFall: Nibbling at Resilient Colonialism in South Africa* (Langaa: RPCIG, 2016). DOI: 10.2307/j. ctvmd84n8.

NYC Health. "New York City Covid-19 Data." *NYC Health*. https://www1.nyc.gov/site/doh/covid/covid-19-data-totals. page.

Pew Research. "Most Americans Say Trump Was Too Slow in Initial Response to Virus Threat." *Pew Research Center,* April 16, 2020. https://www.people-press.org/wp-content/ uploads/sites/4/2020/04/PP_2020.04.16_Trump-and- COVID-19_FINAL.pdf.

Relman, Eliza. "Trump Shares Tweet That Argues Face Masks Represent 'Silence, Slavery, and Social Death.'" *Business Insider,* May 28, 2020. https://www.businessinsider.com/ trump-shares-tweet-that-says-masks-represent-slavery- and-social-death-2020-5.

Reuters. "Photos of the Month: April." *Reuters,* April 2020. https://www.reuters.com/news/picture/photos-of-the- month-april-idUSRTX7GUMJ.

Roach, Joseph. *Cities of the Dead: Circum-Atlantic Performance.* New York: Columbia University Press, 1996.

Roediger, David. R. *The Wages of Whiteness: Race and the Making of the American Working Class.* New York: Verso 1999.

Roy, Arundhati. "The Pandemic Is a Portal." *Financial Times,* April 2, 2020. https://www.ft.com/content/10d8f5e8-74eb- 11ea-95fe-fcd274e920ca.

Sharpe, Christina. *In the Wake: On Blackness and Being.* Durham: Duke University Press, 2016.

Shukaitis, Stevphen, and David Graeber, with Erika Biddle, eds. *Constituent Imagination: Militant Investigations// Collective Theorization.* Oakland: AK Press, 2007.

Soldier, Layli Long. "Layli Long Soldier on Wounded Knee and the Murder of George Floyd." *Literary Hub,* June 3, 2020. https://lithub.com/layli-long-soldier-on-wounded-knee- and-the-murder-of-george-floyd/.

SPLC. "SPLC Reports over 160 Confederate Symbols Removed in 2020." *Southern Poverty Law Center,* February 23, 2021. https://www.splcenter.org/presscenter/splc-reports-over-160-confederate-symbols-removed-2020.

The COVID Tracking Project. "The Clearest Sign the Pandemic Could Get Worse." *The Atlantic,* March 18, 2021. https://www.theatlantic.com/health/archive/2021/03/michigan-covid-19-coronavirus-outbreak/618332/.

The Marshall Project. "A State-by-State Look at Coronavirus in Prisons." *The Marshall Project,* January 4, 2021. https://www.themarshallproject.org/2020/05/01/a-state-by-state-look-at-coronavirus-in-prisons.

The Times Editorial Board. "Editorial: COVID-19 Is Disproportionately Killing Minorities. That's Not a Coincidence." *Los Angeles Times,* April 8, 2020. https://www.latimes.com/opinion/story/2020-04-08/coronavirus-racial-disparity.

Walker, James. "More Than 80 Percent Support National Stay-at-Home Order Being Issued: Poll." *Newsweek,* September 4, 2020. https://www.newsweek.com/americans-back-national-stay-home-order-1496997.

From *Contagion* to Covid: How Hollywood Turns Viral Fear into Viral Profits

Dahlia Schweitzer

The 2020 Republican National Convention emphasized a singular theme — America was under attack. Depending on the speaker, the specific threat varied — liberals, socialists, unions, immigrants — but the message was clear. The GOP Convention in 2016 had been consumed by similar messaging, and shortly before the midterm elections of 2018, Fox News and Republicans warned that the United States was under threat of invasion by an immigrant caravan, a talking point that disappeared soon after the elections were over.

Thanks to a nonstop feed of information — on our phones, on our laptops, on our television screens — our fears are easy to manipulate and inflame. We are taught whom and what to fear, and in January 2021, as Covid-19 cases approached 90 million worldwide, this was more relevant than ever. Imaginary threats come and go depending on political agendas, but the coronavirus pandemic was an actual crisis. This makes it all the more important to note how fears continued to be manipulated, but also how (and why) they were ignored.

Viruses have always been a powerful and infectious metaphor, a way to demarcate "dangerous" people, a way to draw attention to the flaws and frailties of the bonds between people and between nations, and a way to spread and construct fear. As I discuss in my book *Going Viral: Zombies, Viruses and the End of the World,* the outbreak narrative — in which a viral outbreak spreads before being eventually contained or neutralized — reveals and exploits anxieties related to three types of increasingly ineffective boundaries: (1) between your personal body and your fellow citizens; (2) between individual nations; and (3) between "ordinary" people and potentially dangerous disenfranchised groups. Understanding these anxieties can help us deal with the very real crises we face. And though it is true that fear may be a result of a particular situation, it is also a product of social construction, shaped by cultural scripts — such as TV shows, movies, or newspapers — that instruct people how and of what to be afraid. In this chapter, I examine the role recent movies and television shows have played not only in shaping contemporary paradigms of disease and fear, but specifically in shaping our response to the coronavirus.

The way infectious viruses are appropriated by Hollywood provides insight into the viruses themselves and the world we live in. After all, few things reflect social trends and anxieties as film and TV do. Cultural theorist Douglas Kellner observes that films "are an especially illuminating social indicator of the realities of a historical era, as a tremendous amount of capital is invested in researching, producing, and marketing the product. Film creators tap into the events, fears, fantasies, and hopes of an era and give cinematic expression to social experiences and realities."[1] To put it simply, Hollywood reads the zeitgeist in order to translate it into box office profits.

Initially a response to a growing fear of viral outbreaks during the 1990s and beyond, outbreak narratives have now reached epidemic proportions, both in fictional and factual formats. From *28 Days Later* (dir. Danny Boyle, 2002) to *The Walking*

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1   Douglas Kellner, *Cinema Wars* (West Sussex: Wiley Blackwell, 2010), 4.

Dead (AMC, 2010–22), *Outbreak* (dir. Wolfgang Petersen, 1995) to *Contagion* (dir. Steven Soderbergh, 2011), films and TV shows are filled with zombie viruses, bioengineered plagues, and natural disasters. Not only have outbreak narratives infected public discourse and affected the way many of us view the world, but they affected global responses to Covid-19.

Equally alarming is the use of outbreak narratives as "how-to manuals," demonstrating just how widespread their influence. In 1998, President Bill Clinton passed *The Cobra Event,* Richard Preston's fictional account of bioterrorist attacks on US soil, to Secretary of Defense William Cohen and Speaker of the House Newt Gingrich. He also subsequently announced the development of a series of antibioterrorism initiatives for which he requested an additional $294 million from Congress in his budget request for the 1999 fiscal year. Furthermore, Secretary of Health and Human Services Donna Shalala would open her article "Bioterrorism: How Prepared Are We?" for the CDC's *Emerging Infectious Diseases* journal with an outline of *The Cobra Event,* writing that the thought-provoking novel raises this question: "How do we successfully contain and combat the threat of bioterrorism?"[2] Shalala overlooks the book's fictional status. In March 2020, shortly after the Covid-19 virus had seemingly exploded worldwide, journalist Mike Stuchbery reported that some UK and US crisis response teams were reading *World War Z* by Max Brooks as a "study in the social effects of epidemics."[3] Brooks was even brought in to speak to students at the US Naval War College about his book.[4] The novel is a fic-

2   Donna Shalala, "Bioterrorism: How Prepared Are We?," *Emerging Infectious Diseases* 5, no. 4 (1999): 492–93.

3   Mike Stuchbery (@MikeStuchbery_), "TIL I learned that some UK & US crisis response teams on a national level have their members read 'World War Z' by Max Brooks, as a good study in the social effects of epidemics," *Twitter,* March 3, 2020, https://twitter.com/mikestuchbery_/status/1234819359660560385.

4   Josh Swartz, "Max Brooks, Preppers, and What *World War Z* Can Teach Us about Coronavirus," *wbur: Endless Thread,* April 3, 2020, https://www.wbur.org/endlessthread/2020/04/03/world-war-z-preppers-coronavirus.

tional account of a zombie plague that wipes out almost all of the world's population.

Part of the pleasure of the outbreak narrative for the viewer is the way it visualizes disease and information vectors, and the way it can simplify moral ambiguities, which allows the viewer to judge — and even despise — the "othered." "Othering" is a way to reflect on how a disease would (and could) spread, a way of placing blame and shaping fear, and a way to indulge racism. In *Outbreak* and *Contagion*, for example, we can literally trace the disease and information vectors, watching them outlined on maps that display the path of the outbreak. In *24* (Fox, 2001–10), *Covert One: The Hades Factor* (dir. Mick Jackson, 2006), and *Toxic Skies* (dir. Andrew C. Erin, 2008), it is clear with whom to ally and whom to despise, for whose death to cheer, whose crimes to condemn. And zombie narratives, whether they be as straightforward as *Resident Evil* (dir. Paul W.S. Anderson, 2002) and *Dawn of the Dead* (dir. Zack Snyder, 2004), or as nuanced as *The Walking Dead* or *iZombie* (cw, 2015–19), revel in how permissive it is to smash, gouge, spear, or slice the zombied other.

"Othering" is a key thematic trope of the outbreak narrative, and it is a trope that is very much repeated in real life. For example, Sheldon Ungar, in his analysis of us media coverage of the 1995 Ebola outbreak in Zaire, found that every source under consideration contained the view that Zairian "conditions are perfect for breeding a plague," repeatedly referring to the collapse of their public health system, the "staggeringly corrupt government," the soldiers "preying on a frightened populace," and describing the capital of Zaire as "defined by decay."

More recently, the coronavirus outbreak quickly resulted in racial slurs and assaults. In Los Angeles, a man shouted at a Thai woman that "every disease has ever came from China, homie. Everything comes from China because they are f——disgusting."[5] In New York, a man called an Asian woman a

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5   Holly Yan, Natasha Chen, and Dushyant Naresh, "What's Spreading Faster Than Coronavirus in the us? Racist Assaults and Ignorant Attacks against

"diseased b——" before hitting her in the head.[6] A close up of President Donald Trump's notes during a briefing at the White House on March 19, 2020, showed the word "corona" in "Corona Virus" was crossed out and replaced with "Chinese," and the virus was often called the "Wuhan Flu" by Republicans. Not only did Abraham Weintraub, the education minister of Brazil, insinuate that the pandemic was part of Beijing's "plan for world domination," but he did so with a fake Chinese accent.[7] The governor of the Veneto region of Italy told journalists that his country would do a better job handing the virus than China because Italians have better hygiene and the Chinese eat mice alive.[8] Even more horrifying, the *Health and Human Rights Journal* documented the discriminatory treatment inflicted upon Europe's Roma minority, viewed by many governments as "a collective health and safety threat," even when there was no evidence of any Covid-19 cases. The article details, for instance, a Slovakian mayor who "suggested Roma could pose a particular health risk because they are a 'socially unadaptable people,'" and describes police abuses and disproportionate military actions.[9] Amnesty International also documented that "the number of fines handed out for breaching lockdown measures was three times higher" in Seine-Saint-Denis, just north of Paris, the poorest area of mainland France where the inhabitants are pri-

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Asians," *CNN,* February 21, 2020, https://www.cnn.com/2020/02/20/us/coronavirus-racist-attacks-against-asian-americans/index.html.

6 Ibid.

7 Agence France-Presse, "China Outraged after Brazil Minister Suggests Covid-19 Is Part of 'Plan for World Domination,'" *The Guardian,* April 6, 2020, https://www.theguardian.com/world/2020/apr/07/china-outraged-after-brazil-minister-suggests-covid-19-is-part-of-plan-for-world-domination.

8 Human Rights Watch, "Covid-19 Fueling Anti-Asian Racism and Xenophobia Worldwide," *Human Rights Watch,* May 12, 2020, https://www.hrw.org/news/2020/05/12/covid-19-fueling-anti-asian-racism-and-xenophobia-worldwide.

9 Margareta Matache and Jacqueline Bhabha, "Anti-Roma Racism Is Spiraling during COVID-19 Pandemic," *Health and Human Rights Journal,* April 7, 2020, https://www.hhrjournal.org/2020/04/anti-roma-racism-is-spiraling-during-covid-19-pandemic/.

marily Black or of North African descent, than in the rest of the country.[10]

Unfortunately, this pattern is nothing new. Immigrants and foreigners have historically been seen as "contagious" and "diseased." Anti-Roma sentiment has existed for centuries, with the Romani people blamed for transmitting the plague, for instance, or typhus. Alan M. Kraut, in "Foreign Bodies: The Perennial Negotiation over Health and Culture in a Nation of Immigrants," describes how the Irish were charged with bringing cholera to the United States in 1832, and Chinese immigrants were seen as a threat to public health, specifically the bubonic plague, at the beginning of the twentieth century. Italians were also stigmatized for polio, and tuberculosis was called the "Jewish disease."[11] During the 1990s, Haitians who tested positive for HIV were held at Camp Bulkeley in Guantanamo Bay and denied entry under a 1987 law barring immigration of HIV-positive individuals into the United States.

Even now, in the twenty-first century, immigrants are seen as diseased and contagious. In July 2014, US House member Phil Gingrey (R-GA) accused immigrants from Central America of carrying deadly diseases, such as swine flu, dengue fever, Ebola virus, and tuberculosis.[12] In July 2015, Donald Trump declared that "tremendous infectious disease is pouring across the bor-

10 John Silk, "European Police Used Racial Discrimination When Enforcing Coronavirus Lockdowns: Amnesty International," *DW Akademie,* https:// www.dw.com/en/european-police-used-racial-discrimination-when-enforcing-coronavirus-lockdowns-amnesty-international/a-53931040.

11 Alan M. Kraut, "Foreign Bodies: The Perennial Negotiation over Health and Culture in a Nation of Immigrants," *Journal of American Ethnic History* 23, no. 2 (2004): 5.

12 Louis Jacobson, "Rep. Phil Gingrey Says Migrants May Be Bringing Ebola Virus through the U.S.–Mexico Border," *Politifact,* July 18, 2014, http:// www.politifact.com/truth-o-meter/statements/2014/jul/18/phil-gingrey/rep-phil-gingrey-says-migrants-may-be-bringing-ebo/.

der" in the bodies of immigrants.[13] In June 2017, he reportedly claimed that Haitian immigrants "all have AIDS."[14]

Outbreak narratives allow for and encourage this kind of stigmatizing of individuals or locations deemed contagious or ripe for "plague breeding." This method of stigmatizing individuals or locations can be seen as a way to redraw lines rendered meaningless by the process of globalization. Othering becomes a way of creating reassurance that the virus is only meant for "at-risk" people, enforcing a sense of difference and distance, and a way of displacing blame.

In the outbreak narrative, the threat always comes from the outside in, spread via physical contact, breathing, technology, science, and/or conspiracy, but almost always originating in Asia or Africa, traveling from east to west. In *The Andromeda Strain* (Wise, 1971), perhaps the original "outbreak narrative," the virus comes from outer space. In this case, it is literally aliens (a term also used to describe foreign inhabitants of the nation) who are to blame. The reference may be more abstract, but the process of othering is the same. At that point in US history, Hollywood films were often centered around extraterrestrial threats. By the 1990s, however, it was common for the viral threat to come from an African country, even if it was repurposed by the US military as a bioweapon, as in the case of *Outbreak.*

In both real life and in the fictionalized outbreak narrative, it is not simply that diseases are blamed on an unfortunate group but that modernization is offered as the antidote to the diseased and dangerous "relics of 'primitive' other." *Outbreak*, for instance, opens in a tribal and disease-ridden African jungle space, which is in marked contrast to the next scene, set in the organized,

13   Louis Jacobson, "Are Illegal Immigrants Bringing 'Tremendous' Disease across the Border, as Trump Says? Unlikely," *Politifact,* July 23, 2015, http://www.politifact.com/truth-o-meter/article/2015/jul/23/are-illegal-immigrants-bringing-tremendous-diseas/.

14   Stef W. Kight, "Report: Trump Said Haitian Immigrants 'All Have AIDS,'" *Axios,* December 23, 2017, https://www.axios.com/report-trump-said-haitian-immigrants-all-have-aids-1515110820-4d6f7da4-ca7a-4e01-9329-7f25b49e709c.html.

Fig. 1. Still from the movie *Outbreak,* dir. Wolfgang Petersen, 1995.

protected, sterile, modern US Army Medical Research Institute of Infectious Diseases (USAMRIID) — the browns and greens of the jungle all the more chaotic when juxtaposed with the white sterility of the laboratory. The village is also full of tribal music, thatched roofs, dying people, and monkeys, while the "virology section" of the USAMRIID is neatly compartmentalized into "biosafety levels," lists of levels and corresponding viruses distinguishing each section from the next (fig. 1). When the film returns to Africa, this time with the medical researchers, the Westerners walk into the village in their masks and yellow suits, their prophylactics emphasizing their boundaries — metaphorical, technological, and literal — protecting them from the disease and dirt, the dead and dying. To exacerbate the layers of racism and stigma, not only does the Motaba virus seemingly originate in this primitive African village, before being brought to the United States via an infected monkey, the monkey is smuggled in by an Asian man.

In *Contagion,* the virus comes from Asia — linked to the country's alleged lack of hygiene among food workers and the underclass — even if the spread westward is because of an American company and an American blonde. In the book *World War Z* (written by Max Brooks and published by Three

Rivers Press in 2007), the outbreak begins in China; however, in the movie *World War Z* (dir. Marc Foster, 2013), the outbreak begins in South Korea. Thomas R. Feller posits that the reason for this change is the fiscally responsible reason that "China constitutes the world's second largest movie market after the US and the filmmakers did not wish to offend the Chinese authorities who could ban the film from being shown there."[15] In the miniseries *Covert One: The Hades Factor* (CBS, 2006), the virus was developed by Americans but spread by treacherous Muslims. The racial profiling may shift, but the other (whatever his or her skin tone) remains just as threatening, just as stigmatized.

In a *Washington Post* article, "The Long and Ugly Tradition of Treating Africa as a Dirty, Diseased Place," Laura Seay and Kim Yi Dionne examine the tradition of describing not only the African continent in this way but also the African people as "savage animals." They examine the history of comparing African people to uncivilized primates and focus specifically on a *Newsweek* story that suggests "African immigrants are to be feared, and that apes — and African immigrants who eat them — could bring a deadly disease to the pristine shores of the United States of America."[16] The disease, in this case, is Ebola, and the article, predictably, warns that Ebola is on its way to US soil, "all but ignored by the popular press and public." It is ignored because the article's theory (that Ebola is within bushmeat smuggled into the United States in luggage) is nonsense. As best as scientists can ascertain, Ebola is transmitted via bats, not meat. However, *Newsweek*, much like other media sources, continued to threaten that this is a valid risk, an insinuation that is not only

15 Thomas R. Feller, "World War Z," *Science Fiction Film and Television* 7, no. 3 (2014): 445.

16 Laura Seay and Kim Yi Donne, "The Long and Ugly Tradition of Treating Africa as a Dirty, Diseased Place," *Washington Post,* August 25, 2014, https://www.washingtonpost.com/news/monkey-cage/wp/2014/08/25/othering-ebola-and-the-history-and-politics-of-pointing-at-immigrants-as-potential-disease-vectors/.

misleading but irresponsible.[17] Also note the contrast between the ape-eating Africans and the "pristine" United States.

This kind of distancing from a threatening person or group of people continues to be just as relevant off screen as on. The strident declarations by Donald Trump to ban all Muslims from entering the United States and to deport illegal immigrants were just another manifestation of an attempt to draw a line in the sand between supposedly "good people" and "hazardous people." In terms of 9/11, the obvious "other" was the Arab terrorist and the menacing Al Qaeda, but Elizabeth Goren argues that the first signs of distancing were the "actual erection of physical barriers around the disaster site itself," as if to contain the horror. Those directly affected by the disaster were seen as "contaminated carriers of the catastrophe, who had to be almost quarantined" in order to protect others from the social contagion of what they had experienced.[18] The "contagion" of 9/11 was also evident in the way people fled the city after the event, either permanently or temporarily, tourists choosing other, "less tainted" destinations for their holidays. Ground Zero became, like patient zero, something to be shunned and avoided, an attribute further enhanced when the relief centers were moved off-site and uptown. The implication was that somehow the horror and trauma could be contained and localized.

A related thematic trope in both real life and fictional outbreak narratives is a focus on establishing and policing security in a world where "others" want to harm "us." Contagious diseases instill fears of sharing bodily fluids, bodily contact, or even just air space with potentially infectious creatures (animal or human, depending on the disease). If the horror, trauma, and microbes are geographically specific, then the aim is to get as far away from them as possible. This mentality persists, even when irrational. For example, after the Orlando shooting in June 2016, many Americans were shocked to discover that gay men could

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17 Ibid.
18 Elizabeth Goren, "Society's Use of the Hero Following a National Trauma," *American Journal of Psychoanalysis* 67 (2007): 44.

not donate blood. The Food and Drug Administration banned gay and bisexual blood donation completely in 1983, revising the ban slightly in 2015 to allow gay men who have been celibate for a full year to donate, and then finally removing the ban in 2023.

Fear of infection makes one especially aware of the distance between bodies, making a suspected carrier feel uncomfortably close. Metaphorical lines are drawn between those who are not infected and those who are deemed infectious or more likely to be infectious. It may be unattainable, but distance from disease is an aspirational ideal. It is no coincidence, Jacqueline Foertsch writes, "that Sir Thomas More's *Utopia* is an island before it is anything else."[19] Early in the pandemic, when rumors about a lockdown were beginning to circulate, many of the wealthy began to flee city apartments for their second homes, Manhattan residents relocating to Long Island or Connecticut, for example. In France, thousands of rich Parisians fled to the island of Noirmoutier, roughly five hours away. The mayor's initial reaction? To block the only bridge to the mainland. Unfortunately for residents of the island, national authorities said doing so would be illegal, and the island's population nearly doubled overnight.[20]

Unless we can escape to a virus-free island, one way to establish security is by literally drawing a line between "good bodies" and "bad bodies," "good blood" and "bad blood." This can be done on a legal level, as in the FDA's ban, or it can be done with literal lines on the ground, through a quarantine, or by suggestion, through social distancing. In *Outbreak*, the entire town of Cedar Creek is quarantined, and then within that quarantine, the sick people are first isolated in the hospital and then fenced into a tented area after they become too contagious to share the hospital. *Contagion*, rather than using traditional quarantine,

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19 Jacqueline Foertsch, *Enemies Within: The Cold War and the AIDS Crisis in Literature, Film, and Culture* (Urbana: University of Illinois Press, 2001), 28.

20 Norimitsu Onishi and Constant Méheut, "Rich Europeans Flee Virus for 2nd Homes, Spreading Fear and Fury," *New York Times,* March 29, 2020, https://www.nytimes.com/2020/03/29/world/europe/rich-coronavirus-second-homes.html.

Fig. 2. Still from the movie *Containment,* dir. Neil Mcenery-West, 2016.

depicts the use of social distancing, where individuals are told to remain three feet away from each other at all times. In *Containment* (CW, 2016), social distancing expands to four to six feet, and staying home or wearing masks further enhances the social distancing (fig. 2). These exact techniques would be recommended during the coronavirus pandemic, but unfortunately, in real life, people were not so compliant. Excessively politicized, right-wing conservatives have associated mask-wearing and social distancing with weakness and mindless obedience, associating their refusal to care for their own health or for the health of those around them with a defiant sense of freedom. This same defiant sense of "freedom" also fosters a rejection of experts, feeding into a web of conspiracy theories.

In contrast, in *Containment,* scientists and medical personnel begin wearing masks even before the danger of the virus is determined. As soon as details of the virus are revealed, ordinary civilians also start wearing masks and gloves and maintaining personal distance. In these narratives, there is layer upon layer of protection, layer upon layer of isolation, plastic and glass separating the characters from each other. Because they have run out of body bags in *Contagion*, when Erin dies, she is tightly covered with plastic and taped shut. Her body is sealed

Fig. 3. Still from the movie *Contagion,* dir. Steven Soderbergh, 2011.

to contain potential contaminants, to reduce the risk of potential exposure. Even the air around her could be fatal (fig. 3). We also see Jory Emhoff (Anna Jacoby-Heron) kept apart from her boyfriend, only able to text him and to look at him through a window. While her father is being watched at the hospital, she communicates with him through a telephone and through a window (fig. 4).

The utopic desire for effective boundaries continues to ignite political rhetoric. Donald Trump, for instance, argued in an interview with CNN in 2015 that the United States has a "porous border" and that this is not acceptable: "To have a country you have to have a strong border, a really strong border."[21] He repeated this argument throughout much of his presidential campaign messaging, including in a TV spot from January 2016. In that particular campaign ad, Trump demanded a temporary ban on Muslims entering the United States (keeping out "the questionable other"), and called for a halt on illegal immigration via Mexico by building a wall (keeping out another type of "questionable other"). He concluded the ad by reiterating the

21 CNN, "Trump: I'll Build the Wall and Mexico's Going to Pay for It," *CNN,* July 31, 2015, http://www.cnn.com/videos/us/2015/07/31/trump-mexico-border-foster-new-day.cnn.

Fig. 4. Still from the movie *Contagion,* dir. Steven Soderbergh, 2011.

argument that building higher and more effective walls "will make America great again."²² Another example occurred during the November 2014 campaign season, when former US senator Scott Brown (Republican, Massachusetts), then running for a US Senate seat in New Hampshire, managed to pull all these metaphors together in one dizzying array, predicting that ISIS terrorists would sneak in via "porous" boundaries to spread Ebola, a prediction eerily similar to the plot of *The Hades Factor.*²³

22 PoliticalTurkey1, " Donald Trump's First Ad: GREAT AGAIN TV SPOT," *You-Tube,* January 4, 2016, https://www.youtube.com/watch?v=itsSDhgKwhw.

23 In an interview with WGIR radio that was captured by the New Hampshire Democratic Party, Brown was asked whether he favored travel restrictions on some passengers in and out of West Africa. He replied: "We need a comprehensive approach and I think that should be part of it. I think it's all connected. For example, we have people coming into our country by legal means bringing in diseases and other potential challenges. Yet we have a border that's so porous that anyone can walk across it. I think it's naive to think that people aren't going to be walking through here who have those types of diseases and/or other types of intent, criminal or terrorist. And yet we do nothing to secure our border"; quoted in Greg Sargent, "Scott Brown: Anyone with Ebola Can 'Walk across' Our 'Porous' Border," *Washington Post,* October 14, 2014, https://www.washingtonpost.com/blogs/plum-line/wp/2014/10/14/scott-brown-anyone-with-ebola-can-walk-across-our-porous-border/.

Unfortunately for Trump, the outbreak narrative demonstrates that boundaries are never fully effective. For example, the prison is quarantined on *The X-Files* episode "F. Emasculata" (Fox, April 28, 1995), but the virus still spreads. The soldiers and the potentially infected are quarantined in *The Hades Factor,* but the virus still spreads. The hotel is quarantined in season 3 of *24* (Fox, 2003–4), but the terrorists have more of the virus at their disposal. In *Global Effect* (dir. Terry Cunningham, 2002), Meredith Tripp (Carolyn Hennesy) attempts to quarantine South Africa, but the virus reaches the United States anyway. The quarantine is violated in *Pandemic* and *Containment* by people defying orders and sneaking out of the containment zone.

Not only is it impossible to close borders completely, especially since people are guaranteed to defy orders, part of the problem was the way borders were closed and specifically the delays in shutting down flights, not to mention the reluctance to shut flights down entirely. Similarly, despite alarm being raised early on about Covid-19, flights continued between countries and major cities, guaranteeing that it was just a matter of time until the virus had spread worldwide. Similarly, reaction was lethargic to the discovery of a more contagious strain of the virus in the UK in September 2020. Air travel from the UK was not suspended until December, and even then it was initially only to the Netherlands and Belgium. Other countries soon piled on, but the bans were temporary, and the United States only required travelers from the UK to test negative for Covid-19 within seventy-two hours of their departure. Unsurprisingly, the contagious strain had already turned up in forty-five different countries as of January 2020.

The word "contagion," comes from the Latin *contagio,* meaning "to touch together" (*cum*, "together with," and *tangere*, "to touch"). Integral to the word's origin is this bringing together, the formation of shared human bonds, and the connection and contagion therein. This is similar to the way that, on the one hand, a traumatic event can isolate (no one else knows what you experienced; no one else can understand), but, on the other hand, a large-scale traumatic event can unify, creating a bond or

community among those affected (because no one else knows what you all experienced). Contagious diseases create communities based on an "us against them" mentality, unifying groups of infected and groups of uninfected. In Robin Cook's 1997 novel *Invasion,* one of the protagonists says of a deadly virus from outer space that arrives on Earth that "knowing it is happening and that all humans are at risk, I feel connected in a way I've never felt before," as if "humans are a big family."[24] In *The Walking Dead, Dawn of the Dead* (dir. Zack Snyder, 2004), *Blindness* (dir. Fernando Meirelles, 2008), and *Carriers* (dir. Àlex and David Pastor, 2009), we see how outbreaks create new kinds of families, survivors banding together in groups to form new types of social structure. E. Ann Kaplan writes that, following 9/11 in New York, she felt a connection to strangers that she had never felt before: "On the subway, too, we looked at each other as if understanding what we were all facing. For at any moment, it seemed, another attack could take place[. …] And we were in this together."[25] Similarly, in *Outbreak,* the mayor of Cedar Creek (Kurt Boesen) tells Robby Keough, "Cedar Creek is a small town. We're like a family. Everybody's scared." Everyone suffering through a virus is bonded together by virtue of their shared suffering, much as those not yet infected can band together to avoid infection.

Films and TV shows can depict this sweet silver lining to the horrors of a pandemic, but they can also depict the reality that your economic status plays a direct role in your chances for survival, that we are not actually equal in a crisis. In *Train to Busan* (dir. Yeon Sang-ho, 2016), Yong-suk (Kim Eui-sung) is a wealthy CEO only concerned with saving himself, a point that is clarified early in the film when he makes fun of a homeless man. To make matters worse, he is quick to sacrifice numerous fellow passengers whose social status he decides is beneath his if by so doing he can save himself.

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24 Robin Cook, *Invasion* (New York: Berkley Publishing, 1997), 238.

25 E. Ann Kaplan, *Trauma Culture* (New Brunswick: Rutgers University Press, 2005), 9.

In real life, President Trump and some of his close friends and colleagues received monoclonal antibodies when they were infected with Covid-19, which were so rare at that time that they were all but unavailable to the general public. Similarly, although there was a massive decrease in commercial air travel at the start of the pandemic, the private jet industry bounced back. According to data provided by FlightAware, by the end of 2020, business flights (defined as not commercial or cargo) were operating "at between 85% and 90% of their 2019 volume," while VistaJet, a company that "charters private jets through a membership program," saw a "320% increase in new memberships, compared to July 2019."[26] The article "Pandemic Makes World's Billionaires — and Their Advisors — Richer" by Sam Jones and Valentina Romel for the *Financial Times* describes the various ways Covid-19 widened financial gaps around the globe. Jones and Romel describe how the world's billionaires had grown wealthier during 2020, specifically citing China, where 257 people became billionaires in that year alone.[27]

Another key trope of the outbreak narrative is the emphasis on making the invisible visible. Part of this fixation stems from the fear of the seemingly healthy carrier. One of the most terrifying elements of contagious disease is that of the carrier who does not appear infected, but who innocently or maliciously spreads the virus in his or her wake. There is no carrier in the first *Andromeda Strain* (since the infected people are already dead), but starting with *Outbreak* and intensifying with *Contagion,* the seemingly healthy carrier plays a significant role, underscoring the threatening implications of the latency period. The fear revolves around questions such as these: How can you protect yourself if you do not know from what (or from whom)

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26 Katharine Swindells, "Private Jet Industry Trends Upwards Due to Covid-19 Pandemic," *elitetraveler,* November 19, 2020, https://www.elitetraveler.com/cars-jets-and-yachts/aviation/private-jet-trends-upwards-covid-19-pandemic.

27 Sam Jones and Valentina Romel, "Pandemic Makes World's Billionaires — and Their Advisors — Richer," *Financial Times,* October 23, 2020, https://www.ft.com/content/ab30d301-351b-4387-b212-12fed904324b.

you need protecting? How can you protect yourself if you do not know who is infected? The longer the virus takes to show symptoms, the more people will inevitably be infected. This is why viruses with high mortality rates do not spread as much; the carriers die before they can infect others.

Perversely, the inability to tell who is infected was one of the most terrifying aspects of Covid, but it also might have been one of the reasons so many refused to take the virus seriously. Lia Kvatum, in "Why Human Brains Are Bad at Assessing the Risks of Pandemics," wrote that "information without feeling is largely ineffective," so people are reluctant to care about a virus until they know someone personally who has died of it. She also points out that our fears are shaped by our communities, and so we are more likely to believe in experts (rather than conspiracy theories) if others in our community do.[28]

Despite overloaded hospitals and skyrocketing death tolls, lockdowns happening over and over around the world, humans appeared universally resistant to accepting the realities of the virus. For example, Berlin, Germany, had thousands of demonstrators protesting over and over throughout 2020, angry over the lockdowns put in place to limit the spread of the virus, despite the fact that Germany had one of the least strict lockdowns in Europe. Insistence that the virus is a hoax and a tool used merely to keep citizens in line was a popular battle cry around the world, not just in Germany, even though Germany's far-right extremist groups were quick to capitalize on the anger and resentment.

Another part of this fixation stems from the fear that what you cannot see can kill you — and in terms of microbial threat, there is much that cannot be seen. Autopsies are one way of seeing the unseen, cutting open the body to reveal the otherwise hidden wreckage wrought by the virus. In *Black Death* (dir.

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28 Lia Kvatum, "Why Human Brains Are Bad at Assessing the Risks of Pandemics," *Washington Post,* September 8, 2020, https://www.washingtonpost.com/lifestyle/magazine/why-human-brains-are-bad-at-assessing-the-risks-of-pandemics/2020/09/03/7395321c-dd9d-11ea-b205-ff838e15a9a6_story.html.

Christopher Smith 2010)*,* Sara (a.k.a. patient zero) is autopsied, thus revealing the enormity of her illness. "Dear God, this is one node!" shouts one of the doctors slicing Sarah open, before running to put on two additional pairs of gloves. In *Outbreak* (dir. Wolfgang Petersenm 1995)*,* following Robby's autopsy of Jimbo (Patrick Dempsey), she tells Sam that "it looked like a bomb went off" inside him, that "all the organs were liquefied." After peeling off the top of Beth's scalp in *Contagion*, the medical examiner (David Lively) says, "Oh, my god." His assistant (Andrew White) asks if he should take a sample. The medical examiner replies, "I want you to move away from the table." "Should I call someone?" the assistant asks. "Call everyone" is the dramatic reply. In all three of these cases, we do not get to see what the doctors see, but we can surmise from their reactions that whatever lies inside these bodies is truly terrifying.

In response to the fear of the unseeable, outbreak narratives also fetishize the close-up, the magnification, the zooming in to expose what would otherwise remain unseen. For instance, the cover of *Time* magazine's September 12, 1994, issue featured magnified microbes and the title "Revenge of the Killer Microbes" (fig. 5). On May 20, 1995, the cover of the *Economist* featured a skull within a petri dish and the headline "Disease Fights Back." Outbreak narratives frequently call attention to their high-powered microscopes, emphasizing the extreme close-ups of these invisible viruses. Sometimes they even feature animated sequences that depict the virus "at work," all with the aim of making the invisible contagions visible.

On March 22, 2020, the *Daily Mail* ran the headline "The 'Invisible' Enemy Unmasked: Chilling Microscope Images Reveal the Reality of Coronavirus as It Erupts out from the Surface of a Human Cell." The article opens with, "Know your enemy, as the saying goes. And these startling images reveal exactly that — an up-close and personal view of novel coronavirus." A series of images taken with a scanning electron microscope follow, colorized to set the virus vividly apart from sur-
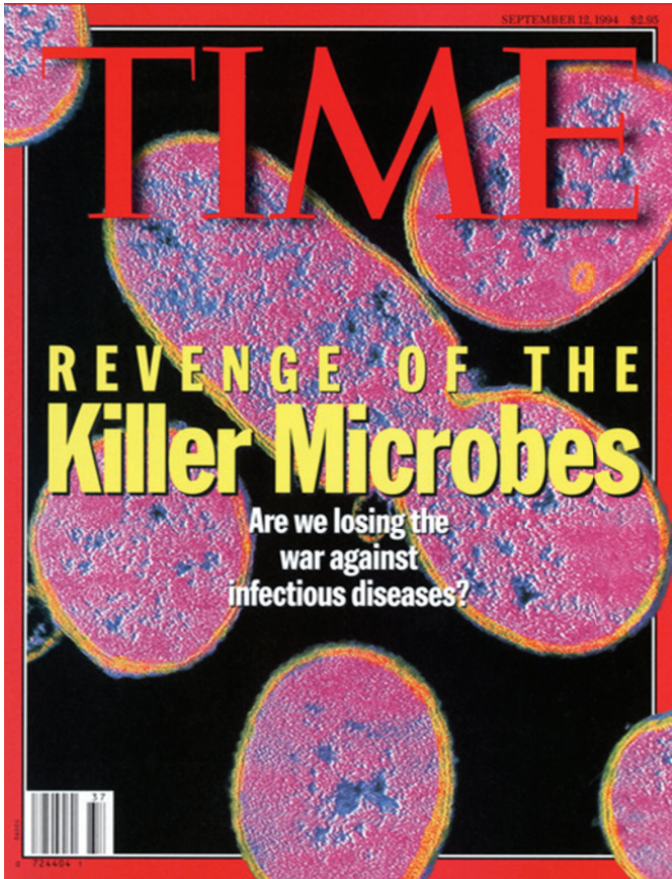
Fig. 5. Cover of *Time* magazine, September 12, 1994.

rounding cells. The images depict the virus "emerging from the surface of cells cultured in a lab and isolated from a patient."[29]

Another constant in the outbreak narrative is the issue of blame, but who (or what) is to blame can and does shift. The Muslim, African, or Asian "other" is often to blame for instigating the outbreak in the Western world, but the extent and speed of the spread is attributed to human development; "progress" is often critiqued for causing, if not the outbreak itself, its spread. Frank Furedi observes the frequency of perceiving "human activity through a narrative that emphasizes its selfish, destructive, and toxic behavior" and argues that this is what "underpins our culture of fear."[30] The sense of culpability in our own destruction is a major theme in both our culture of fear and the outbreak narrative. For example, in *The Hot Zone,* Richard Preston writes that AIDS, Ebola, and any other emerging diseases are "a natural consequence of the ruin of the tropical biosphere," an immune system response against humanity by earth herself.[31]

Heather Schell, however, sees the issue of responsibility a little differently. She writes that constructing narratives where humans are to blame is a way of creating a sense of control where, actually, none exists. The alternative? Reminding ourselves of the failures of medicine and technology to "repel the onslaught of disease organisms."[32] We see this play out in films such as *I Am Legend* (dir. Francis Lawrence, 2007), where the cancer vaccine turns people into zombies, or television shows such as *The Walking Dead,* where the CDC is unable to do anything to help and does not even know how the infection started. Science fails when it creates a deadly virus — *Covert One: The Hades Factor, I Am Legend, 28 Days Later, Resident Evil* — technology fails when it creates a machine that tries to kill and cause

29 Nick Enoch, "The 'Invisible' Enemy Unmasked," *Daily Mail,* March 22, 2020, https://www.dailymail.co.uk/news/article-8132325/Coronavirus-chillingly-seen-scanning-electron-microscope.html.

30 Frank Furedi, *Culture of Fear Revisited* (London: Continuum, 2006), xiv.

31 Richard Preston, *The Hot Zone* (New York: Anchor Books, 1994), 405, 406.

32 Heather Schell, "The Sexist Gene: Science Fiction and the Germ Theory of History," *American Literary History* 4, no. 4 (2002): 823.

destruction — *The Andromeda Strain, Resident Evil, The Walking Dead.* In order to compensate for a lack of control in real life, these narratives are created to shift blame and make sense of the world around us. After all, conspiracy theories create a sense of agency and purpose for what cannot otherwise be understood. They can be reassuring because they imply that, for better or for worse, "everything is connected," that everything has a purpose, that there is a master plan.[33] Better that than to acknowledge that those in charge do not know what they are doing or are not paying attention.

Similarly, various members of the Trump family created narratives to shift blame rather than take responsibility and admit negligence. For instance, healthcare workers were blamed for the shortage of personal protective equipment (they must have been stealing them), doctors and hospitals were inflating Covid numbers (to get more money), the virus was developed in a lab in Wuhan (and intentionally released by the Chinese government), the virus is part of a global hoax (to make Trump look bad), the virus was intentionally spread by Bill Gates (in order to install tracking devices in the vaccine), and the list goes on.

The Hollywood outbreak narrative is a classic because it so effectively plays on our fears about globalization, immigration, ineffective borders, and invisible threats. Analyzing these fictional narratives before and even during an outbreak can help us see what to do and, more importantly, what not to do. Many outbreak narratives of cinema and TV use variations of Ebola as a default virus, as a stand-in for AIDS, SARS, sarin gas, avian flu, anthrax, swine flu, MERS, or any others from the seemingly endless list circulating in news headlines. In marked contrast to AIDS, which may have been the first "emerging virus" to catch people's attention during the last decades of the twentieth century, Ebola progresses faster, without HIV's long latency period, and its visually horrific and dramatic symptoms lend itself more readily to film and TV thrillers. It can also be cured, which is

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33 Peter Knight, *Conspiracy Culture: From Kennedy to "The X-Files"* (London: Routledge, 2000), 208.

crucial for narrative resolution, and it does not tap into deep-seated homophobia. In a more cinematically egalitarian fashion, Ebola affects everyone regardless of sexual orientation or practice. Covid, unfortunately, does the same, making one wonder how long until it permeates Hollywood.

References

Agence France-Presse. "China Outraged after Brazil Minister Suggests COVID-19 Is Part of 'Plan for World Domination.'" *The Guardian,* April 6, 2020. https://www.theguardian.com/world/2020/apr/07/china-outraged-after-brazil-minister-suggests-covid-19-is-part-of-plan-for-world-domination.

CNN. "Trump: I'll Build the Wall and Mexico's Going to Pay for It." *CNN,* July 31, 2015. http://www.cnn.com/videos/us/2015/07/31/trump-mexico-border-foster-new-day.cnn.

Cook, Robin. *Invasion.* New York: Berkley Publishing, 1997.

Enoch, Nick. "The 'Invisible' Enemy Unmasked." *Daily Mail,* March 22, 2020. https://www.dailymail.co.uk/news/article-8132325/Coronavirus-chillingly-seen-scanning-electron-microscope.html.

Feller, Thomas R. "World War Z." *Science Fiction Film and Television* 7, no. 3 (2014): 294–445.

Goren, Elizabeth. "Society's Use of the Hero following a National Trauma." *American Journal of Psychoanalysis* 67 (2007): 37–52. DOI: 10.1057/palgrave.ajp.3350013.

Human Rights Watch. "COVID-19 Fueling Anti-Asian Racism and Xenophobia Worldwide." *Human Rights Watch,* May 12, 2020. https://www.hrw.org/news/2020/05/12/covid-19-fueling-anti-asian-racism-and-xenophobia-worldwide.

Jacobson, Louis. "Are Illegal Immigrants Bringing 'Tremendous' Disease across the Border, as Trump Says? Unlikely." *Politifact,* July 23, 2015. http://www.politifact.com/truth-o-meter/article/2015/jul/23/are-illegal-immigrants-bringing-tremendous-diseas/.

———. "Rep. Phil Gingrey Says Migrants May Be Bringing Ebola Virus through the U.S.–Mexico Border." *Politifact,* July 18, 2014. http://www.politifact.com/truth-o-meter/statements/2014/jul/18/phil-gingrey/rep-phil-gingrey-says-migrants-may-be-bringing-ebo/.

Foertsch, Jacqueline. *Enemies Within: The Cold War and the AIDS Crisis in Literature, Film, and Culture.* Urbana: University of Illinois Press, 2001.

Furedi, Frank. *Culture of Fear Revisited.* London: Continuum, 2006.

Jones, Sam, and Valentina Romel. "Pandemic Makes World's Billionaires — and Their Advisors — Richer." *Financial Times,* October 23, 2020. https://www.ft.com/content/ab30d301-351b-4387-b212-12fed904324b.

Kaplan, Ann E. *Trauma Culture.* New Brunswick: Rutgers University Press, 2005.

Kellner, Douglas. *Cinema Wars.* West Sussex: Wiley Blackwell, 2010.

Kight, Stef W. "Report: Trump Said Haitian Immigrants 'All Have AIDS.'" *Axios,* December 23, 2017. https://www.axios. com/report-trump-said-haitian-immigrants-all-have-aids-1515110820-4d6f7da4-ca7a-4e01-9329-7f25b49e709c.html.

Knight, Peter. *Conspiracy Culture: From Kennedy to "The X-Files."* London: Routledge, 2000.

Kraut, Alan M. "Foreign Bodies: The Perennial Negotiation over Health and Culture in a Nation of Immigrants." *Journal of American Ethnic History* 23, no. 2 (2004): 3–22. http:// www.jstor.org/stable/27501417.

Kvatum, Lia. "Why Human Brains Are Bad at Assessing the Risks of Pandemics." *Washington Post,* September 8, 2020. https://www.washingtonpost.com/lifestyle/magazine/ why-human-brains-are-bad-at-assessing-the-risks-of-pandemics/2020/09/03/7395321c-dd9d-11ea-b205-ff838e15a9a6_story.html.

Matache, Margareta, and Jacqueline Bhabha. "Anti-Roma Racism Is Spiraling during COVID-19 Pandemic." *Health and Human Rights Journal,* April 7, 2020. https://www. hhrjournal.org/2020/04/anti-roma-racism-is-spiraling-during-covid-19-pandemic/.

Onishi, Norimitsu, and Constant Méheut. "Rich Europeans Flee Virus for 2nd Homes, Spreading Fear and Fury." *New York Times,* March 29, 2020, https://www.nytimes.

com/2020/03/29/world/europe/rich-coronavirus-second-homes.html.

PoliticalTurkey1. "Donald Trump's First Ad: GREAT AGAIN TV SPOT." *YouTube,* January 4, 2016. https://www.youtube.com/watch?v=itsSDhgKwhw.

Preston, Richard. *The Hot Zone.* New York: Anchor, 1994.

Sargent, Greg. "Scott Brown: Anyone with Ebola Can 'Walk across' Our 'Porous' Border." *Washington Post,* October 14, 2014. https://www.washingtonpost.com/blogs/plum-line/wp/2014/10/14/scott-brown-anyone-with-ebola-can-walk-across-our-porous-border/.

Schell, Heather. "The Sexist Gene: Science Fiction and the Germ Theory of History." *American Literary History* 14, no. 4 (2002): 805–27. http://www.jstor.org/stable/3568025.

Seay Laura, and Kim Yi Donne. "The Long and Ugly Tradition of Treating Africa as a Dirty, Diseased Place." *Washington Post,* August 25, 2014. https://www.washingtonpost.com/news/monkey-cage/wp/2014/08/25/othering-ebola-and-the-history-and-politics-of-pointing-at-immigrants-as-potential-disease-vectors/.

Shalala, Donna. "Bioterrorism: How Prepared Are We?" *Emerging Infectious Diseases* 5, no. 4 (1999): 492–93. DOI: 10.3201/eid0504.990402.

Silk, John. "European Police Used Racial Discrimination When Enforcing Coronavirus Lockdowns: Amnesty International." *DW Akademie.* https://www.dw.com/en/european-police-used-racial-discrimination-when-enforcing-coronavirus-lockdowns-amnesty-international/a-53931040.

Stuchbery, Mike (@MikeStuchbery_). "TIL I learned that some UK & US crisis response teams on a national level have their members read 'World War Z' by Max Brooks, as a good study in the social effects of epidemics." *Twitter,* March 3, 2020. https://twitter.com/mikestuchbery_/status/1234819359660560385.

Swartz, Josh. "Max Brooks, Preppers, and What *World War Z* Can Teach Us about Coronavirus." *wbur: Endless Thread,* April 3, 2020. https://www.wbur.org/

endlessthread/2020/04/03/world-war-z-preppers-coronavirus.

Swindells, Katharine. "Private Jet Industry Trends Upwards Due to COVID-19 Pandemic." *elitetraveler,* November 19, 2020. https://www.elitetraveler.com/cars-jets-and-yachts/aviation/private-jet-trends-upwards-covid-19-pandemic.

Yan, Holly, Natasha Chen, and Dushyant Naresh. "What's Spreading Faster Than Coronavirus in the US? Racist Assaults and Ignorant Attacks against Asians." *CNN,* February 21, 2020. https://www.cnn.com/2020/02/20/us/coronavirus-racist-attacks-against-asian-americans/index.html.

Wearable Virus Shields:
From Futuristic Dystopias
to Actual Dread

Francesco Spampinato

During the Covid-19 pandemic, a new wave of face shields aimed at protecting and/or isolating users emerged. These included various types of masks, helmets, visors, and even body capsules that would allow avoiding direct contact with the surrounding space and other people who could be possible carriers of the virus. Working as screens behind which one confines oneself, these inventions inevitably raised issues of vision and visuality, or else how they would affect our ways of seeing. Questions of what reality looks like from behind a face mask or shield — and how this "vision" implies feelings of isolation, alienation, dread, and distrust — are crucial not only for better understanding our perception and psychological condition during pandemic peaks but also to imagine what the postpandemic new normal might be like. Some of these coverings are practical solutions for contaminated airborne prevention, most are design speculations addressing the shift from futuristic dystopias to actual dread that we witnessed since the outbreak.

To begin with, a brief history of the medical mask against "contagions" will be outlined, from seventeenth-century plague doctors' beaked masks to the earliest cloth masks in the late nineteenth-century up to the birth of the disposable surgical mask in the 1960s. Since the 1920s — when, along with medical masks, gas masks that had been employed in World War I officially entered the collective unconscious — a new genre of face and head protections started to appear. These include futurists' man-machines, Hugo Gernsback's *Isolator* (1925), Cold War paraphernalia, 1960s space-age fashion, radical design projects, and proto-cyberfeminist bodies, up to postmodern cyberpunk narratives and the posthuman imagery at the turn of the millennium. This new genre of conceptual "inventions," which some of the Covid-19 coverings discussed here draw inspiration from, are based on artistic imagination and critical thinking. They are either dysfunctional or exploring alternative ways to relate with our surroundings, often taking cues from sci-fi visual imageries.

In a review of the monumental two-volume publication *Project on the City* (2002) edited by Rem Koolhas, pivotal postmodernism thinker Fredric Jameson mingles architecture theories with references to sci-fi literature, arguing that "it is the end of the world that is in question here; and that could be exhilarating if apocalypse were the only way of imagining that world's disappearance[. …] Someone once said that it is easier to imagine the end of the world than to imagine the end of capitalism. We can now revise that and witness the attempt to imagine capitalism by way of imagining the end of the world."[1]

Jameson's prophetic words resonated with the Covid-19 pandemic. The time, indeed, seemed just about right to get ahold of masks and plastic shields to keep shopping during the apocalypse or get inside a body bubble to enjoy again clubbing or a live concert. The truth is that we will never go back to our pre–Covid-19 lifestyle. These new wearables are here to signal that, like it or not, we are at the dawn of a new era.

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1   Fredric Jameson, "Future City," *New Left Review* 21 (May/June 2003): 76.

The question is not whether the virus would be defeated or when. Instead, how the ways we were coping with the pandemic were changing for good how we saw and thought of ourselves in relation with the world and other people. For example, how the extreme measures of containment were eliciting alienation, distrust of the other (does one have symptoms? Vaccine? Green Pass?), the loss of empathy, and a perennial feeling of dread. In light of this consideration, face protections should be considered an extension of and a metaphor for the LCD screens behind which we conduct an increasing number of activities. Just as in the 1920s when Walter Benjamin thought of warfare technology, including gas masks, as part of the same set of apparatuses at the base of modern society — namely, media and the arcades of Paris enforcing a consumerist lifestyle — so the 2020s started with a pandemic that suddenly accelerated our usage of and reliance upon audiovisual technologies. These affect our perception and psychological conditions even more deeply than face protections.

Masks and media technologies are both apparatuses that isolate the wearer/user from the physical surroundings as if one were inside a capsule, whether life-size or as big as your apartment. In one of her short lockdown stories collected in Intimations: Six Essays (2020), Zadie Smith suggests a comparison between our current psychological state and that of the schizophrenic:

> The profound misapprehension of reality is what, more or less, constitutes the mental state we used to call "madness," and when the world itself turns unrecognizable, appears to go "mad," I find myself wondering what the effect is on those who never in the first place experienced a smooth relation between the phenomena of the world and their own minds. Who have always felt an explanatory gap. The schizophrenic. The disassociated[…] What is it like to have always seen, in your mind's eye, apocalypse in the streets of New York, and then one day walk out in those same streets and find — just

as it is in your personal hellscape — that they are now deso-
late, empty and silent?[2]

Either mass-marketed or self-made, either coping with actual
risks of contamination or exploring "other" ways of seeing and
performing the everyday, either practical solutions or purely
speculative design projects, these new face coverings allowed us
to see reality not for what it is, for real, but for what we think of
it in our mind. Driven by anxiety and fear, our misapprehen-
sion of reality was not unjustified — the virus was genuinely out
there and was deadly — but was undoubtedly amplified by our
new habits. A simple disposable surgical mask would have suf-
ficed, but artists and designers were coming up with solutions
that, especially when they are dysfunctional and/or conceptual,
seemed to point out that reality had not changed much. Instead,
it is the way we see reality that had changed, and that depended
on the apparatuses that mediate our perception of and connec-
tion with this reality, whether a face shield worn to go shopping
or a smartphone display on which we keep scrolling the latest
feeds on social media.

From the Black Death to the Modern Era

From the earliest moments of the Covid-19 outbreak, it was
clear that the surgical face mask would become "a symbol of our
times," as *The New York Times* stated in a headline as soon as
March 17, 2020.[3] Wearing surgical masks in public was already
a common habit in Asia, notably in Japan, China, Taiwan, and
South Korea, for either cultural or environmental reasons, par-
ticularly during flu seasons, with a surge in the early 2000s
because of the SARS epidemic. In other areas of the world,

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2   Zadie Smith, *Intimations: Six Essays* (London: Penguin Random House,
    2020), 61.

3   Vanessa Friedman, "The Mask," *New York Times,* March 19, 2020, https://
    www.nytimes.com/2020/03/17/style/face-mask-coronavirus.html. A ver-
    sion of this article appeared in print on March 19, 2020, D1, of the New
    York edition with the headline "What a Mask Uncovers."

including Europe and the United States, the use of face masks was common at different ages, usually in connection with the burst of respiratory diseases or acute forms of air pollution as a by-product of industrialization or some chemical disaster or gas weapon. The origins of face masks in general — funerary, ritualistic, ornamental — and helmets as forms of armor get lost in the history of numerous civilizations, but the evolution of face masks for protection from infectious agents transmitted by air is much more circumscribed.

In his *Book of the Marvels of the World* (ca. 1300), Italian explorer Marco Polo recounted how servants in thirteenth-century China, at the time of the Yuan dynasty, were required to cover their faces with silk scarves woven with gold thread when bringing food to the emperor, to prevent any possible contamination through their lower-class breath. The first masks to be employed in health care emerged in fourteenth-century Europe, worn by doctors treating patients affected by the so-called black death, the bubonic plague that as is still the deadliest pandemic in human history, causing the death of approximately 30 to 60 percent of the European population. According to the miasma theory — deemed to be overcome by the germ theory in the nineteenth century — endorsed by most medical doctors at the time, the disease spread through poisoned air perceived as an unhealthy smell or vapor. People then started covering their faces, yet the pestilence remained a regular part of everyday life for at least three centuries.

An incarnation of the black death dread was a sinister crow-like beaked mask, usually paired with heavy leather robes, which plague doctors apparently wore in seventeenth-century Europe. In 1619, during a plague outbreak in Paris, French physician Charles de Lorme — who assisted many European royals, including King Louis XIII — described a protective outfit made of Moroccan goat leather. This consisted in a waxed coat, boots, hat, gloves, and a mask with a nose "half a foot long, shaped like a beak, filled with perfume with only two holes, one on each side near the nostrils, but that can suffice to breathe and carry

Fig. 1. Paulus Furst of Nuremberg, *Doctor Schnabel von Rom,* etching, 1656.

along with the air one breathes the impression of the [herbs] enclosed further along in the beak."[4] Plague doctors wearing beaked masks started being represented in paintings and illustrations, a popular one being Paulus Furst of Nuremberg's etching *Doctor Schnabel von Rom* (1656), in the British Museum, whose rigid posture and reptilian hands are telling of how these figures were perceived as terrifying (fig. 1).

To wish away the fear, the plague doctor became a recurring character of Italian commedia dell'arte and carnival celebrations, notably in Venice where eerie beaked masks hanging in closed souvenir shops during the Covid-19 lockdowns seemed to predict again that the end was near. As much as the miasma theory itself, these outfits were hardly protective against diseases transmitted by air, no matter what aromatic substances one could put inside the mask and the distance between doctor and patient enforced by the beak. According to a *Lancet* article published in May 2020, the first proper surgical masks date back to 1897 when surgeons Johann Mikulicz in Poland and Paul Berger in France began wearing a face mask in the operating room.[5] Later on, with the arrival of the Manchurian plague in 1910–11 and the influenza pandemic or Spanish flu of 1918–19, more and more medical workers, patients, and even the general public started wearing cloth masks covering mouth and nose.

The poor sanitary conditions brought by World War I probably triggered the Spanish flu, which escalated with soldiers returning home packed into trains and trucks. Along with surgical masks, another mask that protected the wearer from inhaling contaminated air entered the collective unconscious at that time: the gas mask. Sealed covers over the whole face, equipped with respirators made of sorbent compounds, gas masks began to be mass-produced during World War I to protect soldiers against chemical weapons. Coincidentally, narratives of war

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4   Charles de Lorme, quoted in Michael Tibayrenc, ed., *Encyclopedia of Infectious Diseases: Modern Methodologies* (Hoboken: John Wiley, 2007), 680.

5   Bruno J. Strasser and Thomas Schlich, "The Art of Medicine: A History of the Medical Mask and the Rise of Throwaway Culture," *The Lancet* 396, no. 10243 (2020): 19–20.

Fig. 2. Hugo Gernsback wearing his invention, "The Isolator," 1925.

and technology started interweaving in artistic speculations on cold and merciless man-machines, as in Jacob Epstein's sculpture *Torso in Metal from "The Rock Drill"* (1913–15) and Italian futurists' costumed performances, such as Ruggero Vasari's *L'Angoscia delle macchine* (1923), with costumes by Ivo Pannaggi, and Fortunato Depero's *Annicham del 3000* (1924). They represented automata or cyborgs, metaphorical of the increasing automation of modern life.

In 1930, Benjamin, one of the most critical observers of modern society, argued that the Great War was "the result of the gaping discrepancy between the gigantic power of technology and the minuscule moral illumination it affords."[6] In other words, both impressive technological advancement and human brutality. A contemporary of Benjamin, Hugo Gernsback, an American inventor — who is credited for establishing science fiction as a literary genre, notably through stories filled with futuristic inventions and space travels in magazines, such as *Amazing Stories,* which he founded — produced a helmet named "The Isola-

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6   Walter Benjamin, "Theories of German Fascism: On the Collection of Essays *War and Warrior,* edited by Ernst Jünger" (1930), trans. Jerolf Wikoff, *New German Critique* 17 (Spring 1979): 120.

tor" in 1925 (fig. 2). Its function was to isolate the user from the surrounding soundscape and limit the field of view while providing oxygen through an attached tank. Worn in a photoshoot by Gernsback himself sitting on his desk, the dysfunctional device, reminiscent of a diver helmet, clearly resonated with Benjamin's view of warfare technology's dystopian impression on the public imagination.

Cold War Anxieties, Space-Age Utopias, and Radical Design Responses

According to Riccardo Venturi, Gernsback's Isolator "responds, in its own way, to the crisis of concentration and attention, to the impact that new audiovisual devices such as cinema have on our perceptual plexus."[7] That is the angle adopted by Benjamin to look at modern society, which to him was characterized, at least since the 1920s, by an increasing presence of media overstimulating the human sensorium with glows of manufactured reality. Modern warfare with its "invisible" weapons was just the pinnacle and the testing ground for a set of devices that, supposedly deceiving users to achieve a better quality of life, were, in fact, indoctrinating them to obey a set of interconnected power systems. This view was aligned with the anticapitalist thought proposed by Karl Marx in the nineteenth century and later perfected by the thinkers of the Frankfurt School, of which Benjamin was a notable associate. Face masks, of whichever type, symbolized new screens distancing and at the same time mediating human beings' perception of the outside world.

With the rise of totalitarian regimes in the 1930s, the traumas of World War II, and the establishment of an enduring state of imminent conflict in the Cold War era, gas masks and other protective devices shifted from emblems of fear and death to functional inventions employed in sci-fi narratives, and from there back to the Earth, worn as futuristic accessories in erotic

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7   Riccardo Venturi, "The Isolator," *Antinomie*, March 28, 2020, https://antinomie.it/index.php/2020/03/28/the-isolator/.

or fashionable settings. In the 1960s, gas masks, combined with leather or latex clothing outfits, started playing a central role in BDSM practices, such as bondage, as symbols of fetish or punishment. At the same time, fashion designers such as Pierre Cardin, André Courrèges, and Rudi Gernreich demystified the fear of atomic attacks by prefiguring an otherworldly lifestyle, reinterpreting spacesuits, body armors, and helmets popularized during the moon race. Ranging from utilitarian to playful, these designers turned Cold War anxieties into space-age utopias revealing, as argued by Jane Pavitt, "a concern to insulate the wearer against the shock of the new."[8]

The 1960s were characterized by conditions similar to those of the 1920s, namely, a further degree of mimesis offered by audiovisual media, the entrance of computer technology in the collective unconscious, the increase of automation in urban life, and a renovated sense of the future, all brought on by a new economic boom that reinvigorated the faith in capitalist liberalism and related fantasies of a longer, safer, and happier life. As much as Benjamin was the perfect interpreter of modern society, Marshall McLuhan became the key thinker of this new electronic age. Indebted to Norbert Wiener's cybernetic theories — encapsulated in bestsellers such as *The Human Use of Human Beings* (1950) — with his idea that "by continuously embracing technologies, we relate ourselves to them as servomechanisms,"[9] McLuhan inspired an emerging generation of artists and designers to experiment with prostheses and wearable technologies as "extensions" of the human sensorium, speculating on a new technology-enhanced being: the cyborg.

In the 1960s and '70s, Renate Bertlmann, Haus-Rucker-Co., Lynn Hershman Leeson, and Ugo La Pietra, among others, explored the cybernetic body through performances and installations. In 1968, crucial radical architecture figures Haus-

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8   Jane Pavitt, *Fear and Fashion in the Cold War* (London: V&A Publishing, 2008), 10.

9   Marshall McLuhan, *Understanding Media: The Extensions of Man* (New York: McGraw-Hill, 1966), 41.

Fig. 3. Ugo La Pietra, *Immersione "Caschi Sonori,"* audio-visual environment (with Paolo Rizzatto), Triennale, Milan, 1968. Courtesy of Archivio Ugo La Pietra.

Rucker-Co. and La Pietra presented moon age–inspired translucent helmets isolating users from the surrounding reality. Unlike Gernsback's Isolator, which forced the wearer to decompression and immobility, these wearable devices pushed users to develop different sensorial properties. From within the translucent green double hemispherical mask of Haus-Rucker-Co.'s Flyhead, Environment Transformer, the user perceived reality through prismatic eyepieces and audiovisual filters that supposedly facilitated a fly's perspective. Similarly, La Pietra's Caschi Sonori were methacrylate helmets equipped with headphones transmitting various sounds and pornographic stories, which he presented at the Triennale museum in Milan within an inflatable environment (fig. 3).

These, and other projects by artists and designers working at the intersection of art and technology, such as Ant Farm, Gruppo 9999, USCO, and Utopie, reckoned with the spread of computers

technologies, cctv cameras, and screens that was taking place at the time, or else how this new set of apparatuses was producing new visual and perceptual dynamics. Their recurrent tactic was to employ technologies in unexpected ways and to demystify the ideas of the future and progress they embodied. Douglas Murphy, who has discussed some of these practices in a recent book, has argued,

> In those days of the Cold War and the space race, it was common to imagine the future in terms of visually striking advanced technology of a massive scale[. …] But these futures failed to arrive[. …] In the experiments in architecture and urbanism of the post-war era, we see that many of the abandoned and defeated futures that the era dreamed resonate strongly with our current experience, at times giving us a sense of déjà vu.[10]

Similarly, Bertlmann's and Hershman Leeson's cybernetic bodies anticipated current ideas of cyberfeminism, adopting technology as a tool for women's liberation. Hershman Leeson's *Breathing Machines* (1966–67), her earliest work, are sculptural self-portraits based on masks made with a wax mold of the artist's face, painted black (in solidarity with the civil rights movement) and with a wig attached. One of them is presented within a hemispherical space-age helmet featuring the sound of the artist's own breathing. Rather than technology, Bertlmann employed rubber pacifiers, a reference to child care and maternity, in sculptural works and performances as prostheses extending and mediating the body's connections with its surroundings. The artist's android-like *Pacifier Mask* (1976), like Hershman Leeson's *Breathing Machines,* condemns the increasing processes of automation in daily life and, at the same time, suggests forms of gender emancipation, deconstructing the patriarchal beliefs in technological progress.

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10 Douglas Murphy, *Last Futures: Nature, Technology, and the End of Architecture* (London: Verso, 2015), 1–5.

Issues of Emergency and Sustainability

With cyberpunk since the 1980s and posthuman culture since the 1990s, masks, helmets, face shields, and visors keep popping up in the arts and visual culture alike, every time there is a hint to some future. Most of the time, this is a dystopian one, in which inexorable corporations and street violence rule society, often recovering from some apocalyptic event, and in which people have lost empathy and conduct alienated lives mediated by screens. Sound familiar? Mark Fischer was undoubtedly right when he wrote in 2014:

> While the 20th-century experimental culture was seized by a recombinatorial delirium, which made it feel as if newness was infinitely available, the 21st century is oppressed by a crushing sense of finitude and exhaustion. It doesn't feel like the future. Or, alternatively, it doesn't feel as if the 21st century has started yet[. …] The slow cancellation of the future has been accompanied by a deflation of expectations.[11]

Fisher took his life before he could see that the twentieth-century futures have become our present.

As the twentieth century started to delineate in the 1920s, or at least that's when some features of the century appeared distinctively, one can argue that the twenty-first century begins precisely in the year 2020, with the Covid-19 outbreak. Since the arrival of the pandemic, face masks were no longer employed as a symbol of some projected future but necessary protection to prevent a contagion that might be deadly for anyone. Narratives of isolation, alienation, dread, and distrust reincarnate, then, from media fantasies directly into our everyday. If when the airplanes hit the World Trade Center in 2001, people thought that that must have been a movie because they had already seen those images in countless feature films, so when we took aware-

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11 Mark Fisher, *Ghosts of My Life: Writings on Depression, Hauntology and Lost Futures* (London: Zero Books, 2014), 8.

ness of the Covid-19 emergency, our mind went back to media dystopias, starting with Steven Soderbergh's 2011 *Contagion*. This movie predicted many aspects of "our" pandemic, to the point that since the outbreak, it was on TV every other night: that was our present, prophesied ten years earlier.

Ranging from functional to playful, from fashionable to conceptual, a new generation of wearable solutions to prevent airborne respiration droplets from touching the user's face started to emerge in this dawn of a new era. At first, it was the utilitarian ones. The most in-demand accessory of the season, in the first few months of the pandemic, surgical masks immediately were sold out (as were hand sanitizers, latex gloves, and various types of disinfectants and antiseptics) and were not even available for Covid-19 patients and healthcare workers. As the number of patients in intensive care grew exponentially, hospitals soon were in short supply of respirators too. To face the emergency, engineer Cristian Fracassi's company Isinnova from Brescia in Lombardy, the first and most affected region in Italy, came up with a resourceful invention: a respiratory valve that could be adapted to the Decathlon Easybreath diving mask. From the happy days of beach vacations to the quest for survival, it was but a short step, wasn't it?

Some epidemiologists praised face shields over masks because they were more effective at protecting the eyes, nose, and mouth from Covid-19, but face masks were easier to produce, circulate, and, more importantly, replaced. According to the *Lancet* article cited above, reusable and washable medical masks gave way to single-use paper masks in the 1930s, but masks made of synthetic materials, such as those in use today, started being produced in the 1960s. It is at the end of that decade that more and more hospitals developed a disposable system that included masks, syringes, surgical instruments, and other material because "disposability was supposed to reduce the risk of compromising the precarious state of sterility,"[12] endorsing in this way what the authors of the article define as

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12   Strasser and Schlich, "The Art of Medicine," 19.

a "throwaway culture."[13] As in any uncanny media dystopia, our hyperproductive society, inundated by useless gadgets, proved unable to face the most urgent and basic needs at the beginning of the pandemic.

Issues of sustainability were immediately at stake, and though most companies rushed to produce as many masks as possible in the minimum time frame, in observance of the industry's standards, others risked having their products removed from the market for not conforming to the features required. London-based children clothing brand Petit Pli, for example, in 2020 started producing the [MSK], a nonmedical, reusable face mask whose fabric, made from recycled plastic bottles, expands to adapt to face contours. Even though it features an "antiviral coating," this is less protective than any usual surgical mask. At the same time, it is a feasible ecological solution for situations in which the wearer is less exposed to contagion risks. At the 2020 Triennial exhibition of the National Gallery of Victoria, Australia, British designer Alice Potts presented a series of biodegradable face shields made of food waste and dyed with flowers, more a lyrical cry for attention on ecological issues than effective protection.

Along with production, sustainability tackled the question of disposability. Once mask production started to keep pace with the pandemic evolution, how were we to dispose of the trillions of masks used every day worldwide? Horrified by the number of masks abandoned in the streets, Dutch designer Marianna de Groot-Pons came up with a rice paper mask embedded with flower seeds for her brand Marie Bee Bloom. Once used, one can plant it and wait for flowers to bloom, a metaphor of a new optimistic era to begin. Others experimented with ways to reuse surgical masks as a building material. At Suzhou Cultural & Creative Cultural Industry Expo in China in 2020, the Portuguese sustainable architecture collective Convergent Architecture Studio (CAS) presented *Face-to-Face,* an immersive installation employing 117,539 masks. Similarly, Italian designer Tobia

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13   Ibid.

Fig. 4. Martino Lombezzi, *A man walking in Via Ugo Bassi during the first Covid lockdown wearing a self-made protecting suit.* Bologna, March 21, 2020. Courtesy of Martino Lombezzi.

Zambotti collected thousands of masks from the streets and filled an iceberg-shaped sofa called *Couch-19* (2021), linking mask pollution to global warming.

Do-It-Yourself, Playful, Fashionable, and Futuristic

In the first months of the pandemic, the mask shortage generated numerous do-it-yourself responses, from people covering their nose and mouth with bandannas and balaclavas to those sewing their own cloth masks. Desperate as much as inventive

people improvised lo-fi solutions of any type. Italian photographer Martino Lombezzi took a picture of a man in Bologna walking around during the first lockdown in March 2020 inside a capsule made with an umbrella with attached plastic sheets as a shield (fig. 4). Day by day, online design magazines *Designboom* and *Dezeen* featured new speculative solutions to cope with the pandemic. Known for handcrafting sneakers into tribal-looking masks, Beijing-based designer Zhijun Wang made a Covid-19 mask out of an IKEA Frakta bag. Likewise, Korean design studio mmm thought of a hilarious way to reconsider consumerist waste. Its ANYTHING (2020) face shield is a 3D-printable frame onto which one could apply empty packaging of pasta or Haribo sweets plastic bags.

Several designers developed do-it-yourself solutions to facilitate the self-production of masks and visors through 3D printing and laser cutting. Japanese designer Tokujin Yoshioka circulated a template design that would allow anyone to create an "Easy-to-make FACE SHIELD" (2020) attachable to the wearer's eyeglasses by hand-cutting an A3 sheet of PVC plastic. Others focused on the bright side of the pandemic, namely, that we all had more time for ourselves at home and — before adapting to new and even more stressful conditions of remote labor — could rediscover play. German studio Aerosoap, whose projects stand at the crossroads of art, design, and science, developed a wearable soap bubble maker in the shape of a face shield, *Soap Mask: Lockdown Project* (2020), which admittedly "does not provide efficient or even long-lasting protection. Not a bit. But it enriches some lockdown monotony, in which new experiences are often limited to the digital space, with new, surprising, real and optimistically colored perspectives"[14] (fig. 5).

Fashion houses immediately responded to the insufficiency of masks by producing some. Following a request from the Tuscany region, in March 2020 Prada and Gucci began producing of surgical masks to be provided to healthcare workers and hos-

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14 Aerosoap, *Soap Mask: Lockdown Project,* 2020, https://www.aerosoap.com/en/soapmask/.

Fig. 5. Aerosoap, *Soap Mask,* 2020. Concept, design, photography: Frédéric Wiegand & Thomas Wirtz. Courtesy of Aerosoap.

pitals. The same month LVMH, the world's leader in luxury fashion, announced that it would supply around 40 million surgical masks to France. Other fashion brands that went in the same direction included Balenciaga, COS, H&M, Mango, Yves Saint Laurent, and Zara. As soon as this urgent need was met and face masks became part of our everyday outfits — even though our only public activity was, for long, just lining up in front of a grocery store — fashionable and often pricey products entered the market. Louis Vuitton was the first high-fashion brand, in September 2020, to introduce a face shield with a monogrammed strap, sold at approximately €900. From Burberry to Ralph

Lauren to Off-White, hardly any fashion brand did not have its mask in a few months.

Fashionable and reusable cloth masks are not fully protective, so all of a sudden, we all became experts in the types of masks that are defensive — the surgical mask, the N95, the FFP2, the FFP3, and others — their filtration of airborne particles, or else the percentage of aerosols and droplets that might go in and out, and how to properly wear them. However, considering the number of people leaving their masks off their nose, wearing them below their chin, and sometimes just on the elbow, the doubt is that not everyone took it on the same degree of seriousness. Even some tech companies soon entered this sector of the market, developing futuristic wearables. For about €250 one could buy South Korean multinational electronics company LG's PuriCare air purifier AP300AWFA, which features dual H13 Grade HEPA filters blocking up to 99.95 percent of airborne particulates as small as 0.1 microns (the coronavirus is approximately 0.125 microns), a dual fan system, and a battery with four to eight hours of autonomy.

Many projects were based on shields resembling space helmets, taking inspiration from sci-fi imageries or workwear and sportswear conceived for extreme situations. Instead of being paired with pressure suits, maybe made of nonflammable or aluminized fabric, these ball-like shields enveloping the whole head were usually presented along with casual, often avant-garde clothing revisiting the space-age-inspired fashion of Cold War-era designers, such as Courrèges, Cardin, and Gernreich. However, whereas these designers speculated on otherworldly adventures across the galaxies in the style of postwar sci-fi, from *The Day the Earth Stood Still* (1951) to *Barbarella* (1968), the futuristic helmets of the Covid-19 era do not need to project our current anxieties onto the life in another planet or some alien species looking for the extinction of humanity. These projects are very aware of the terrestrial conditions from which this pandemic has emerged. Futuristic face coverings are the ultimate emblem of the future's collapse into the present.

More than masks, shields appeared the perfect accessory for our dystopian present because of their space feel. After a successful crowdfunding campaign in April 2020, Toronto-based company vyzr launched its €300 BioVYZR, a boosted version of whatever that man in Bologna was wearing: a capsule-like shield with a wide-angle view, air-purifying system, and an internal positive-pressure environment. Sphere helmets reminiscent of *The Jetsons* or *Futurama* cartoons came along, their ironic dimension reinforced by video tutorials and photoshoots normalizing their everyday use. A video shows emotionless members of Berlin-based collective Plastique Fantastique wearing the *iSphere,* a clear plastic ball, while riding on the U-Bahn. Another shows two friends chatting, laughing, and taking selfies under a Covidvisor. The bobblehead respirator, produced by a New York start-up, could not have a better promoter than style blogger Michelle Madonna, who wore it at nyfw in September 2020.

The Postpandemic New Normal

As soon as it became clear that socializing, in the flesh, was what we missed the most, finding expedients to socialize again without putting ourselves at risk became an utmost priority. The closure of museums, cinemas, theaters, and music venues was particularly painful and a reminder of the significant role that the arts play in society and our lives. The world of pop music was the first to take note, pointing out that music is needed more than ever during a pandemic. The 2020 edition of mtv's popular Video Music Awards was a case in point, which included new categories for "Quarantine Performance" and "Best Music Video from Home." The show was marked by multiawarded pop star Lady Gaga's appearances in nine different outfits, each completed with futuristic face masks designed by Lance Victor Moore, MaisonMet, Diego Montoya, and Cecilio Castrillo. The last, a leather designer from Madrid, made a pink gas mask-like goggle strapped to Gaga's head that would fit great in an installment of *Mad Max* postapocalyptic saga.

Fig. 6. The Flaming Lips, still from video made in preparation of the Space Bubble concert, The Criterion, Oklahoma City, US, December 11, 2020. Video directed by Wayne Coyne and Blake Studdard.

Through the lens of pop music, another dystopian yet ironic prefiguration of post-Covid-19 new normality, was offered by American indie rock band the Flaming Lips, which performed various socially distanced concerts since the outbreak, with musicians and audience standing inside individual life-size bubbles. They had already performed in Zorb balls in the past, and Wayne Coyne, the band's lead singer, is known for walking on top of crowds inside one, so they immediately thought this was the perfect solution to play live in the quarantine era. After some testing appearances on Stephen Colbert's and Jimmy Fallon's late-night TV shows, in October 2020 they played two gigs at Criterion, a concert venue in Oklahoma City, for an audience of one hundred. In preparation of these Space Bubble shows, Coyne and Blake Studdard directed two videos documenting the band's theatrical performances of the songs "Brother Eye" and "Assassins of Youth" for an audience of individuals, each standing inside an inflatable ball, and happily dancing and lip-synching, firm in a designated square on the gridded floor (fig. 6).

Fig. 7. Tosin Oshinowo and Chrissa Amuah, *Ògún* headpiece from the series *Freedom to Move,* 2020, inspired by Lexus. Photo by Mark Cocksedge.

One last type of inventive Covid-19 mask to be mentioned is that aimed at enhancing the wearer's personality, drawing from sci-fi, surrealism, and subcultures, with a penchant for the 1980s New Romantics scene. Inspired by the deconstructed clothing and makeup style of Blitz club-era performers, such as Leigh Bowery, Grace Jones, and Steve Strange, some designers have focused on the sculptural properties of face masks, realizing accessories for postpandemic youths who are free from any precodified construction of either gender or ethnicity. London-based designer Freyja Sewell's *Key Workers* (2020) is a series of eight ornamental masks celebrating frontline workers, taking cues from media fantasies à la *Star Trek* or *Hunger Games* (the character of Effie Trinket seems particularly at stake). At the same time, Nigerian architect Tosin Oshinowo and Ghanian designer Chrissa Amuah's series of bronze headpieces *Freedom to Move* (2020), such as *Ògún* and *Egaro*, recall the Afrofuturist imagery of R&B singer Janelle Monáe or *Black Panther* (fig. 7).

Practical, playful, or conceptual, most of these projects call attention to the fact that the containment measures adopted

worldwide — forms of lockdown and quarantine, mask-wearing, social distancing — had the inescapable consequence of alienating people, pushing them to prefer staying behind a screen instead, safer. Every pandemic in history, viral or bacterial, from the black death to the Spanish flu, from tuberculosis to AIDS, was fought with physical containment measures. In Gesualdo Bufalino's novel *The Plague-spreader's Tale* (1981), Marta, the patient of a TB sanatorium in postwar Sicily, embodies the awareness and fears that any contagious patient probably feels in a pandemic, such as when she admits: "I feel, I know, that every breath I breathe out is poison, that everything I touch or that touches me gets infected[. …] And I feel, I *know*, that everywhere I go I am spreading and smearing death — on walls, on napkins, on the rims of dishes."[15]

That isolation was mandatory for Covid-19 patients and doctors, despite the inevitable side effect of alienation, was not up to discussion, and the same was probably correct for anyone during the pandemic peaks, symptoms or not. Nevertheless, what about the conditions in which isolation takes place? What are the effects of hyperconnectivity online and saturated media exposure? In an illuminating essay to understand our era, but published before the pandemic, Byung-Chul Han discussed the psychological effect of the neoliberal regime under which we live, a regime that relies upon "a highly efficient, indeed an intelligent, system for exploiting freedom. Everything that belongs to practices and expressive forms of liberty — emotion, play and communication — comes to be exploited."[16] According to Han, electronic media and the internet play a central role in this regime. "A person playing a game," for instance, "being emotionally invested, is much more engaged than a worker who acts rationally or is simply *functioning*."[17]

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15   Gesualdo Bufalino, *Diceria dell'untore* (Palermo: Sellerio, 1981), 119, translated into English as *The Plague-Spreader's Tale,* trans. Patrick Creagh (London: The Harvill Press, 1989).

16   Byung-Chul Han, *Psychopolitics: Neoliberalism and New Technologies of Power* (London and New York: Verso, 2017), 3.

17   Ibid., 49.

The phenomenon of gamification — the adoption of video-game dynamics to engage users or consumers in nongaming situations — is emblematic for understanding the appeal of these new types of futuristic inventions for contaminated air prevention. Like the schizophrenic described by Smith, deserted cities during lockdowns look like a natural extension of our virtual infrastructures. So, wearing a face shield, better if air-ventilated, looks like a logical thing to do. Ranging from functional to playful, from fashionable to conceptual, even when they are introduced as commercially viable products, these speculative design projects cannot escape revealing our "profound misapprehension of reality,"[18] our inability to discern what stands in front of our very own eyes, be it an "invisible" virus, a phantasmagoric fantasy, or simply someone else on the other side of the screen. A quintessential symbol of our pandemic times, these face coverings show that ours might become just another of those futures that will remain in the past.

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18 Smith, *Intimations*, 61n2.

References

Antonelli, Paola, ed. *Safe: Design Takes on Risk.* New York: The Museum of Modern Art, 2005.

Benjamin, Walter. "Theories of German Fascism: On the Collection of Essays *War and Warrior,* edited by Ernst Jünger" (1930). Translated by Jerolf Wikoff. *New German Critique* 17 (Spring 1979): 120–28. DOI: 10.2307/488013.

Berardi, Franco "Bifo." *Futurability: The Age of Impotence and the Horizon of Possibility.* London: Verso, 2017.

Bolton, Andrew. *The Supermodern Wardrobe.* London: V&A Publishing, 2004.

Bufalino, Gesualdo. *Diceria dell'untore.* Palermo: Sellerio, 1981.
———. *The Plague-Spreader's Tale.* Translated by Patrick Creagh. London: The Harvill Press, 1989.

Burke, Johanna. *Fear: A Cultural History.* London: Virago, 2005.

Burroughs, William S. *The Ticket That Exploded*. New York: Grove Press, 1967.

Crowley, David, and Jane Pavitt. *Cold War Modern: Design 1945–1970.* London: V&A Publishing, 2008.

Dunne, Anthony, and Fiona Raby. *Speculative Everything: Design, Fiction, and Social Dreaming.* Cambridge: MIT Press, 2013.

Fisher, Mark. *Ghosts of My Life: Writings on Depression, Hauntology and Lost Futures.* London: Zero Books, 2014.

Han, Byung-Chul. *Psychopolitics: Neoliberalism and New Technologies of Power.* London: Verso, 2017.

Hiesinger, Kathryn B., and Michelle Millar Fisher, eds. *Design for Different Futures.* Minneapolis and New Haven: Walker Art Center and Yale University Press, 2019.

Jameson, Fredric. *Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions.* London: Verso, 2005.
———. "Future City." *New Left Review* 21 (May/June 2003): 65–79. https://newleftreview.org/issues/ii21/articles/fredric-jameson-future-city.

———. *The Seeds of Time*. New York: Columbia University Press, 1994.

Murphy, Douglas. *Last Futures: Nature, Technology, and the End of Architecture.* London: Verso, 2015.

Pavitt, Jane. F*ear and Fashion in the Cold War.* London: V&A Publishing, 2008.

Shorr, Mimi, ed. *Body Covering.* New York: Museum of Contemporary Crafts of The American Craftsmen's Council, 1968.

Smith, Zadie. *Intimations: Six Essays.* London: Penguin, 2020.

Strasser, Bruno J., and Thomas Schlich. "The Art of Medicine: A History of the Medical Mask and the Rise of Throwaway Culture." *The Lancet* 396, no. 10243 (2020): 19–20. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31207-1/fulltext.

Tibayrenc, Michael ed. *Encyclopedia of Infectious Diseases: Modern Methodologies.* Hoboken: John Wiley, 2007.

Van Helvert, Marjanne, ed. *The Responsive Object: A History of Design Ideology for the Future.* Amsterdam: Valiz, 2016.

Žižek, Slavoj. *Pandemic! COVID-19 Shakes the World.* Cambridge: Polity, 2020.

Covid-19 Comics and the Data Visualization of Everyday Life

Anna Feigenbaum and Alexandra Alberda

During Covid-19 our pandemic lives became deeply entwined with data visualizations. From instructional handwashing infographics to calls to "flatten the curve," data visualizations were telling us how to live and predicting our possible futures.[1] As the cascade of open data relating to the Covid-19 virus grew over the course of the pandemic, so too did the charts and graphs claiming to decipher, decode, and translate this data for everyday understanding.

Alongside authorial graphics produced by the country's biggest newspapers, the CDC, and the World Health Organization, citizens and artists also leveraged data visualization conventions to express the turbulent, strange experience of everyday life under the virus. Tackling everything from top-level health statistics to daily behavior changes around handwashing, from

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1   This chapter is based on collaborative work between Anna Feigenbaum, Alexandra Alberda, and Aria Alamalhodaei. Where noted, a previous version of the text appeared in Anna Feigenbaum and Aria Alamalhodaei, *The Data Storytelling Workbook* (London: Routledge, 2020).

cleaning the kitchen to understanding the importance of rising R numbers, these Covid-19 data comics evidenced the heightened role that health data came to play in our everyday lives since the onset of the Covid-19 pandemic.

In this chapter, we situate these Covid-19 data comics in relation to broader practices of graphic medicine as it intersects with critical data studies and data feminism. In doing so, our aim is to build a conceptual framework for innovating public health messaging around an ethos of empathy and in ways that can foster what Lulu Pinney calls "data know-how."[2] According to Pinney, data know-how is a way of doing "data literacy" out in the everyday world. It combines contextualizing data as a social practice with sharing data in ways that enable social change, agency, and empowerment. The examples we draw on toward the end of this chapter form part of a large-scale study of 15,000 "Covid comics" posted and shared over Instagram between January 2020 and March 2021.

Humanizing Data Visualizations and Data Feminism

The data comics emerging from Covid-19 often contrasted with more traditional approaches to data visualization in a number of ways. Traditional data visualization practices found in business, scientific, government, and news communications are often characterized by a sanitized, omniscient aesthetic. They tend to prioritize formal structure and cleanliness over emotion and empathy.[3] Such data visualizations have been termed "generic visuals" by Chris Anderson and his team at the University of Leeds, referring to "images with standardized formats and appearances, which perform particular design functions,

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2   Lulu Pinney, "Is Literacy What We Need in an Unequal Data Society?," in *Data Visualization in Society,* eds. Martin Engebretsen and Helen Kennedy (Amsterdam: Amsterdam University Press, 2020), 223.

3   See Catherine D'Ignazio and Lauren F. Klein, "Feminist Data Visualization," in Workshop on Visualization for the Digital Humanities at EEE VIS Conference 2016, available at *Kanarinka,* http://www.kanarinka.com/wp-content/uploads/2015/07/IEEE_Feminist_Data_Visualization.pdf.

and which circulate with increasing frequency in the news media."[4]

These kinds of visualizations can lead to data stories that feel aloof, turning humans into clean lines and oversimplified icons without providing any sense of personhood. Such traditional data storytelling practices also often perform what Donna Haraway refers to as the "god trick"[5] of seeing from everywhere and nowhere, as is common in many big data visualizations and social network analysis.[6] These kinds of macro-scale information visualizations have their place, but the ways that they make people feel are often not considered as part of their communicative effect. Helen Kennedy and Rosemary Lucy Hill write that "data are as much felt as they are experienced cognitively and rationally."[7]

Designers note the emotional importance of aesthetic decisions, but critical data studies researchers, according to Kennedy and Hill, have paid little attention to the emotional aspects of people's encounters with numbers and statistics in data visualizations. They argue that there has also been a lack of attention paid to nonexpert engagement with data, or what Nick Couldry and Alison Powell refer to as "big data from the bottom up."[8] And although this gap has begun to be filled by new scholarship in recent years, that data "is lived and experienced at the level of

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4   Chris Anderson, "Generic Visuals in the News: The Role of Stock Photos and Simple Data Visualizations in Assembling Publics," research project, School of Media & Communication, University of Leeds, 2020, https://gtr.ukri.org/projects?ref=AH%2FT000015%2F1.

5   Donna Haraway, "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective," *Feminist Studies* 14, no. 3 (1988): 575–99.

6   See D'Ignazio and Klein, "Feminist Data Visualization," and Helen Kennedy and Rosemary Lucy Hill, "The Feeling of Numbers: Emotions in Everyday Engagements with Data and Their Visualisation," *Sociology* 52, no. 4 (2018): 830–48.

7   Kennedy and Hill, "The Feeling of Numbers," 2.

8   Nick Couldry and Alison Powell, "Big Data from the Bottom Up," *Big Data & Society* 1, no. 2 (July 2014).

the everyday"⁹ has perhaps never been more significant than it was in the time of Covid-19.

Inspired by such feminist critiques of data, many working in these areas want to see more "data humanism," not only in how audiences emotionally respond to visualizations, but also how they are produced, designed, and shared. Giorgia Lupi put it this way, "We are ready to question the impersonality of a merely technical approach to data, and to begin designing ways to connect numbers to what they really stand for: knowledge, behaviors, people."¹⁰ Among other practices, Lupi advocates for visually communicating the complexity of data, sketching with data as part of the design process, capturing broader contexts and remembering that data — like people — is flawed. In their work on "data feminism," Catherine D'Ignazio and Lauren F. Klein call for, among other things, telling stories more horizontally, considering more about data contexts, visualizing messiness, embracing pluralism, elevating emotion, and embodiment, and evaluating the effectiveness of a visualization in relation to emotions.¹¹

These signposted practices for humanizing data share many attributes with aesthetic and structural elements of the comics medium and graphic storytelling more broadly. Comics have been contentiously defined in a number of ways, including as "sequential art"¹² and later as "pictorial narrative."¹³ However, the rise of single panels and hyperlinked webcomics disrupted these

9   Kennedy and Hill, "The Feeling of Numbers," 16.

10 Giorgia Lupi, "Data Humanism: The Revolutionary Future of Data Visualization," *Print,* January 30, 2017, https://www.printmag.com/article/data-humanism-future-of-data-visualization/.

11 See D'Ignazio and Klein, "Feminist Data Visualization," and Catherine D'Ignazio and Lauren F. Klein, *Data Feminism* (Cambridge: MIT Press, 2020).

12 See Will Eisner, *Comics and Sequential Art: Principles and Practices from the Legendary Cartoonist* (New York: W.W. Norton, 2008), and Scott McCloud, *Understanding Comics: The Invisible Art* (New York: HarperPerennial, 1993).

13 See Greg Hayman and Henry John Pratt, "What Are Comics?," in *Aesthetics: A Reader in Philosophy of the Arts,* eds. David Goldblatt and Lee Brown (Upper Saddle River: Pearson Prentice Hall, 2005), 419–24.

earlier definitions, challenging the idea of linearity as necessary to the comics form and highlighting the many different artistic and narrative styles that comics can take. Rather than pursue a tidy definition, Aaron Meskin proposes that "what we need is some grasp of the various styles, techniques, and purposes found in the art form, as well as a broad grasp of how to evaluate the variety of elements that are typically (but not necessarily) used in it, such as narrative, drawing, dialogue, and coloring."[14] Both in this chapter and in our broader research, we work with this approach to comics. Our interest is in how these elements from the comics medium can contribute to humanizing data and to creating more empathetic and effective "data comics."[15]

But What Is Data?[16]

Before diving into this emergent area of "data comics," it is likewise important to establish a clearer understanding of how we approach data in our research. Popular definitions of "data" vary both across and within fields. Those, like us, coming from a critical data studies and data feminism perspectives often disagree with definitions found in mainstream and popular texts. Take for example this definition from the UK government's open data initiative: "[Data is a] value or set of values representing a specific concept or concepts. Data become 'information' when analyzed and possibly combined with other data in order to extract meaning and to provide context. The meaning of data can vary depending on its context."[17] Often, as seen in this prominent UK

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14 Aaron Meskin, "Defining Comics?," *Journal of Aesthetics and Art Criticism* 65, no. 4 (2007): 376.

15 See Benjamin Bach, Nathalie Henry Riche, Sheelagh Carpendale, and Hanspeter Pfister, "The Emerging Genre of Data Comics," *IEEE Computer Graphics and Applications* 37, no. 3 (2017): 6–13, and Feigenbaum and Alamalhodaei, *The Data Storytelling Workbook.*

16 A previous version appeared in Feigenbaum and Alamalhodaei, *The Data Storytelling Workbook.*

17 *Data.gov,* s.v. "data," https://web.archive.org/web/20170522074049/https://www.data.gov/glossary.
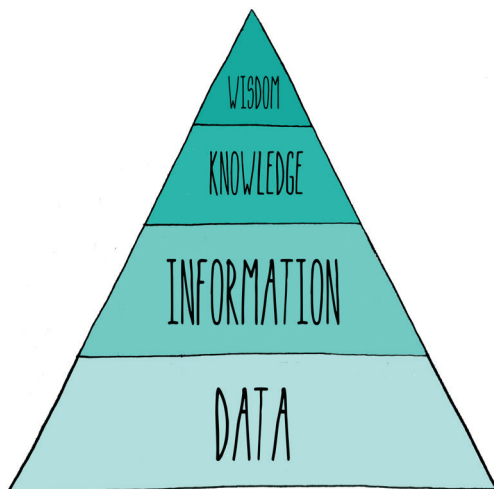
Fig. 1. DIKW Model illustrated by Alexandra Alberda. Courtesy of the artist.

government glossary, data is defined as a base material. Like feelings before we give them names, or food before it is cooked, data is said to be raw before it is processed into information (then knowledge, then wisdom in this popular DIKW model) (fig. 1).

Our work follows other critical data scholars and data feminists who contest the idea that data can ever exist in a raw, pure form. As Lisa Gitelman and Virginia Jackson argue in the introduction to the collection *"Raw Data" Is an Oxymoron,* people often act as if data can exist in a realm apart from humans.[18] But, just as a photograph is not an objective representation of reality, neither is data. A photo, they remind us, is shaped and framed by the photographer. Likewise, data requires human participation. Just like photography, data "needs to be under-

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18 Lisa Gitelman and Virginia Jackson, "Introduction," in *"Raw Data" Is an Oxymoron,* ed. Lisa Gitelman (Cambridge: MIT press, 2013), 1–14.

stood as framed and framing."[19] For us data is never raw, but always entangled with humans and human values.

This is why we promote introducing comic techniques to data communication in order to help people focus on the human elements of statistical information and to better contextualize how data matters in people's everyday lives. Doing so enables data storytellers and their audiences to more clearly pinpoint what is at stake, and to communicate it both more effectively and more empathetically for audiences.

Statistical Chaos and Covid-19 Data

This need for humanizing data becomes even more prevalent in times of "statistical chaos." Through even a quick reflection one can clearly see statistical chaos at work in Covid-19 data. From the unknown timelines of lockdowns and vaccination trials to the fear of new strands and ever-increasing R numbers, the inability for the pandemic to be controlled or even (particularly in the early days) well understood by the medical establishment in turn created a sense of being out of control for the population. This makes the communication of statistics and other forms of numeric data particularly challenging.

In the press release for a 2020 event hosted by Bournemouth University, Royal Statistical Society and the Association of British Science Writers, An Nguyen said, "Statistics have been a staple of daily life and daily news since at least the latter half of the 20th century, but have never taken such a central place as they do during the pandemic."[20] Nguyen, who convened the symposium also explained:

> We are in a public health crisis where everything we do at individual, organisational and societal levels literally depends

19 Ibid., 5.
20 From the transcription of An Nguyen's intervention at the "Coronavirus, Statistical Chaos and the News" online symposium, Bournemouth University, December 4, 2020.
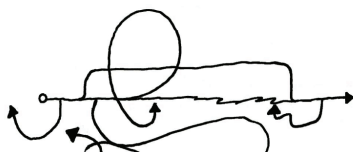
Fig. 2. Arthur Frank Illness Narratives illustrated by Alexandra Alberda. Courtesy of the artist.

on what the numbers tell us[. …] Amidst much public confusion, anxiety, and fear, we seem to see numerical mis- and disinformation everywhere on both mainstream and social media[. …] At the same time, the pandemic has seen many excellent, cutting-edge, and breath-taking data journalism and communication projects around the world.[21]

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21 Ibid.

People are flooded daily with new data that is being produced around the globe at an unprecedented speed, but we are too close to the chaos to step outside and reflect. What we will know about Covid-19 in a year or two will have a storyline or narrative that we were able to tell from within the current state of the pandemic. For in chaos, Arthur W. Frank writes, we can only tell stories "on the edges of the wound."[22] In his groundbreaking book *The Wounded Storyteller,* Frank outlines what he argues are the three most common illness narratives: restitution, quest, and chaos (fig. 2). The first structure is *restitution.* According to Alexandra Alberda, restitution refers to narratives that seek to return someone to a previous normal.[23] These narratives focus on restorable health conditions, such as recovering from a common cold. Restitution narratives frequently appear in advertisements for medicine that put forward social myths about overcoming illness, such as this medicine "cures all my pains."

Frank's second structure is the *quest narrative* or the "hero's journey," as it is often called in fiction. In this structure, the protagonist starts from a "normal" state that gets disrupted by serious illness. Alberda explains that protagonists in a quest narrative do not return to "normal." Rather, they are fundamentally transformed by the skills and experiences they gain along their journey.[24] In the public health sector, quest narratives often appear in campaigns for weight loss, quitting smoking, or recovery from alcohol abuse.

Frank's third narrative type is *chaos. Chaos* is the antinarrative, temporally disjointed and without a definite resolution. Some features of a chaos narrative, as defined by Frank, include troubles that go down to a "bottomless depth," a lack of control

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22 Arthur W. Frank, *The Wounded Storyteller: Body, Illness, and Ethics* (Chicago: University of Chicago Press, 2013), 101.

23 See Aria Alamalhodaei, Alexandra Alberda, and Anna Feigenbaum, "Humanizing Data Through 'Data Comics': An Introduction to Graphic Medicine and Graphic Social Science," in *Data Visualization in Society,* eds. Martin Engebretsen and Helen Kennedy (Amsterdam: Amsterdam University Press, 2020): 347.

24 Ibid.

and a feeling of being swept away, stories that relate a spiral of suffering characterized by "and then, and then, and then" narrative progressions; they are hard for listeners to hear because they are threatening and can provoke anxiety and feelings of helplessness; they are emotionally battering, and the ill person's loss of control is amplified by the medical establishment's inability to control the disease.[25]

On an individual level, the chaos narrative is characterized by a "telling without mediation."[26] Protagonists are not yet able to reflect on themselves or their situation because they are amidst the chaos. Zoomed out from the individual, chaos narratives can also apply to collective events. In fact, Frank says he first began theorizing chaos narratives on reading testimonies of the Holocaust. In this larger contextual level, chaos narratives are a sign of systematic failure, of structures and infrastructures unable to cope with or respond to an illness or trauma that collectively unfolds.

The Covid-19 pandemic, on a global scale, revealed health inequalities around the world and unearthed hidden or previously dismissed forms of systematic racism and discrimination, including able-ism and age-ism.[27] On an individual level, the effects of Covid-19 seeped into every single person's life, forcing all of us to view ourselves against the pandemic's health statistics, its graphs and charts, and changing projections. We were called upon or interpellated into the statistical chaos that surrounded us, asked to continuously evaluate and reevaluate our own health conditions and that of our loved ones. We became lay experts in the risk factors of our lifestyles, assessors of our

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25 Frank, *Wounded Storyteller,* 98–114.

26 Ibid., 98.

27 See Kathryn Haynes, "Structural Inequalities Exposed by COVID-19 in the UK: The Need for an Accounting for Care," *Journal of Accounting & Organizational Change* 16, no. 4 (2020): 637–42; Michael Marmot and Jessica Allen, "COVID-19: Exposing and Amplifying Inequalities," *Journal of Epidemiology and Community Health* 74, no. 9 (2020): 683–88; and Whitney N. Laster Pirtle, "Racial Capitalism: A Fundamental Cause of Novel Coronavirus (COVID-19) Pandemic Inequities in the United States," *Health Education & Behavior* 47, no. 4 (2020): 504–8.

access to services, regulators of our neighborhood restrictions. As statistical chaos meets the chaos of this not-yet-controllable illness, together we are left to try and make sense of the world's first data visualized pandemic. We are "datafied citizens," as Veronica Barassi suggests,[28] in this upside-down data world.[29]

Data Comics[30]

Across different fields, research has repeatedly shown that features of the comics medium can help increase the effectiveness of communicating and comprehending complex data.[31] For example, comics use relatable icons that can provoke identification with readers, are able to narrate experience without words, can capture scales of illness, represent pain, show the internal fears of clinical encounters, and in doing so make visible the emotional and cognitive dimensions of living through illness.[32] In addition, hand-drawn comics can give us access into personal knowledges through the drawn lines and aesthetic choices of their creators. This is a feature that other forms of communication do not usually provide audiences. Audience engagement with the mark-making of the artist stimulates an emotive connection that is not as easily facilitated in technical representations.

28 Veronica Barassi, "Datafied Citizens in the Age of Coerced Digital Partici-pation," *Sociological Research Online* 24, no. 3 (2019): 414–29.

29 See Jonathan Gray, "Three Aspects of Data Worlds," *Krisis: Journal for Contemporary Philosophy* 1 (2018): 3–17.

30 A previous version appeared in Feigenbaum and Alamalhodaei, *The Data Storytelling Workbook.*

31 See M.K. Czerwiec et al., *Graphic Medicine Manifesto* (University Park: Pennsylvania State University, 2015); Gary Ashwal and Alex Thomas, "Are Comic Books Appropriate Health Education Formats to Offer Adult Patients?" *AMA Journal of Ethics* 20, no. 2 (2018): 134–40; and Matthew N. Noe and Leonard L. Levin, "Mapping the Use of Comics in Health Education: A Scoping Review of the Graphic Medicine Literature," *Graphic Medicine,* July 24, 2020, https://www.graphicmedicine.org/mapping-comics-health-education/.

32 See Susan M. Squier, "So Long as They Grow Out of It: Comics, the Discourse of Developmental Normalcy, and Disability," *Journal of Medical Humanities* 29, no. 2 (2008): 71–88.

Comics have been found to be especially beneficial when trying to connect people with complex or sensitive data, such as health data. The use of graphics to represent decision-making in health has repeatedly been proven useful for patient communication.[33] Comics can effectively communicate risk factors and social issues surrounding an illness. Readers can relate to events and experiences, connecting them to their own and creating empathy.[34] Although comics have different histories and take on different aesthetics throughout the world, they are a cross-cultural medium, prevalent in popular cultures. These features lend comics well to humanizing data. Yet, as data visualization researcher Benjamin Bach and his colleagues argue (in a paper written as a comic), "Although comics are familiar to everyone, they are vastly underexplored for data-driven storytelling."[35]

Alberda summarizes the reasons for why comics can work well for data storytelling around three principles: comics are approachable, accessible, and relatable.[36] By approachable, Alberda refers to how comics are prevalent in popular culture and are created and read in many cultures. Generally speaking, in relation to accessibility, the comics medium is often used in literacy training. Iconography can be used to represent local, regional, and national identities. And visuals are often more

33 See Patricia F. Anderson, Elise Wescom, and Ruth C. Carlos, "Difficult Doctors, Difficult Patients: Building Empathy," *Journal of the American College of Radiology* 13, no. 12 (2016): 1590–98; Yuichi Furuno and Hiroyasu Sasajima, "Medical Comics as Tools to Aid in Obtaining Informed Consent for Stroke Care," *Medicine* 94, no. 26 (2015); Michael J. Green and Kimberly R. Myers, "Graphic Medicine: Use of Comics in Medical Education and Patient Care," *BMJ* 340, no. 7746 (2010): 574–77; and Sarah T. Hawley et al., "The Impact of the Format of Graphical Presentation on Health-Related Knowledge and Treatment Choices," *Patient Education and Counseling* 73, no. 3 (2008): 448–55.

34 See Matthew P. McAllister, "AIDS, Medicalization, and the News Media," in A*IDS: A Communication Perspective,* eds. Timothy Edgar, Mary Anne Fitzpatrick, and Vicki S. Freimuth (New York: Routledge, 1992), 195–221.

35 Benjamin Bach et al., "The Emerging Genre of Data Comics," *IEEE Computer Graphics and Applications* 37, no. 3 (2017): 6.

36 Alexandra Alberda, "Learning from Comics," in Feigenbaum and Alamalhodaei, *The Data Storytelling Workbook,* 161–62.

effective than text alone because imagery can get closer to cultural and emotional meanings. Finally, comics are relatable because they tell the human side of a health issue and have been shown to help build communities.

Looking at each of these aspects in further detail, we can see how comics are approachable, accessible, and relatable. The familiarity of the medium makes comics *approachable*, because the reader has control over how long to engage with the work. Comics express messages through words and images. As opposed to videos or television, when reading comics we process the message at our own speed. In terms of connecting with storytelling in comics, Michael J. Green and Kimberly R. Myers hypothesize that comics may make people feel "more focused and in control"[37] and "less isolated and more hopeful"[38] through this individual pacing.

This structural aspect of comics also contributes to its potential for enhancing data-driven storytelling. Bach and colleagues suggest that making use of panels can help break complex processes into less complex units, helping guide the reader through transitions.[39] For example, panels might be used in a data-driven comic story to move from detail to broader context, or as a way of drilling down from broader picture to smaller detail.

Comics are likewise *accessible* in that they are usually presented in an easy-to-understand format. They often connect with readers by employing iconography that has a local, regional, or national identity, using recognizable images that can often get closer to meaning than text can alone. Because of their familiarity and ability to make information more comprehensible, comics have been found to be a useful medium for getting information out to the general public.[40]

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37 Green and Myers, "Graphic Medicine."

38 Ibid.

39 Bach et al., "The Emerging Genre of Data Comics."

40 Sarah McNicol and Lydia Wysocki, "Comics in Qualitative Research," in *SAGE Research Methods Foundations,* eds. Paul A. Atkinson et al. (London: SAGE, 2019), n.p.

This unique combination of words and images often makes comics more *relatable* than other graphic forms. In the case of health, "comics can offer patients and family members opportunities for self-awareness, reassurance, empathy, companionship and ways to explore the impact of illness on family relationships."[41] Not only is it important that the disease and health data are depicted accurately, but that patient and family experiences are also represented fairly.[42] Through the use of emotive stories, people can make stronger connections with the data, helping them to make sense of their own personal experiences with a particular issue or illness.

Much of the reason for the approachability, accessibility, and relatability of comics is that, as a medium, comics are often characterized by the presence of multiple messages. Subtext, performative encounters, and conflicted feelings can be represented graphically in comics. For example, comics can represent a conversation along with the hidden, unspoken meaning behind the words — something that is almost impossible to do with text alone. In this way, the reader simultaneously has access to both the words and the thoughts of the characters. This view inside of someone's inner world illustrates that what we say out loud is not always what we feel inside.[43]

Data indicates that the pandemic led to increased anxiety and reduced well-being, and so this exploration of how our interpersonal interactions differs from our inner mental states and feelings has become of heightened importance.[44] Uncertainty and the need to be hypervigilant to guard our health and the health of others contributes to feelings of irritability, being overwhelmed, exhaustion, burnout, and anxiety.[45] Many people

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41 Ibid.

42 See Green and Myers, "Graphic Medicine."

43 Ibid.

44 Emma Hepburn, *How to Stay Calm in a Global Pandemic* (Paris: Hachette, 2020).

45 See ibid.; Walter Cullen, Gautam Gulati, and Brendan D. Kelly, "Mental Health in the COVID-19 Pandemic," *QJM: An International Journal of Medicine* 113, no. 5 (2020): 311–12; and Betty Pfefferbaum and Carol S.

try to mask or contain these feelings at home and at work, which can lead to further stress.[46] Gaining emotional intelligence over our own and others' feelings has thus become central to wellness practices in workplaces and daily live. Covid-19 comics were being circulated and reprinted on these issues, often capturing what we cannot explain in words.

Graphic Medicine

This layered storytelling style is particularly helpful for communicating the uncertainty of health and medical data — both as claims to truth and in relation to the human experiences that data captures.[47] With regard to the pandemic, as different people responded to preventative health measures, testing, vaccinations, illness, and treatment differently, the plurality of meaning in comics could also work to convey a diversity of human experiences, as promoted by feminist designers calling for humanizing data.[48]

Many of these kinds of data comics that emerged during and about Covid-19 could be classified under the umbrella term "graphic medicine." Some prolific artists producing work during the pandemic were already explicitly aligned to this community of comics, others were becoming part of the growing field, whether through their own associations or through researchers pulling their work under this rubric to give some context and history to the practice of telling health stories through elements of the comics medium. For example, in the preface to *Covid Chronicles: A Comics Anthology,* Kendra Boileau notes the effect

North, "Mental Health and the COVID-19 Pandemic," *New England Journal of Medicine* 383, no. 6 (2020): 510–12.

46 See Hepburn, *How to Stay Calm in a Global Pandemic*, and Salima Hamouche, "COVID-19 and Employees' Mental Health: Stressors, Moderators and Agenda for Organizational Actions," *Emerald Open Research* (2020).

47 A previous version appeared in Feigenbaum and Alamalhodaei, *Data Storytelling Workbook.*

48 See McNicol and Wysocki, "Comics in Qualitative Research," and Lupi, "Data Humanism."

that the rise of graphic medicine has had on trade publishing: "A book like *Covid Chronicles* is a great example of how Graphic Medicine so effectively conveys ideas of scale and connection."[49]

Graphic medicine sits at the intersection of the comics medium and health care. In 2007, the term "graphic medicine" was coined by Ian Williams, a physician, writer, and comics artist.[50] Today, "graphic medicine" refers to both a graphic genre and a critically acclaimed organization. The phrase provides an umbrella term to bring together a growing number of comics that engage with health care, illness, disability, patient education, treatment and patient experiences, and practitioner experiences. Works classified as graphic medicine cross a variety of comics genres, including webcomics, graphic pathographies, informational comics, comics strips, single panels, and video/audio installations.

Advocates of graphic medicine see the potential of enhancing effective communication through the direct, collaborative involvement of patients, practitioners, and artists. Graphic memoirs specifically bring out the participatory and humanizing elements of graphic medicine. These memoirs, or graphic pathographies, include acts of personal storytelling about the lived experience of illness or disability. This often involves representing how people encounter and make sense of data in relation to illness, and in doing so exploring complex personhood and stigmatized health identities. In this regard, Christina Maria Koch writes, "The visual-verbal medium of comics is particularly apt in showing how intricately mental states are bound up with lived bodily experience and an embodied sense of self."[51]

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49 Kendra Boileau, "Preface," in *COVID Chronicles: A Comics Anthology,* eds. Kendra Boileau and Rich Johnson (University Park: Pennsylvania University Press, 2021), x–xi.

50 See Green and Myers, "Graphic Medicine."

51 Christina Maria Koch, "When You Have No Voice, You Don't Exist? Envisioning Disability in David Small's *Stitches*," in *Disability in Comic Books and Graphic Narratives,* eds. Chris Foss, Jonathan W. Gray, and Zach Whalen (London: Palgrave Macmillan, 2016), 29.

In the comics medium, hypervisualization allows artists to represent the somatic and psychological experience of one's changing health and responses to it, from what it feels like to receive a diagnosis to the fear of telling others about your illness. Comics classified as graphic medicine often include quantitative data as a way of connecting the clinical representation of data with the human experience of becoming a patient in relation to that data. In this way the data about an illness or set of patients (or in the case of the pandemic, an always "potential patient") is juxtaposed with the routine and often mundane experiences of everyday life.

Graphic medicine and graphic pathographies, in particular, work to emphasize the human side of health experiences that play out alongside the clinical lexicon upheld by healthcare systems.[52] In the case of Covid-19, this can be thought of, for example, as a contrast between reading daily positive case statistics and the experience of being tested or taking a loved one for a test. Giving narrative to numbers through these comics elements can help practitioners move beyond sanitized, authorial, or generic data visualizations. Instead, their data stories can come to tell complicated, contested, and, perhaps most importantly, chaotic data stories. For the remainder of this chapter we turn to look at a small set of examples from our research sample of Covid-19 data comics that illustrate key features of the comics medium and graphic medicine.

Covid-19 Comics: Statistical Chaos

Liz Fosslien's data comics, drawn under her collaborative pen name "Liz and Mollie," captured the disruption of the pandemic

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52 See Anthony Farthing and Ernesto Priego, "'Graphic Medicine' as a Mental Health Information Resource: Insights from Comics Producers," *The Comics Grid: Journal of Comics Scholarship* 6, no. 1 (2016): art. 3; Ernesto Priego, "Comics as Research, Comics for Impact: The Case of Higher Fees, Higher Debts," *The Comics Grid: Journal of Comics Scholarship* 6, no. 1 (2016): art. 16; and M.K. Czerwiec et al., *Graphic Medicine Manifesto* (University Park: Pennsylvania State University, 2015).

through an ongoing series of single-panel illustrations shared primarily across Instagram. This work draws from comics the placement of word and image, shared internal thoughts and dialogue, simplified iconography, and a mark-making aesthetic that resists the sanitization often found in more traditional graphic design and digital illustration. At the same time, these works draw from data visualization the use of charts and graphs to represent variables, a simple contrasting color scheme and clear data annotations that echo the kinds of choices made by data journalist. Yet the playful aesthetic and humor draw on the cartooning tradition, remixing to create some of the most widely shared and circulated Covid-19 data comics.

In *A Chronology of 2020,* Liz and Mollie capture the spiraling and time disorientating experience of the pandemic in an image that plays intertextually with what is popularly referred to as the "groundhog day" effect of lockdowns. This visualization resonates with graphic medicine illustrations of recovery and what it is like to live with undiagnosed and/or chronic health conditions. In other panel illustrations, they mobilize pie charts to contrast self-expectations versus reality, combining graphical summaries with the layered perspective common in the comics medium. They likewise utilize line graphs and bar charts to capture the personalized experience of becoming datum. The chaos of our quantified pandemic selves is reflected back to us through simple narration and resonant iconography.

Also telling stories from the edges of chaos,[53] cartoonist and hospital administrator Katy Doughty created a webcomic called "We Might Not Ever Know the True Toll of Covid-19."[54] As part of her hospital job, Doughty was responsible for updating her hospital's online Covid-19 guide. Her webcomic illustrates her reflections on the messiness of Covid-19 data and its collection. In one stark panel, the bars of a bar graph tumble and fall over each other like the planks of a broken fence. Some of them

53 See Frank, *Wounded Storyteller.*
54 Katy Doughty, "We Might Not Ever Know the True Toll of COVID-19," *The Nib,* September 21, 2020, https://thenib.com/the-true-toll-of-covid-19/.

COVID-19 COMICS

fall into a bloodred mound at the bottom of the graph, paired with the caption "The truth is Covid-19 statistics are a mess."[55] Doughty's somber text relates the struggle of keeping up to date with the death count. Two panels show neat rows of hospital beds. The first filled with blank outlines of bodies reads, "Most case statistics in the U.S. don't include information about race and the CDC had to be sued before releasing the data that they do have."[56] The following panel shows the same scene, this time the beds are filled with black and brown bodies. Here the paired caption text narrates, "The data is sparse, but damning. Latinx and Black people are three times as likely to get Covid-19 as white people, and twice as likely to die from it."[57]

Doughty's sequential artwork on the statistical chaos of Covid-19 makes strong use of the gutter, the space between panels where the reader is left to imagine the narrative unfold. The work that is done in the gutter is one of the key features of comics that researchers have found effective in getting information to stick and increase audience empathy and engagement.[58] Doughty also uses a stripped-back color scheme, resonant iconography, and layers of text to convey the contrast between what we see on the "data surface" versus the realities behind the scenes. Doughty's data comic legitimates the human experience of chaos, while making visible data that is absent, uncounted, or hidden. Most importantly, it does this in a way that spotlights — rather than shies away from — the systematic failures and vulnerabilities revealed by all that what we cannot yet count.

Doughty's piece has a much more serious tone than the work from Liz and Mollie, but both humanize data by resisting sani-

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55 Ibid.

56 Ibid.

57 Ibid.

58 See McCloud, *Understanding Comics*; Green and Meyers, "Graphic Medicine"; Michael A. Chaney, ed., *Graphic Subjects: Critical Essays on Autobiography and Graphic Novels* (Madison: University of Wisconsin Press, 2016); and Sathyaraj Venkatesan and Sweetha Saji, "Rhetorics of the Visual: Graphic Medicine, Comics and Its Affordances," *Rupkatha Journal on Interdisciplinary Studies in Humanities* 8, no. 3 (2016): 221–31.
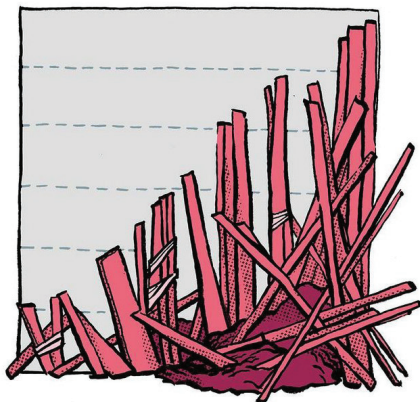
The truth is COVID-19
statistics are a mess.

Fig. 3. Katy Doughty, *We Might Not Ever Know the True Toll of COVID-19,* 2020. Courtesy of the artist.

tization, disrupting the omniscient voice of statistical authority, and telling stories about mess.[59] By accepting that we are in chaos rather than trying to find resolutions, these data comics are able to focus on what we can know — both cognitively and emotionally (fig. 3).

Covid-19 Comics: Empathy, Context, and Social Change

Monique Jackson's "Corona Diary" project on Instagram highlights the importance of human stories and testimony. The "Corona Diary" is a documentary project that shares and reflects on Jackson's experience as a Black woman with long Covid as she navigates the UK's medical infrastructure. Her posts illus-

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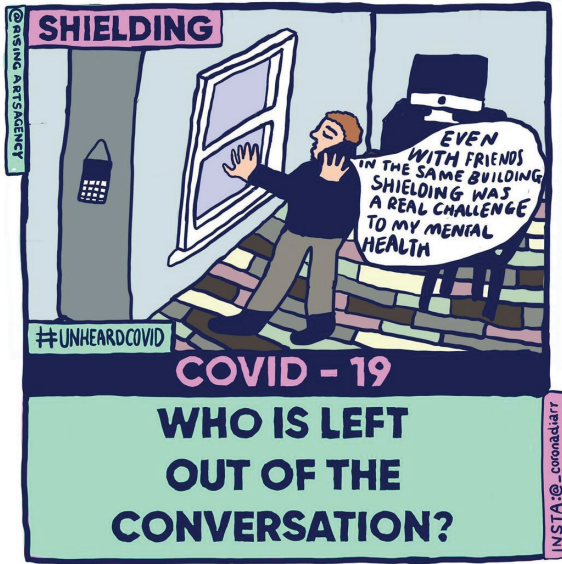59 See D'Ignazio and Klein, "Feminist Data Visualization."

Fig. 4. Monique Jackson, Instagram: @_coronadiary, #UnheardCovid series, 2020. Courtesy of the artist.

trate what Frank discusses as the emotional battering of chaotic illness narratives. Her image and text illustrations illuminate the effects of difficult diagnostics, fraught clinical encounters, and chronic pain.[60] In one panel, Monique sits in front of her computer screen. The floor is covered in trash, clothes, and dirty dishes. A cup of tea sits on the desk beside her. Inviting the reader into her inner world, the image is paired with caption text reading, "I felt as though I was just about pulling it together to work from home. I was hoping that the chaos inside would not be visible to those who I spoke with on the screen."[61]

In a special collaborative series on #UnheardCovid, Jackson uses composite characters to represent people often left out of

60 See Squier, "So Long as They Grow Out of It."
61 Transcription from Monique Jackson's Instagram project "Corona Diary," https://www.instagram.com/_coronadiary/?hl=en.
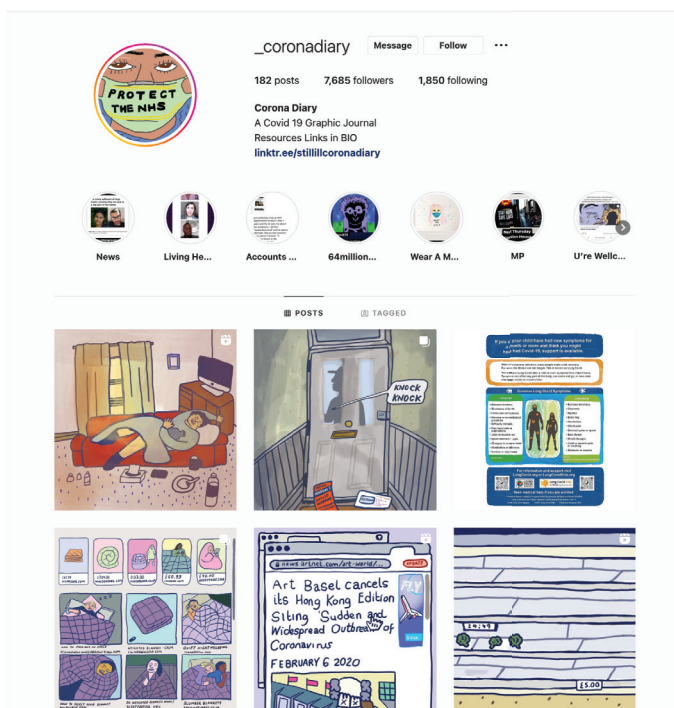
Fig. 5. Monique Jackson, Instagram: @_coronadiary, #UnheardCovid series, 2020. Courtesy of the artist.

public narratives around Covid-19. For this project she partnered with the @risingartagency. Together they responded to the question: Who is left out of the conversation? "I asked followers for feedback and there was a lot!" Jackson explains on her Instagram account. "I picked 9 answers then spoke either directly to people who identified under these categories or alternatively found online quotes from those in response to the pandemic." The series includes a teacher, a pregnant person, a child, a homeless person, a medic, a disabled person, an evicted migrant, someone with long Covid, and someone shielding. The visual illustrations layer character onto these demographic categories (fig. 4).

For example, the panel representing homeless voices shows a dog and a light-skinned man in a large, hooded coat sitting on the pavement. The legs of a passerby behind him hint at his invisibility. A speech bubble gives him voice, "There is a huge chance of catching Covid […] as a male on the streets you are only expected to live until 48."[62] In the Instagram caption accompanying this image, Jackson cites this to "Paul quotes by Tortoise Media" and pairs the comic with a bio link to an app that supports rough sleepers. In doing so, Jackson creates contextualization and offers data as a know-how resource.[63] Throughout the #UnheardCovid series, Jackson's composite figures with what Avery Gordon calls "complex personhood,"[64] an understanding that demographic categories are not static data objects, but social processes of dividing up people that have real effects on how we see each other and ourselves. These categories of vulnerability mark but cannot fully define us (fig. 5).

A more explicit incorporation of statistical data can be found in Mona Chalabi's work. Chalabi's illustrations are able to expand a person beyond "their disease." She has been taking authorial data sources and literally giving them humanness through illustration posted on her Instagram account.[65] Many of Chalabi's comics present the same types of demographics data conveyed via the official data and data visualizations of major organizations (CDC, WHO), yet her use of relatable, everyday human figure illustration are able to foster a more empathetic connection with the viewer, conveying the vulnerability humans rely on to create meaningful connections. Like the figures in #UnheardCovid, Chalabi's humanized data demographics add layers to their individual labels. For example, in a panel titled "Protect people who are vulnerable to disease," Chalabi pairs CDC data on the percentages of the US population of people with various vul-

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62 Ibid.

63 See Pinney, "Is Literacy What We Need in an Unequal Data Society?"

64 Avery F. Gordon, *Ghostly Matters: Haunting and the Sociological Imagination* (Minneapolis: University of Minnesota Press, 2008).

65 See Mona Chalabi's Instagram account, https://www.instagram.com/monachalabi/.

nerabilities through illustrations of figures against a plain white background. Chalabi depicts "people who are undocumented" as two women, one brown-skinned and one white-skinned, both in long aprons, suggesting that they are workers, possibly service workers. Her illustration of "those who have chronic diseases" shows a young, brown-skinned man in trendy clothing, visually contrasting stereotypical images of chronic illness and hinting toward the invisibility of many people's chronic conditions. Providing complex personhood through these aesthetic choices, Chalabi brings empathy and context to her data comics.

Throughout her work, Chalabi uses a range of techniques from the comics medium and from practices of data visualization. For example, she often compares and contrasts datasets to reveal social inequities and injustices. In an illustration based on data from Michigan in the United States, Chalabi pairs two datasets side by side. On the left of the panel a high-rise apartment building with 100 windows is used to represent population percentages. Fourteen of the rows are occupied by dark brown-skinned figures, depicting 14 percent of Michigan's population as Black residents. On the right there are rows of coffins, laid out in the same 10×10 grid. Here dark-brown figures occupy four rows of coffins, representing 40 percent of Covid-19 deaths that are Black people. In the caption text on Instagram, Chalabi further contextualizes this data: "There are lots of reasons why black people face a higher fatality rate from this diseases, but here are some of them: *a higher likelihood of exposure to Covid-19 (black people are more likely to work in service jobs, or jobs without sick pay, so physical distancing often just isn't an option)."[66]

From a health inequalities perspective, Chalabi's data comics bring in social and economic factors that underlie what we see in the surface data collected about disease. This provides the viewer with layers of data, addresses problem of hidden and unavailable data (as we see in Doughty's webcomic discussed above), and speaks toward what we can know in the face of

66 Ibid.

all we cannot amidst the chaos of disease and the power relations that shape medical infrastructures and their data worlds. "There still isn't national data on the racial disparities in Covid-19," Chalabi writes in the introductory text to this illustration, "but in the meantime, we have numbers from some parts of the country."

As seen in this example, Chalabi's data comics are heavily reliant on conventions from data visualization, particularly in her use of pictograms (symbols representing numbers or percentages) and more complex forms, such as waffle charts and matrix charts. Her simplified color schemes, clearly annotated data points, and referencing of data sources all demonstrate best practices in traditional data visualization. Chalabi also at times utilizes the affordances of Instagram as a platform for showcasing sequential art. For example, in a post on infection rates, the click-through function takes the reader on a narrative journey through data projections on rising death counts. Here Chalabi utilizes what data visualization researchers Edward Segel and Jeffrey Heer refer to as a balancing of author-driven and reader-driven in a user-driven click-through that goes as the reader's pace.[67] Such intentional narratively formatting is considered best practice in the field.

At the same time as Chalabi's work exemplifies a number of best practices in data visualization, she also utilizes graphic conventions that help create both cognitive and emotional or embodied connections with her readers. Her illustration style evokes empathy and reflection through its careful use of identifiable, yet detail-oriented, everyday iconography and creative visual metaphors. At times her data comics include elements of collage, that is, photo cutouts outlined in a bright color and layered onto a hand-drawn data visualization element. This intertextuality brings her authorial statistics further into the every-

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67 Edward Segel and Jeffrey Heer, "Narrative Visualization: Telling Stories with Data," *IEEE Transactions on Visualization and Computer Graphics* 16, no. 6 (2010): 1139–48.

day, recirculating and remixing data through images that are accessible and relatable to readers.

Following Pinney, Chalabi's data comics contextualize data as a social practice, revealing how things are counted, what is not counted, and some of the power relations behind this. They do so in ways to provide "know-how" in the form of resources for those fighting for social change, "enabling those affected by power imbalances to ask critical questions."[68] Chalabi's ground-breaking work was recently celebrated by the British Science Association, which awarded her an honorary fellowship for her work communicating data on Covid-19.

Conclusion

This chapter has aimed to introduce Covid-19 data comics and situate them in relation to the emergent fields of graphic medicine, critical data studies, and data feminism. Our broader research is interested in the potential of data comics to improve public health communication in times of statistical chaos and chaotic illness.[69] We have focused on examples that illustrate how the comics medium can help foster empathy and provide "know-how,"[70] in relation to contextualizing data as a social practice, particularly around issues of health inequalities, communicating information in ways that encourages critical and reflective questioning.

Research shows that engaging with visual resources can make people feel more focused and in control. Visual graphics and illustration are often better at tapping into the emotional and social dynamics of illness to make people feel less isolated.[71] Such graphic storytelling offers opportunities for self-aware-ness, reassurance, empathy, and companionship, allowing people to explore the effects of illnesses together. As such, Covid-19

68 Pinney, "Is Literacy What We Need in an Unequal Data Society?," 227.

69 See Frank, *Wounded Storyteller*.

70 See Pinney, "Is Literacy What We Need in an Unequal Data Society?"

71 See McAllister, "AIDS, Medicalization, and the News Media," and Green and Myers, "Graphic Medicine."

data comics have much to teach us about the potentials of this medium for broader public health campaigns.[72]

Those working in the fields of both health communication and data visualization can further explore these potentials for humanizing data through the comics medium. More can be done to expand on conventions, for example, by bringing visual metaphor, resonant icons, gesture, experiential scales, and internal emotional worlds into the visual communication of scientific and statistical reporting. Future projections are another existing form of data visualization that could be further explored using simple animated illustrations that invite users to put themselves into the story. This approach can help develop agency, offering an opportunity for people to see themselves as active contributors to shared public health goals. Drawing from the success of small-scale studies, broader-scale research can be conducted to see if these approaches generate more audience empathy, translate into data know-how, and potentially lead to positive behavioral change and social action.

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72 See Ciléin Kearns and Nethmi Kearns, "The Role of Comics in Public Health Communication during the COVID-19 Pandemic," *Journal of Visual Communication in Medicine* 43, no. 3 (2020): 139–49; McNicol and Wysocki, "Comics in Qualitative Research"; and Green and Myers, "Graphic Medicine."

References

Alamalhodaei, Aria, Alexandra Alberda, and Anna Feigenbaum. "Humanizing Data through 'Data Comics': An Introduction to Graphic Medicine and Graphic Social Science." In *Data Visualization in Society,* edited by Martin Engebretsen and Helen Kennedy, 347–66. Amsterdam: Amsterdam University Press, 2020. DOI: 10.2307/j.ctvzgb8c7.27.

Anderson, Chris. "Generic Visuals in the News: The Role of Stock Photos and Simple Data Visualizations in Assembling Publics." Research project, School of Media & Communication, University of Leeds, United Kingdom, 2020. https://gtr.ukri.org/projects?ref=AH%2FT000015%2F1.

Anderson, Patricia F., Elise Wescom, and Ruth C. Carlos. "Difficult Doctors, Difficult Patients: Building Empathy." *Journal of the American College of Radiology* 13, no. 12 (2016): 1590–98. DOI: 10.1016/j.jacr.2016.09.015.

Ashwal, Gary, and Alex Thomas. "Are Comic Books Appropriate Health Education Formats to Offer Adult Patients?" *AMA Journal of Ethics* 20, no. 2 (2018): 134–40. DOI: 10.1001/journalofethics.2018.20.2.ecas1-1802.

Bach, Benjamin, Nathalie Henry Riche, Sheelagh Carpendale, and Hanspeter Pfister. "The Emerging Genre of Data Comics." *IEEE Computer Graphics and Applications* 37, no. 3 (2017): 6–13. DOI: 10.1109/MCG.2017.33.

Barassi, Veronica. "Datafied Citizens in the Age of Coerced Digital Participation." *Sociological Research Online* 24, no. 3 (2019): 414–29. DOI: 10.1177/1360780419857734.

Boileau, Kendra, and Rich Johnson, eds. *Covid Chronicles: A Comics Anthology.* University Park: Pennsylvania University Press, 2021.

Chaney, Michael A., ed. *Graphic Subjects: Critical Essays on Autobiography and Graphic Novels.* Madison: University of Wisconsin Press, 2016.

Couldry, Nick, and Alison Powell. "Big Data from the Bottom Up." *Big Data & Society* (2014). DOI: 10.1177/2053951714539277.

Cullen, Walter, Gautam Gulati, and Brendan D. Kelly. "Mental Health in the Covid-19 Pandemic." *QJM: An International Journal of Medicine* 113, no. 5 (2020): 311–12. DOI: 10.1093/qjmed/hcaa110.

Czerwiec, M.K., Ian Williams, Susan Merrill Squier, Michael J. Green, Kimberly R. Myers, and Scott T. Smith. *Graphic Medicine Manifesto.* University Park: Pennsylvania State University, 2015.

D'Ignazio, Catherine, and Lauren F. Klein. *Data Feminism.* Cambridge: MIT Press, 2020.

———. "Feminist Data Visualization." In Workshop on Visualization for the Digital Humanities at EEE VIS Conference 2016. Available at Kanarinka. http://www.kanarinka.com/wp-content/uploads/2015/07/IEEE_Feminist_Data_Visualization.pdf.

Doughty, Katy. "We Might Not Ever Know the True Toll of COVID-19." *The Nib,* September 21, 2020, https://thenib.com/the-true-toll-of-covid-19/.

Eisner, Will. *Comics and Sequential Art: Principles and Practices from the Legendary Cartoonist.* New York: W.W. Norton, 2008.

Farthing, Anthony, and Ernesto Priego. "'Graphic Medicine' as a Mental Health Information Resource: Insights from Comics Producers." *The Comics Grid: Journal of Comics Scholarship* 6, no. 1 (2016): art. 3. DOI: 10.16995/cg.74.

Feigenbaum, Anna, and Aria Alamalhodaei. *The Data Storytelling Workbook.* London: Routledge 2020.

Frank, Arthur W. *The Wounded Storyteller: Body, Illness, and Ethics.* Chicago: University of Chicago Press, 2013.

Furuno, Yuichi, and Hiroyasu Sasajima. "Medical Comics as Tools to Aid in Obtaining Informed Consent for Stroke Care." *Medicine* 94, no. 26 (2015). DOI: 10.1097/MD.0000000000001077.

Gitelman, Lisa, ed. *"Raw Data" Is an Oxymoron.* Cambridge: MIT Press, 2013.

Gray, Jonathan. "Three Aspects of Data Worlds." *Krisis: Journal for Contemporary Philosophy* 1 (2018): 3–17. https://archive.krisis.eu/three-aspects-of-data-worlds/.

Green, Michael J., and Kimberly R. Myers. "Graphic Medicine: Use of Comics in Medical Education and Patient Care." *BMJ* 340, no. 7746 (2010): 574–77. DOI: 10.1136/bmj.c863.

Gordon, Avery F. *Ghostly Matters: Haunting and the Sociological Imagination.* Minneapolis: University of Minnesota Press, 2008.

Hamouche, Salima. "Covid-19 and Employees' Mental Health: Stressors, Moderators and Agenda for Organizational Actions." *Emerald Open Research* (2020). DOI: 10.35241/emeraldopenres.13550.1.

Haraway, Donna. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Feminist Studies* 14, no. 3 (1988): 575–99.

Hawley, Sarah T., Brian Zikmund-Fisher, Peter Ubel, Aleksandra Jancovic, Todd Lucas, and Angela Fagerlin. "The Impact of the Format of Graphical Presentation on Health-Related Knowledge and Treatment Choices." *Patient Education and Counseling* 73, no. 3 (2008): 448–55. DOI: 10.1016/j.pec.2008.07.023.

Hayman, Greg, and Henry John Pratt. "What Are Comics?" In *Aesthetics: A Reader in Philosophy of the Arts,* edited by David Goldblatt and Lee Brown, 419–24. Upper Saddle River: Pearson Prentice Hall, 2005.

Haynes, Kathryn. "Structural Inequalities Exposed by Covid-19 in the UK: The Need for an Accounting for Care." *Journal of Accounting & Organizational Change* 16, no. 4 (2020): 637–42. DOI: 10.1108/JAOC-08-2020-0099.

Hepburn, Emma. *How to Stay Calm in a Global Pandemic.* Paris: Hachette, 2020. https://www.hachette.co.uk/wp-content/uploads/2020/12/How-to-Stay-Calm-in-a-Global-Pandemic-Free-ebook.pdf.

Kearns, Ciléin, and Nethmi Kearns. "The Role of Comics in Public Health Communication During the Covid-19 Pandemic." *Journal of Visual Communication in Medicine* 43, no. 3 (2020): 139–49. DOI: 10.1080/17453054.2020.1761248.

Kennedy, Helen, and Rosemary Lucy Hill. "The Feeling of Numbers: Emotions in Everyday Engagements with Data and Their Visualisation." *Sociology* 52, no. 4 (2018): 830–48. DOI: 10.1177/0038038516674675.

Koch, Christina Maria. "When You Have No Voice, You Don't Exist? Envisioning Disability in David Small's *Stitches*." In *Disability in Comic Books and Graphic Narratives,* edited by Chris Foss, Jonathan W. Gray, and Zach Whalen, 29–43. London: Palgrave Macmillan, 2016.

Lupi, Giorgia. "Data Humanism: The Revolutionary Future of Data Visualization." *Print,* January 30, 2017. https://www.printmag.com/article/data-humanism-future-of-data-visualization/.

Marmot, Michael, and Jessica Allen. "Covid-19: Exposing and Amplifying Inequalities." *Journal of Epidemiology and Community Health* 74, no. 9 (2020): 683–88. DOI: 10.1136/jech-2020-214720.

McAllister, Matthew P. "AIDS, Medicalization, and the News Media." In *AIDS: A Communication Perspective,* edited by Timothy Edgar, Mary Anne Fitzpatrick, and Vicki S. Freimuth, 195–221. New York: Routledge, 1992.

McCloud, Scott. *Understanding Comics: The Invisible Art.* New York: HarperPerennial, 1993.

McNicol, Sarah, and Lydia Wysocki. "Comics in Qualitative Research." In *SAGE Research Methods Foundations,* edited by Paul A. Atkinson, Sara Delamont, Alexandru Cernat, Joseph W. Sakshaug, and Richard Williams, n.p. London: SAGE, 2019. DOI: 10.4135/9781526421036832018.

Meskin, Aaron. "Defining Comics?" *Journal of Aesthetics and Art Criticism* 65, no. 4 (2007): 369–79. DOI: 10.1111/j.1540-594X.2007.00270.x.

Nguyen, An. Intervention at the "Coronavirus, Statistical Chaos and the News" online symposium, Bournemouth University, UK, December 4, 2020.

Noe, Matthew N., and Leonard L. Levin. "Mapping the Use of Comics in Health Education: A Scoping Review of the Graphic Medicine Literature." *Graphic Medicine,* July 24, 2020. https://www.graphicmedicine.org/mapping-comics-health-education/.

Pfefferbaum, Betty, and Carol S. North. "Mental Health and the Covid-19 Pandemic." *New England Journal of Medicine* 383, no. 6 (2020): 510–12. DOI: 10.1056/NEJMp2008017.

Pinney, Lulu. "Is Literacy What We Need in an Unequal Data Society?" In *Data Visualization in Society,* edited by Martin Engebretsen and Helen Kennedy, 223–38. Amsterdam: Amsterdam University Press, 2020.

Pirtle, Whitney N. Laster. "Racial Capitalism: A Fundamental Cause of Novel Coronavirus (Covid-19) Pandemic Inequities in the United States." *Health Education & Behavior* 47, no. 4 (2020): 504–8. DOI: 10.1177/1090198120922942.

Priego, Ernesto. "Comics as Research, Comics for Impact: The Case of Higher Fees, Higher Debts." *The Comics Grid: Journal of Comics Scholarship* 6, no. 1 (2016): art. 16. DOI: 10.16995/cg.101.

Segel, Edward, and Jeffrey Heer. "Narrative Visualization: Telling Stories with Data." *IEEE Transactions on Visualization and Computer Graphics* 16, no. 6 (2010): 1139–48. DOI: 10.1109/TVCG.2010.179.

Squier, Susan M. "So Long as They Grow Out of It: Comics, the Discourse of Developmental Normalcy, and Disability." *Journal of Medical Humanities* 29, no. 2 (2008): 71–88. DOI: 10.1007/s10912-008-9057-1.

Venkatesan, Sathyaraj, and Sweetha Saji. "Rhetorics of the Visual: Graphic Medicine, Comics and Its Affordances." *Rupkatha Journal on Interdisciplinary Studies in Humanities* 8, no. 3 (2016): 221–31. DOI: 10.21659/rupkatha.v8n3.23.

Wysocki, Lydia. "Farting Jellyfish and Synergistic Opportunities: The Story and Evaluation of Newcastle Science Comic." *The Comics Grid Journal of Comics Scholarship* 8, no. 1 (2018): art 6. DOI: 10.16995/cg.119.

Going Viral: Survival Design

Manuel Olveira

The emergence of the Covid-19 pandemic and the subsequent global health crisis took place in the context of incipient and uneven recovery following the global economic crisis that began at the end of 2008. This crisis was directly triggered by the 2006 collapse of the real estate bubble in the United States and the stock market crisis of 2008, both having been forged in the fires of capitalist economies' neoliberal management models at the turn of the millennium. In this context of fragility encouraged by predatory social, cultural, economic and ecological policies, the effect of the pandemic was exacerbated because it was unleashed on a public health service that had been weakened by years of neglect and a withered social body that was not at all prepared.

The political decisions of the years before the outbreak of the pandemic weakened the public sector in general and the health sector in particular, as a report by the Corporate Europe Observatory shows: "From hospitals to care homes, the evidence is mounting that outsourcing and private provision of healthcare has significantly degraded EU member states' capacity to deal effectively with Covid-19." The report continues: "In the context of Covid-19, these trends have had disastrous implications for

health and care systems' ability to handle the pandemic. Health budget cuts have led to understaffing and reduced total hospital bed numbers, while the rise of private hospitals goes hand in hand with a fall in intensive care beds, which are less profitable for companies."[1]

The immediate consequences of Covid-19 were therefore devastating from every perspective, and the future has become unpredictable, to the extreme that it generates anxiety and uncertainty that affects all walks of life, from health to the economy, personal to social, and cultural to ecological, to name a few. More than ever, Walter Benjamin's accurate quote in his eighth thesis on the concept of history written in 1940 — "The tradition of the oppressed teaches us that the 'state of emergency' in which we live is not the exception but the rule"[2] — decisively presents our reality, because emergency and uncertainty are unavoidable.

Accidents, catastrophes, and uncertainty are at the root of Paul Virilio's work. In both theoretical and expository essays,[3] Virilio clearly describes how society is a victim of the progress that should, supposedly, protect us from eventualities and mishaps: "When you invent the ship, you also invent the shipwreck; when you invent the plane you also invent the plane crash; and when you invent electricity, you invent electrocution[....] Every technology carries its own negativity, which is invented at the same time as technical progress."[4]

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1   Corporate Europe Observatory, "When the Market Becomes Deadly: How Pressures towards Privatisation of Health and Long-term Care Put Europe on a Poor Footing for a Pandemic," *Corporate Europe Observatory,* January 26, 2021, https://corporateeurope.org/en/2021/01/when-market-becomes-deadly.

2   Walter Benjamin, "Theses on the Philosophy of History," in *Illuminations: Essays and Reflections,* ed. Hannah Arendt, trans. Harry Zorn (New York: Schocken, 1969), 257.

3   Paul Virilio, *Unknown Quantity* (Paris: Fondation Cartier pour l'art contemporain, 2002).

4   Paul Virilio, *Politics of the Very Worst,* ed. Sylvère Lotringer, trans. Michael Cavaliere (Los Angeles: Semiotext(e), 1999), 89.

The same perception of the negative effects of progress inspired some critical contributions made in the 1980s and 90s, following environmental disasters, including Chernobyl. Sociologists such as Anthony Giddens and Ulrich Beck analyzed the fact that catastrophes were previously produced by natural forces, but in modern times they result from human activity that is destabilizing the environment. Risk is inherent to the system, to the point that Giddens defines a risk society as "a society increasingly preoccupied with the future (and also with safety), which generates the notion of risk."[5] That same society for Beck is "a systematic way of dealing with hazards and insecurities induced and introduced by modernisation itself."[6]

Although the sequence of health crises in recent years seemed like a premonition, the emergence of SARS-CoV-2 caught the whole world by surprise as a result of our senseless race forward. The neoliberal model affects the entire system, violating all kinds of justice and social, economic, and/or ecological balance. Its fallacies based on economic growth, progress, control of the forces of nature, and anthropocentrism disguise extractive predation, the exploitation of people and resources, hyperconnectivity and planetary mobility, the relocation of production and the excessive extension of logistics, globalization understood in the worst possible way, and systematic pollution that is generating a devastating climate crisis. All this continues to increase, despite the successive health crises of mad cow disease, Ebola, Zika, bird flu, and swine flu that foreshadowed what happened with a zoonotic pathogen, the novel coronavirus, putting science, health, multilateralism, and the entire system as we have known previously in check.

"What is wrong with our system that we were caught unprepared by the catastrophe despite scientists warning us about

5 Anthony Giddens and Christopher Pierson, *Making Sense of Modernity: Conversations with Anthony Giddens* (Stanford: Stanford University Press, 1998), 209.
6 Ulrich Beck, *Risk Society: Towards a New Modernity* (London: Sage, 1992), 21.

it for years?" Slavoj Žižek wonders at the end of the "Noli Me Tangere" introduction to his book *Pandemic! Covid-19 Shakes the World.* This lack of foresight has meant that no public administration had a contingency plan for a crisis as serious and widespread as Covid-19. The magnitude of the pandemic and global lockdown were unprecedented and therefore no one had prepared clear reaction plans or organized responses. It is obvious that the way the pandemic evolved was not, and still is not, known, meaning that the whole of society had, and still has, after more than three years since the pandemic started, to look for new ways and tools to interpret and react to an urgent, unexpected reality.

Emergency, New Paradigm

The responses to Covid-19 were emergency reactions and decisions, both structural in different administrations and in domestic reactions and decisions. Globally, we witnessed a sequence of responses that ranged from the adaptation of conventional hospitals, the construction of field hospitals, the improvisation of protective healthcare equipment, drones for temperature control, cameras and disinfection robots, temporary vaccination centers, and mobile applications to a wide variety of homemade "inventions," such as plastic head protection screens or cloth face coverings.

The double sense of the concept of an emergency is essential in considering everything related to the pandemic: on the one hand, emergency can be understood as a situation, accident, or disaster that requires an immediate reaction, but, on the other, it can be understood as the emergence or manifestation of that disaster or of the responses to that disaster that materialize in multiple ways in daily life, from uses and behaviors to the objects that regulate and facilitate these. The pandemic is an emergency, and with it new situations and responses have emerged. An example of this were the field hospitals for dealing with the health emergency, the appearance of messages in all kinds of forms in public spaces from windows to face masks,

changes in space and in the rules of behavior, the initial prohibition on going outside and the subsequent pedestrianization of some roads, the increased value of windows and balconies, the use of warlike imagery, and the emergence of online work and education.

As we can see in the video work done by Andrés Jaque/Office for Political Innovation and Iván Munuera entitled *The Transscalar Architecture of Covid-19,* we have witnessed the emergence and appearance of new imagery that ranges from the micro- to the macroscopic, including the transformations of large architectural spaces. The work was produced for the Earth Day symposium, where it was presented as part of the Virtual Design Festival. As the creators affirm in the presentation,[7] the video "charts the impact of coronavirus on spaces at different scales," and documents the dramatic transformations of the built environment, including conference centers that become temporary hospitals and empty city streets that are reclaimed by wildlife, and explores how the pandemic affected different people in different economic situations around the world. *The Transscalar Architecture of Covid-19* presents this double meaning of the word "emergency" insofar as it tracks the decisions and responses to the challenges of the pandemic through space and architecture and, at the same time, shows the emergence or appearance of new visual imageries.

The dominant narrative was that Covid-19 had changed the world and, consequently, the reality in which we live, to the point that we distinguish between the old normality and the appearance or emergence of a new one determined by recent behavioral parameters in all aspects of life. Still uncertain, this new normal is altering spaces or objects and how we use them, forcing us to rethink what we understand by reality. Such is the awareness of witnessing a moment of crucial change or a para-

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7   Dezeen, "Andrés Jaque and Ivan Munuera Premiere Film Exploring the Visual Landscape of COVID-19," *YouTube,* April 22, 2020, https://www.youtube.com/watch?v=AD6khyFbBcQ.

digm shift that some thinkers have argued that 2020 represents the end of the twentieth century at the epistemological level.

Boundless progress seems to have encountered an abrupt halt that reveals its fallacy, at least temporarily. With this, modern reason and supposed scientific truth seem to be giving way when determining the paradigms in which to think and understand reality. As has already been postulated by a diverse range of thinkers from Nietzsche to Lyotard, from Wittgenstein to Lacan, science is not the only way to access and represent what is real. In fact, Lacan differentiated between what is real and reality. What is real is inaccessible to the human mind, and can only be approached through reality, in other words through a symbolic construction or representation of what is real.

The impetuous and unexpected(?) appearance of Covid-19 required us to try to avoid scientific and rational paradigms when thinking about what is real and to intervene in it in order to explore nonmodern, nonanthropocentric and non-Western methods of mediating and imagining reality and its objects. Perhaps art is better positioned to provide us with tools for the political and poetic imagination to create thought and action mechanisms, instruments, objects, or practices appropriate to the present circumstances.

In several books, including Mark Honigsbau's *The Pandemic Century*,[8] we again witness a critique of progress, reason, and scientific truth as the only epistemological forms of accessing what is real. In the words of Adam Matthews: "When a phantom objectivity of one objective scientific truth enters the order of things, pandemics exploit epistemological blind spots again and again."[9]

Progress and its corollary of accidents, risks, and catastrophes allow us to affirm emergencies as one of the defining traits of the current paradigm. In fact, serious and unexpected mishaps or

8   Mark Honigsbaum, *The Pandemic Century: A History of Global Contagion from the Spanish Flu to COVID-19* (Cambridge: Penguin, 2020).

9   Adam Matthews, "Review of Mark Honigsbaum (2020), *The Pandemic Century: A History of Global Contagion from the Spanish Flu to COVID-19,*" *Postdigital Science and Education* 2 (2020): 1006–14.

situations make it possible for states to declare a state of alarm, emergency, or exceptional circumstances, unfortunately increasingly frequently, which entails the suspension of some fundamental freedoms and the exercise of some rights of citizenship, such as freedom of assembly or freedom of movement. For the lockdown and subsequent restrictions, many countries had to resort to their respective declarations of state of alarm, emergency, and exceptional circumstances, which proves that emergencies do not seem to be the exception but rather the rule, as Benjamin rightly predicted. Any new paradigm that tries to represent what is real must include emergencies as a symptom, but also incorporate nonmodern or non-Western positions, and, likewise, understand the degree of interrelation between all the agents of the system, including the nonhuman or the most invisible.

Finding other key ways that allow the reality of the pandemic to be approached includes understanding it in a specific context, as expressed by David Benjamin, one of the founders of The Living, a research group based in New York that fuses a biological perspective with design practice. Together with The Living, he organized an exhibition at the Storefront for Art and Architecture in New York in 2018 titled "Subculture: Microbial Metrics and the Multi-Species City" in which the microscopic biodiversity of urban life was explored as a paradigm through which to understand that life in communities participates in that biological diversity. In fact, biomimicry (the use of biological forms as a basic inspiration for object conceptualization) is one of the trends of contemporary design. To understand life after the pandemic from the perspective of coexistence and biological diversity, Philip Kennicott writes about David Benjamin's proposals:

> Benjamin is saying that the pandemic touches on everything; it transpires throughout the totality of the three-dimensional world we inhabit, influencing and influenced by every relation of one thing to another. The pandemic, and the problems it has highlighted and exacerbated, is as inescapable as space, or life. The crisis of the pandemic is highly related to the crisis of climate change, and to the economic crisis. We

can't and shouldn't address one alone, and we must address all three together. That means designing with uncertainty and with invisible forces in mind.[10]

It is palpable that we have witnessed a systemic transformation that affects time, space, and all the activity that we carry out within its parameters. The whole world experienced an unexpected change in gear. We went from living in accelerated movement surrounded by other people who are also on the move to domestic confinement or severe restrictions on mobility. A change in gear that well exemplifies the Suspended Time Institute project produced by MUSAC. Born a little before the pandemic but intersected by it, this project, as Raquel Friera and Xavier Bassas write in their presentation, "is an institution (pseudo-, para-, meta-, anti-institution, also dis-titution, etc.) that arises from the need to reappropriate expropriated lifetime, constantly and daily, in our capitalist societies."[11]

This change, which the pandemic seemed to be a critical expression of, has forced us to rebuild meaningful relationships with reality, from the spectacular macro gestures of power to the micro-political initiatives of empowered citizens, and from spatial and temporal uses to different objects that mediate and enable them. We have to accept a new paradigm that should not be understood as a utopia, a goal, an ideal, or a place to reach, but rather, taking Bruno Latour's reference as a practice, a modus operandi that allows "invisible forces," new facts and interpretations to be expressed, to emerge, or to appear.

This way of understanding the situation implies awareness of a break, of one period that ends and another that begins. This, which is reflected in many professional spheres, is also

10 Philip Kennicott, "Designing to Survive," *Washington Post,* July 13, 2020, https://www.washingtonpost.com/magazine/2020/07/13/pandemic-has-shown-us-what-future-architecture-could-be/?arc404=true.

11 MUSAC, "Instituto del Tiempo Suspendido, ITS. Presentación de la web del proyecto de Raquel Friera y Xavier Bassas," *MUSAC,* June 2020, https://musac.es/#programacion/programa/instituto-tiempo-suspendido-web-raquel-friera-xavier-bassas-2.

supported by some architects or architectural theorists who are predicting the end of modern architecture as we have understood it so far:

> I think 2020 ended the 20th Century in architecture. Architecture never leads in pivotal periods. Modernism was birthed by a Western World leaving monarchies and diving into the Industrial Revolution: it caused neither. Today, a century of nearly unquestioned aesthetic correctness in architecture may be changing. The world of celebrated design has always been desperate for relevance as it has little tangible value beyond the fundamental joy that it offers everyone. The oxymoron of design being an essential luxury found reason in the 20th Century when it was seen as the cutting edge of a cultural move to a bright, clean, Modern future.[12]

Emergency Responses

The first responses to the Covid-19 emergency followed the well-known inertia of spectacularized media treatment that understands catastrophes happen to others and not to us. The degree of alienation of our society seems to allow us to consume the spectacle of self-destruction separate from ourselves, as if it were a representation. Distancing and representation are two important concepts included in the well-known thesis 1 written by Guy Debord in *The Society of the Spectacle:* "In societies where modern conditions of production prevail, all of life presents itself as an immense accumulation of spectacles. Everything that was directly lived has moved away into a representation." That distance was what led to spectacularized treatment in the media and on social networks, as described by Xiaoyu Weng in *An Informal and Incomplete Journey:*

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12 Duo Dickinson, "2020: The End of the 20th Century in Architecture," *ArchDaily,* January 2, 2021, https://www.archdaily.com/954210/2020-the-end-of-the-20th-century-in-architecture.

The media, along with the rest of us, have succeeded in generating many spectacles out of this crisis: the rapid construction of two emergency field hospitals in a week's time; the overnight transformation of unused exhibitions centers and stadiums into hospitals; the transplanting of *guangchang wu* (plaza dancing) — an exercise routine made popular by middle-aged and retired women and collectivity performed to music in urban squares, plazas, and parks — to these field hospitals, led by nurses covered in protective gear; the arrival of thousands of volunteer doctors and nurses from numerous local hospitals across the country to the city of Wuhan and Hubei Province; and the motivational reportage about women doctors and nurses continuing to work on the frontline despite, for example, suffering an accidental abortion, or having to give up on breastfeeding their newborns. These spectacles not only feed the desire to know the "truth," but also fuel the propaganda machine. By replacing truth with spectacle, the machine operates effectively.[13]

China was the first country in which emergency architecture emerged because it was the location that was first affected by a wave of infections that collapsed hospitals to the point that some people were not treated, as Xiaoyu Weng describes: "My heart broke when I read that a senior citizen in Wuhan had to walk for hours to get to the hospital because public transportation in the city had stopped, only to get turned away because there were not enough beds and testing kits. I imagined the feeling of not be able to breathe despite the imperative to continue walking for miles."[14] For this reason, it was necessary to build quickly new and large temporary sanitary facilities, such as the Wuhan Huoshenshan Hospital with capacity for 1,000 beds. The hospital was built in a single week and was epically presented

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13 Xiaoyu Weng, "An Informal and Incomplete Journey," *e-flux* 108, April 2020, https://www.e-flux.com/journal/108/326261/an-informal-and-incomplete-journey/.

14 Ibid.

with impressive images taken by a drone that offered a choreographed spectacle of many cranes working in unison.

The same thing happened later in many other places where it was necessary to install field hospitals, converting fairgrounds or spaces for spectacles into places that could accommodate large numbers of sick people. This happened first with the China Optics Valley Convention & Exhibition Centre in Wuhan, later happening to the ExCel Exhibition Centre in London, which turned into the NHS Nightingale Hospital, the Javits Center in New York, Ecuador's Centro de Covenciones Bicentenario, the McCormick Place in Chicago, the Convention Center in New Orleans, and IFEMA in Madrid, taking advantage of these buildings' capacity to host many people and their good electrical infrastructure that could be used to power all kinds of medical equipment. These facilities' large spaces were converted into field hospitals with minimal changes, implementing quick and flexible solutions. Where previously there were temporary stands for trade fairs, a series of cubicles with curtains and screens were formed to create spaces with some privacy for the sick.

Although hospitals specifically designed for the pandemic were built in some places, such as Hospital Isabel Zendal in Madrid, opened in December 2020 amid criticism and controversy, given the urgency of the situation most of the actions instead consisted of reimagining the functionality of and restructuring preexisting spaces for new uses (fig. 1). For example, the abandoned buildings of the Ciudad de la justicia and Palacio del hielo were converted into morgues in Madrid, and Salisbury Cathedral, the Blatchwood nightclub in London, and the Black Country Living Museum in Birmingham were transformed into picturesque vaccination centers in the UK. The reorganization of these buildings also entailed a reorganization of their functions, evidencing a substantial change that puts the focus on the emergency as a paradigm from which the system is being restructured.

With the same urgency, some projects were developed by taking modular, prefabricated, and transportable architectures that can be very quickly installed as references. This is the case,

Fig. 1. Manuel Olveira, Photograph of the vaccination queue. Hospital Zendal, Madrid, Spain, 2021. Courtesy of the author.

for example, with a container for intensive care whose prototype was installed in Milan. CURA (Connected Units for Respiratory Ailments)[15] were designed by Italian architect and MIT professor Carlo Ratti and consist of several prefabricated modules, connected by inflatable corridors and equipped with biocontainment systems that can be installed by a few people in just a few hours. Similarly, FEMA's National Mobile Disaster Hospital consists of a series of ready-to-use portable tents and easily transportable modular structures that can be up and running in just a few days.

That same emergency response with "survival designs" then prompted several projects to enable temporary and transportable spaces for carrying out Covid-19 tests. After its previous experience with SARS, South Korea developed a system of portable tents inspired by the fast-food drive-thrus that have spread across the globe. A similar solution has been used to build tem-

15 Tom Ravenscroft, "Carlo Ratti Associati Designs Shipping-container Intensive Care Units for Coronavirus Treatment," *Dezeen*, March 24, 2020, https://www.dezeen.com/2020/03/24/shipping-container-intensive-care-units-coronavirus-COVID-19-carlo-ratti/.

porary spaces for vaccination campaigns, such as the one developed by Stefano Boeri, who created an architectural and communicative concept with the slogan "With a flower, Italy comes back to life."[16]

Promoting this type of temporary architecture based on prefabricated, transportable, and low-cost modules brings prototypes and productions, such as the Doecker-normal-barracken pavilion model, to the fore. Patented at the end of the nineteenth century, it was commercially distributed almost all over the world by German company of Danish origin Christoph & Unmack. Architect Konrad Waschmann worked for the company and would later emigrate to New York to work with Walter Gropius on the well-known prefabricated house project Packaged House/General Panel System (1940).

The Doecker model, designed for use in wars, pandemics, religious missions, concentration camps, colonies, or settlements, consisted of a wooden structure and felt and cardboard walls. It was weather-resistant thanks to a unique treatment using paints and varnishes. In Catalonia (Spain), one of these barracks was installed in 1913 to provide assistance to the 4,000 workers who were building a large hydroelectric plant. Today it still stands in the Vall Fosca area, as evidenced by the exhibition project by Primož Bizjak and Carlos Bunga, "Hospital de Cartón,"[17] presented at the Gallería Elba Benítez in Madrid between September and November 2020 (fig. 2).

Except for the temporal distance and the materials and techniques used, this prefabricated field hospital shares the same characteristics as the aforementioned Wuhan hospitals, the

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16 Christele Harrouk, "Stefano Boeri Develops Concepts and Pavilions for the Italian Anti-COVID-19 Vaccination Campaign," *ArchDaily,* December 14, 2020, https://www.archdaily.com/953236/stefano-boeri-develops-concepts-and-pavilions-for-the-italian-anti-COVID-19-vaccination-campaign.

17 Galería Elba Benítez, "Hospital de cartón Primož Bizjak, Carlos Bunga. Proyecto comisariado por Ainhoa González," *Galería Elba Benítez,* September 10–November 9, 2020, https://elbabenitez.com/es/exhibition/hospital-de-carton/.

Fig. 2. Primoz Bizzjak, Hospital de Cartón, Capdella, Valle de Fosca (detail). Courtesy of the artist and Elba Benitez Gallery, Madrid.

CURA container for intensive care, and Stefano Boeri's tents for vaccination campaigns: emergency response, rapid installation, good ventilation, and high disinfection capacity for the materials used. All of this is very suitable for a biopolitical regime marked by emergency, exception, and, in a certain way, by an authoritarianism that, in part, is expressed through spectacularity.

The pandemic's spectacular iconography contributed to the distancing of citizens because it builds an image of reality that is far from what is real. Of course, the emergency response examples just described contrast strongly with the improvised solutions that the majority of the population at the individual level — and also a fair few institutions — had to "invent" when faced with this unforeseen situation. There was a lack of information and protocols, materials and equipment. The precariousness of the shortages derived from the absence of local production or technology diversity shows not only a lack of foresight but also the absence of productive sovereignty, which leaves citizens and countries in the hands of producing powers, such as China. In fact, most people and more than a few essential

workers on the front line had to be innovative to respond with "inventions" to needs and seek solutions to problems.

The spectacle of media reality has nothing to do with the precariousness of what is real, especially in the first months of 2020. Our way of life, our needs, the objects we used, and the way we related to each other were suddenly put on hold, their functionality ceased, and we were forced to learn to quickly find solutions and answers. Some statements written shortly before, such as "artists learning to be artists, public learning to be the public, museums learning to be museums,"[18] acquired an unusual dimension. Since March 2020, museums had to relearn how to be museums, just as people also had to relearn how to be citizens, clients, or users with new ways, new customs, new behaviors, and a new normal. Suddenly, in almost all spheres of life, millions of us were neophytes, illiterate, incapable, inexperienced, and clumsy, rehearsing our early childhood, concocting answers, remedies, and designs, putting both stoicism and good will into it.

What Can I Do?

The state of emergency pushed us to act for our survival and for group protection. In fact, the voluntary efforts of many people contributed to mitigating all kinds of planning and/or supply shortages of products and tools in the first wave of the pandemic during the first months of 2020. Expressions of altruism and solidarity acted as the "invisible forces" mentioned by Kennicott that contributed to meeting all kinds of needs.

Since the emergence of the SARS-CoV-2 virus, most design solutions have come from voluntary contributions for the common benefit of coping with the effects of the pandemic. Part of the population mobilized their domestic or professional knowledge to find solutions to problems or alternatives to shortages.

18 Manuel Olveira, "Ensayo en movimiento," in *Exponer o exponerse: La educación en museos como producción cultural crítica,* ed. Belén Sola Pizarro (Madrid: Los libros de la catarata, 2019), 39.

As the illustrator and designer Tamara Shopsin expresses in the compilation of proposals mentioned in the article "Innovative Design Responses to the Coronavirus," "I think there's a general feeling right now of 'What can I do to help in any way?' This is something I can do from my house. It's a very small thing, but I'm very happy to work on it."[19]

The global imperatives of protection, care, and communication have resonated in all kinds of communities, groups, professionals, and individuals, awakening the will and the capacity to do something — generally open source and free of rights — for the benefit of society as a whole. For this reason, it is appropriate to qualify this action arising from the will to contribute to the common good in critical times as "survival design." Therefore, the aforementioned collection of proposals includes a window from which to deliver food to take away without hand-to-hand contact (Sanitary Food Transfer Window), a manual ventilation adapter printed in 3D (3D-Printed Adapter for Manual Ventilation), and various proposals for the manufacture of personal protective equipment.

Citizen mobilization was continuous and was expressed in multiple ways using, very often, a fairly widespread and affordable technology: 3D printers. In fact, these types of printers played a fundamental role in the production of objects and tools in the first wave of the pandemic, either by filling gaps or by adapting existing designs to the new reality arising from the virus. Among the many examples, we can name the stimulus of the literacy and production "maker" through FabLabNetwork;[20] face shields for healthcare staff designed by Cornell University professor Jenny Sabin, who launched Operation PPE to distribute specifications for 3D printed face masks; the Leitat 1 field respirator designed by Magí Galindo for Hospital Parc Taulí de

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19 Audrey Grey, "8 Innovative Design Responses to the Coronavirus," *Architectural Digest,* April 9, 2020, https://www.architecturaldigest.com/gallery/8-innovative-design-responses-to-the-coronavirus.

20 Lass, "Neil's Message to the #FabLab Network," *fabfoundation,* March 2020, https://mailchi.mp/fabfoundation.org/the-fab-foundation-march-blast-is-here-4355935.

Sabadell (Spain); and the proposals of the Foster+Partners studio that published open-source designs for a visor that can be mass produced using a simple laser cutter as an alternative to 3D printing.

Most of these ideas had their first, prominent presence on the internet, meaning that giving an account of this activity and its results is possible not only by collecting and compiling the objects but also by their digital manifestation. That is why initiatives such as the Design in Quarantine repository were born.[21] This initiative was proposed by Anna Talley and Fleur Elkerton, two design history postgraduate students at the Royal College of Art and the Victoria and Albert Museum in London. They perceived that many published projects were dispersed across blogs, social networks such as Instagram and Twitter, or on various websites. They therefore made the decision to try to gather these projects in an archive that can provide an account of the responses of survival design to the Covid-19 emergency.

Many of the initiatives were individual and homemade responses, such as the production of face coverings at home with sewing machines that were the subject of intense use after years of neglect, an activity that contributed to rethinking the consideration and use of some everyday objects, as demonstrated in the *Pandemic Objects* project's blog.[22] However, the vast majority have been the result of altruistic collaborations developed by informally organized groups. For example, the PARTISANS architecture studio in Canada joined forces with community services group WoodGreen to launch the Canadian Covid Creators Network,[23] a project that encourages the creative community to use their knowledge to fill gaps or provide anything necessary in the face of the pandemic. A further example can be found in the members of the Hong Kong Design Trust, who launched the

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21 *Design in Quarantine,* https://designinquarantine.com/.
22 *Victoria and Albert Museum: Pandemic Objects,* https://www.vam.ac.uk/blog/pandemic-objects.
23 *Canadian COVID Creators Network,* https://www.cccnetwork.ca/.

Critically Homemade project[24] with the intention of seeking out homemade solutions to these new challenges.

Like many others, this project expressed the need to create ties and collaborate with other people for the common good, emphasizing the capacity of each person to act, even from their own home, avoiding physical interaction, and effectively contributing to generating a positive cooperative atmosphere that resembles the global solidarity proposed by Žižek. In the words of the Design Trust cofounder and Critically Homemade innovator Marisa Yiu: "The desire to make things with our hands is universal and a significant human expression. While some handicrafts are means of survival, making objects with our hands serves as a creative release. Restricted by the necessary social distancing during an unprecedented pandemic, many designers have expressed a need to connect, collaborate and create."[25]

During the pandemic, this volunteerism even reached several companies. For example, some clothing brands, such as Hermenegildo Zegna, with its Zegna: Solidarité sur-mesure! project, and Carolina Herrera, produced protective equipment when there were no masks, gowns, and overalls for healthcare staff. The latter also contributed via the Puig brand by manufacturing hydroalcoholic gel[26] at the time when this essential product for disinfection was in short supply.

The halt in daily activities fostered community solidarity, because we were all affected by the pandemic and in the same situation of confinement at home. During domestic confinement at the height of the first wave, when neither the supplies

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24 Marisa Yiu, "Critically Homemade," *Design Trust,* 2020–2021, https://designtrust.hk/design-trust-critically-homemade/.

25 Marisa Yiu, "Lead Curator's Message," *Design Trust: Critically Homemade Programme Portfolio,* https://designtrust.hk/design-trust-critically-home-made-programme-portfolio/.

26 efe, "Carolina Herrera, de la sastrería a la confección de batas y mascarillas para luchar contra el coronavirus," *ABC Estilo,* March 10, 2020, https://www.abc.es/estilo/gente/abci-carolina-herrera-sastreria-confeccion-batas-y-mascarillas-para-luchar-contra-coronavirus-202004101417_noticia.html.

nor the protocols were clear, part of the population suffered the shock of being shut down at home, sometimes working remotely, but also with a lot of free time. This was a favorable situation for the reaction that produced altruistic initiatives that answered the question, "What can I do?" but also sought to solve everyday problems derived from social isolation and a lack and inefficiency of certain tools, and to reimagine the use of certain day-to-day objects.

This is how individual and collective ingenuity got to work, and proposals appeared and were shared aimed at promoting personal and group resilience, distributing knowledge, and gave experience for, for example, entertaining children at home or producing a climate of emotional well-being. Some of the homemade objects explored new ways of maintaining personal prophylaxis, either by "inventing" some protection and/or iso-lation device, or by looking for a way not to touch potentially contagious surfaces; others served as tools to improve mental health and emotional well-being.

Expressions of solidarity and support appeared in multiple ways, from applauding at 8:00 p.m. each day or leaving food in stores for those who could not buy it, to placing messages of encouragement and positive drawings or banners in windows (fig. 3). These manifestations of empathy, union, and warmth, generated in the spirit of "survival design," were intended for healthcare and essential services workers, but they reached the whole of society. The drawings of clouds and rainbows with the phrase "Andrà tutto bene" (All will be well) are perhaps the best-known expression of this because these spread very quickly, as described by Kristian Volsing:

> The phrase "Andrà tutto bene" entered the country's con-sciousness in early March, when handwritten post-it notes with the phrase mysteriously began appearing on front doors in the Lombardy region — a clandestine act to brighten the spirits of troubled citizens. Soon after, a group of families in southern Italy encouraged their children to craft signs us-ing the same phrase with added rainbows. When photos of

Fig. 3. Gloria Luca, Photograph from the series *Balconies_Windows_ Traces,* Carabanchel District, Madrid, Spain, June 2020. Courtesy of the artist.

these signs were shared online and in the news, the practice quickly became a national phenomenon before spreading to other countries around the world, including to the UK. What started as a modest activity to bring some cheer, resulted in an international movement of incredible force: Hundreds of thousands of signs made by children over the course of several months, representing an outpouring of empathy at an unprecedented scale for this new and difficult time we faced together.[27]

The same iconic motif experienced countless renderings and customizations, as can be partially seen in the "All Will Be Well" exhibition organized by the Victoria and Albert Museum between December 2020 and February 2021.[28] The phrase and

27 Brendan Cormier, "Pandemic Objects: AIDS Posters," *Victoria and Albert Museum: Pandemic Objects Blog,* December 8, 2020, https://www.vam. ac.uk/blog/design-and-society/pandemic-objects-aids-posters.

28 "About the 'All Will Be Well: Children's Rainbows from Lockdown' Display," *Victoria and Albert Museum,* https://www.vam.ac.uk/articles/about-the-all-will-be-well-childrens-rainbows-from-lockdown-display.

its corresponding symbol served as a positive catalyst for many people, especially young people, to act politically by sending a message of support that encompassed all of society. Numerous acts of dehierarchical communication moved by "invisible forces" allowed many individual voices to make themselves heard until they became a chorus. The applause, the phrase, or the rainbow constituted bridges that united those of us who were separated and isolated. Those willful expressions seemed like propitiatory liturgies. More specifically, the applause resembled rituals to ward off evil, the drawings protective signs, and the phrases assertive rites. Repeating them, sharing them, and making them ubiquitous gave strength to actions and made us all stronger.

Many creators acted in the same way. This was the case of designer Jaime Hayon, who shared his vibrant drawings through social media so that people could color and personalize them. Other similar projects included those of Damien Hirst, who put his work *Butterfly Rainbow* on the internet to be downloaded from his website[29] or to be sold in a limited edition to support the National Health Service; and Rossella Farinotti and Gianmaria Biancuzzi, who invited contemporary artists of a range of generations to create "The Colouring Book,"[30] so that anyone who wants to can download the drawings in DIN A4 format from home on their devices, print them on paper, and color them in, allowing people to be active and contribute to making homes and streets more pleasant.

With the same desire to support and promote entertainment during confinement and also to help humanitarian organizations in solidarity, a team led by Carmen Fortea, Carmen Navarro, Bea Herdon, and Max Ward produced the action and comedy video game *Call of Corona: Micro Warfare*[31] during

29 Damien Hirst, *Butterfly Rainbow,* 2020.

30 Rossella Farinotti and Gianmaria Biancuzzi, "The Colouring Book," *Milano Art Guide,* https://milanoartguide.com/thecolouringbook/

31 Mongomeri, "Call of Corona: El videojuego contra el COVID-19," *NEO2,* May 20, 2020, https://www.neo2.com/videojuego-COVID-19/.

their time in confinement. The game's goal is to bring an end to Covid-19, both in game and in real life — all the game's profits are destined for the World Health Organization.

Once confinement was over, it was necessary to follow new social norms, including the need to maintain a physical distance of two meters. To do this, signs that ranged from professional to amateur were made that generally consisted of bars placed on the ground to make us aware of the protocol and at the same time to provide us with a clear understanding of that distance when queuing at shops and accessing public transport, for example. Other types of signs with arrows were also made to prevent people from crossing in open spaces, and circles were even marked on beaches and parks to delimit safe distances. To ensure social distancing in social gatherings, designer Paul Cocksedge has expressed the rules of social distancing in the piece "Here Comes the Sun,"[32] which can be downloaded for free and customized.

Solving practical problems that were unthinkable before the pandemic and overcoming the limitations imposed by Covid-19 (confinement, social distancing, absence of physical contact, or exchange of objects, etc.) was the objective of multiple "survival design" projects, such as portable pedals for public bathrooms, making it possible to use the sinks without touching either the soap or the tap. One of these was developed by Kenyans Bernard Dindi and Christopher Butsunzu,[33] but there were also many others. In these cases, the majority made their contributions without any previous experience or training, guided only by the altruistic objective of finding solutions to the challenges derived from the pandemic's spread.

Something similar occurred in the art world, with commissioned projects, such as those presented by the 1Mira Madrid

32 Paul Cockgsede Studio, "Here Comes the Sun, 2020," *Paulcockgsedgestudio. com,* http://www.paulcocksedgestudio.com/here-comes-the-sun.

33 Justus Wanzala, "Kenyans Are Innovative in Finding Ways to Fight COVID-19," *InDepthNews,* April 27, 2020, https://www.indepthnews.net/index.php/ the-world/africa/3496-kenyans-are-innovative-in-finding-ways-to-fight-COVID-19.

gallery between September and November 2020 in its "A Discourse of Uncertainties"[34] exhibition, curated by artist and gallery owner Mira Bernabeu. Some of the selected works very much exemplify the illusory or innocent individual gesture of finding solutions and alternatives, as expressed by Álvaro de los Ángeles in the pamphlet for the exhibition: "This illusion suggested, broadly speaking, two alternatives: to wait for it to be all over and return to the same accelerated pace and thus maintain unaltered the obsession with vertical progress; or, to wish to change the world through the individual gesture or, in other words, through rediscovered innocence, increasingly less feasible the less innocent we are."[35]

Of the projects in this exhibition, the one presented by María León and LUCE is paradigmatic. With the illustrative title *Correspondence in the Light Well (Correspondencia en el patio de luces),* the artist and his grandmother present their communication over their time in lockdown in their respective homes in a block of flats (figs. 4 and 5). A kind of lockdown record or diary kept through the exchange of dozens of letters or notes, it is also an example of the simple and ingenious way that two people who live on two different floors can communicate, including using broomsticks or mops bound together with duct tape to bridge the distance, with a clothes peg at one end holding the sheets of paper being exchanged. These objects were then returned to their day-to-day use for cleaning or hanging clothes.

This simple and simultaneously complex project serves to represent the simple and complex task of physically and emotionally relocating ourselves in the new conditions derived from the pandemic and rethinking the functionality of objects in a scenario marked by this emergency, which we must individually and collectively confront and respond to. The pandemic plunged us into an unexpected situation and forced us to adapt. We did

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34 Álvaro de los Ángeles, "Discurso de Incertidumbres," *1 Mira Madrid,* 2020, https://1miramadrid.com/admin/wp-content/uploads/2020/12/N°3-Discurso-de-incertidumbres_1-Mira-Madrid_2020-1.pdf.

35 Álvaro de los Ángeles, "La repetición inexacta del futuro," *1 Mira Madrid,* https://1miramadrid.com/es/exhibitions/discurso-de-incertidumbres.
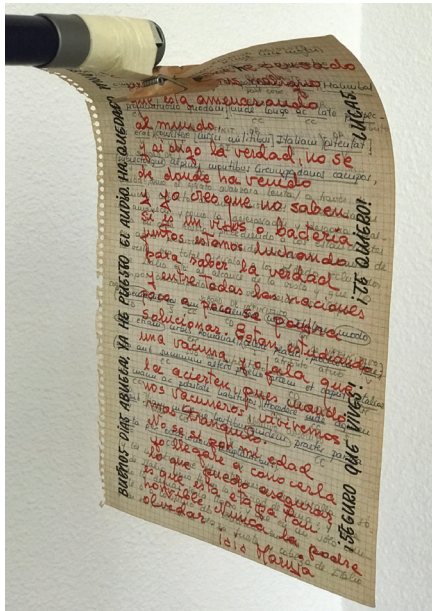
Figs. 4 and 5. María León and LUCE, *Correspondencia en el patio de luces,* 2021. Photography: Ruben Montesinos. Courtesy of the artists and 1 Mira Madrid Gallery, Madrid.

this by reimagining the operational function of many everyday objects, such as the clothes pegs, broomsticks, and mops used by María León and LUCE in the *Correspondence in the Light Well.*

Reimagining Objecthood and Functionality

Alteration in daily life stimulates symptomatic presentations of the unconscious in the lives of people for whom reality has become a strange experience derived from the protocols of the so-called new normal. Order and regularity were broken, along with part of our emotional stability. In the words of Montserrat Rodríguez and Guillermo Kozameh:

> The crisis generated by Covid-19 requires a new order that, given the suddenness of its imposition, we experience as disorder. Disorder that gives rise to a notable increase in violence, in a broad sense, and to its expression in the psychological and organic fields. The lack of order, all lack of order, means that there is no delimitation. Dissemination that generates anguish. Anguish that feeds on that unrestrained wait for something to happen. An indomitable wait that activates memories of tension in relation to the psychological and organic helplessness that human beings experience in the nursing phase of their lives. Anguish at intrusions and forcings outside of the possible control in which so many could take refuge. Anguish that leads to panic destabilising our immune and emotional defences, preventing us from living our daily life to its fullest.[36]

Given the radical change in the daily lives of all of the planet's inhabitants, the effects of the pandemic were felt physically and emotionally, individually and collectively to the point of generating new imaginaries. Covid-19 made us reconsider some eve-

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36 "Montserrat Rodríguez, and Guillermo Kozameh, La COVID-19: Extrañeza y desorden en la vida cotidiana," *MUSAC,* https://musac. es/#programacion/programa/encuentro_COVID_tres.

ryday objects and cultural conformations, such as gloves, face coverings, cash, empty chairs, balconies and terraces, internet tutorials, military metaphors, and toilet paper, and it also made us pay attention to other things that previously went unnoticed, such as doorknobs, handles, and elevator buttons. The emergence of new perceptions in relation to these has been so sudden and so general that their presentation in the collective imagination has changed.

Everyone knows that the lockdown caused toilet paper to disappear from supermarket shelves. It seems that there was never objectively a shortage and that the causes of its compulsive acquisition were more because of subjective issues related to personality and the perception of the pandemic as it came to function as a security talisman. Toilet paper expresses a collective anxiety for cleanliness, the regulation of bodily fluids, control of the body, and also an affirmation of Western civilizational progress that xenophobically and abjectly separates us from the non-Western other and symbolically assures us tranquility and security.

On the other hand, as with other products or objects, there was a change in the standard perception of toilet paper's properties. Bruno Latour pointed out that "the meeting point between things […] at each step losing some properties to gain others."[37] One property of toilet paper, its volume, easily detectable in supermarkets, changed our perception of it because its absence on the shelves was very noticeable, thus increasing the desire and anxiety to get or covet it. This reconsideration or renewed perception of toilet paper's properties explains its preeminence in the pandemic symbolic order.

The initial lockdown and subsequent exceptional rules altered daily life, its dynamics, and its gestures, which led to new uses and needs and also to a renewed perspective of the environment. All the material culture that surrounds us and all the objects that we use were reexamined. The challenges that the whole of society faced because of the pandemic generated a

37 Bruno Latour, *Pandora's Hope: Essays on the Reality of Science Studies* (Cambridge: Harvard University Press, 1999), 71.

considerable demand for imagination and space for innovation in the design of products, objects, services, and forms of communication and interaction. The objectual and graphic aspects of design were renovated. Many community, group, or professional settings, various initiatives and companies, even university and museum departments, responded to this demand for innovation in very different ways. The pandemic posed a challenge to citizens' mental faculties, which in practice translates into a challenge for objectual faculties and for the material culture of society as a whole.

In addition to dealing with the difficult issue of practical applications, many of the innovative proposals carry a message of survival and hope that tries to generate a new attitude of consideration toward sustainability and respect for differences, both between humans and between nonhuman beings. The response to Covid-19 does not need to generate fear or coercion with military metaphors and racist or nationalist manifestations. On the contrary, it can and must be inclusive, creative, equitable, and participatory, in terms of both individual responses (making a poster or putting a hopeful drawing in the window) and professional responses (promoting designs to solve practical problems or generating projects that allow us to understand the transformations arising from the pandemic).

Some of these responses come from experiences with other pandemics, such as the AIDS pandemic of the 1980s. Because of the apathy of public administrations, various self-instituted groups organized actions and facilitated independent initiatives directed by the affected communities themselves in the 1980s and 90s. These groups included EATG in Germany, ECAB in Europe, and GAT in Portugal, with the best known being the AIDS Coalition to Unleash Power (ACT UP), which started in the United States and spread to other countries across the world. ACT UP's 1987 poster and the central image of its campaign of activism against AIDS, with the well-known slogan "Silence = Death," seems to have made an impression on a good part of society in 2020 that, faced with lockdown and social isolation, was set on talking and communicating.

Fig. 6. Public Protest Poster, projection on a public wall in Barcelona, 2020. Photography: María Vives and Raúl Goñi. Courtesy of María Vives and Raúl Goñi.

A significant portion of citizens understood that they had something significant to say in relation to Covid-19. This manifested itself both through participation on social networks or online platforms and by going out onto balconies to applaud healthcare workers or placing all kinds of messages on their windows or other public spaces. This communicative reaction was carried out not only by those who civilly abided by the rules and showed support for healthcare workers, essential workers, and the whole of society, respecting the restrictions imposed by public authorities, but also by those others — called *cayetanos*, "deniers," in Spain, for example — who in many ways rejected the measures against the pandemic, criticized Covid-19-related information offered in the media, and protested against restrictions.

The relationship between a pandemic and the forms of action and reaction of minority communities and individuals is very revealing, as happened with the LGTBIQ communities in 1990s Spain, for example, LSD, or La Radical Gai, in relation to AIDS. Bridging the gap, we can see its correlation with other

Fig. 7. Manuel Olveira, Photograph of an exhibition at Municipal Library, Cuevas del Becerro, Malaga, Spain, 2021. Courtesy of the author.

self-organized and subalternated communities that believe that silence equals death and, therefore, with the boost that these provide to dehierarchical communication. In fact, graphics were hugely relevant after the lockdown started, either on banners and drawings in windows, or on posters projected in public spaces such as the Public Protest Poster,[38] or on posters in all kinds of public establishments or professional proposals, such as those presented in the Viral Art Project[39] (fig. 6). The use of graphics has allowed a part of society to express itself, overcoming isolation, and to play an active role in the pandemic using drawing and graphics as instruments (fig. 7).

This is not the only link that we can establish between the past experience of some undervalued or subalternated communities and the experience of society as a whole in relation to the

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38 Public Protest Poster (@public_protest_poster), *Instagram,* https://www. instagram.com/public_protest_poster/.

39 *Viral Art Project,* https://viralartproject.com/.

pandemic. When the order of reality as we knew it fails, we all have to relearn new relationships, skills, and ways of conducting ourselves in a world that suddenly does not suit our needs and expectations. Not only did what we called "normality" disappear, but the order of things was also disrupted, becoming a "dis-order" that we had and have to deal with, either through readaptation of behavior and social uses, or through the design of prostheses or new objects that allow us to survive.

News that the SARS-CoV-2 coronavirus could survive on surfaces for a long time prompted new materials to be investigated,[40] but above all it made many people aware of everything that we unconsciously touch, to the point that many simple everyday objects were perceived as potentially dangerous or undesirable. The doorknob, one of these objects, became a "problem" because we touch many and they are touched by many every day. For this reason, a large number of initiatives produced new open-source designs of handles and knobs that were printed in 3D and that could be placed over existing doorknobs to allow doors to be opened with the forearm. The slogan attached to the project, "Do no harm, use your arm!" is very illustrative, as is the reflection made by Natalie Kane, curator of design, architecture and digital at the V&A Museum, for the project Pandemic Objects:

> Such designs serve a secondary use that could exist long after the coronavirus crisis has hopefully subsided, as a means to open doors that have previously been difficult for many. Form, as we know, should always follow function, but with apologies to the old design gods of yore, it's not so simple when the function itself is still limiting, or exclusionary, because it didn't think of those who might not have full dexterity or grip, or might not have the full use, or absence of a limb or hand. It suddenly makes your average lever handle — a

40 Molly Long, "Redesigning Surfaces for a COVID-proof Future," *Design Week*, July 15, 2020, https://www.designweek.co.uk/issues/13-19-july-2020/COVID-proof-surfaces/.

seemingly "universal" design — an uninviting way to enter someone's home.[41]

The problem of design and universal measures arises from the preeminent positioning of one type of person, the 50th percentile Western Caucasian man, who is presented as an ideal reference model for culture and society, from Greco-Roman idealizations to Leonardo da Vinci's *Vitruvian Man* or Le Corbusier's Modulor. As Simone de Beauvoir states, our reality is a direct product of that vision: "Representation of the world, like the world itself, is the work of men; they describe it from their own point of view, which they confuse with absolute truth."[42]

Ergonomics standards often end up prioritizing some bodies over others in an attempt to cater to all diversity with the universal claim of a male body of reference, as Caroline Criado Pérez states in her book *The Invisible Woman.* The same occurs with face coverings (which usually have a single universal size that, by default, is designed for a standard face — that face, as is usual for medical devices, is that of a man of the 50th percentile) or even with personal protection equipment (designed for a man's body, these are usually too big for women, who, paradoxically, form the majority of healthcare workers). If the unreality or injustice of many object designs was evident before the pandemic, it is more so after it.

The world has become maladjusted for us, like a mask that is too big, and our innocent and spontaneous daily gestures have ceased to be the tonic. It is obvious that, for the majority of the world's population, the reality of the pandemic is not what we were used to before it: suddenly nothing is or works as before, and we therefore find ourselves limited and uncontrolled. Our ability to control our environment is reduced, and this becomes a problem. Face coverings obstruct vision, we open taps and

41 Natalie Kane, "Pandemic Objects: The Door Handle," *Victoria and Albert Museum: Pandemic Objects Blog,* May 14, 2020, https://www.vam.ac.uk/blog/projects/pandemic-objects-the-door-handle.

42 Simone de Beauvoir, *The Second Sex,* ed. and trans. H.M. Parshley (London: Jonathan Cape, 1953), 162.

doors with our feet and elbows, we use gloves in stores that cause difficulties when getting out our card to pay…These are small examples that show that nothing is easy, direct, or comfortable for those of us who were used to the previous world. In that discomfort or disability, some people and communities have an advantage over us; the pandemic taught us that we can learn from them.

Many differently abled people wear prostheses as mediating technologies that solve many of the inconveniences of inhabiting a world not designed for them. During the pandemic, much of the population was using replacement or orthopedic objects to deal with some inconveniences or with some potential risks. Protective screens, masks and gels, demisting products for glasses, tools to open taps and doors…with all this, it's possible that the idea of the universal body based on the 50th percentile Caucasian man is giving way to diversity and fragility. We learned that many people with functional diversity are very used to finding solutions to the impossibility of touching or to the physical and emotional distance from their peers. In the same way, perhaps certain situations of isolation that affected many people could be managed based on the experience of those who have experienced barriers between the interior and the exterior, for example, people on the autistic spectrum, such as Birger Sellin.[43]

Almost all the actions of care, empowerment, and resilience we have described arose within marginalized and/or socioeconomically disadvantaged groups within their own communities, especially in those where the organization processes were participatory and democratic, strengthening collective organization and investing effort in developing capacities different from the usual ones, to achieve social, not economic, profitability. This highlights divergent capacities and forms of production and organization that were previously ignored by the majority. Although many of the initiatives and projects were emergency responses, sometimes local in scope, to the ineffectiveness

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43 Birger Sellin, *Quiero dejar de ser un dentrodemi* (Barcelona: Galaxia Gutenberg, 2017).

of conventions or the lack of solutions of public administrations, weighed down by the ineffectiveness of politicians or by bureaucratic heaviness, they were of great symbolic importance in some areas because they valued actions from the bottom up.

Indeed, throughout the health, social, and economic crises that arose from the pandemic, measures were taken, services organized, and communications and information planned by government agencies, as they had to be. But what was truly striking, and very often effective, was the civic movement that established and organized itself to act as a conduit to reach where necessary and meet all kinds of needs. This movement included contributions from artists, such as the Between Bridges Foundation,[44] fundraising campaigns,[45] and crowdfunding projects, such as Kickstarter or IndieGoGo, among others. Although generally small and local, this list of initiatives self-managed by communities would be incomplete without mentioning the transport of sick people and food delivery services, or protective equipment manufacturing projects using sewing machines or 3D printers.

All these forms of citizen action were accompanied by a reconsideration of the supposedly universal modern Eurocentric subject and by communicative actions generating symbolic spaces for non-Western, nonmodern, and nonstandard visions and expressive gaps in the public sphere to encourage locals and strangers, understanding that care should not only be provided to individual bodies, but also to the social body.

The Social Body Speaking

Paradoxically, despite being confined and having restricted doses of interaction and mobility, we carried out intense communication, often digitally, but also occupying all kinds of phys-

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44 Between Bridges Foundation, *MUSAC,* http://documentamusac.org/editorial/between-bridges-foundation/.

45 Gemma Huddleston, "Captain Tom Moore's 100th Birthday Walk for the NHS," *JustGiving.com,* https://www.justgiving.com/fundraising/tomswalk.

ical public spaces. Places such as domestic windows and shop windows, doors and T-shirts were occupied by messages; even face coverings hosted messages, for example, coming to incorporate George Floyd's agonizing statement of "I Can't Breathe," uttered as he was killed by the police in Minneapolis on May 25, 2020. The public space is informally filled with proclamations, expressions, reactions, and wishes that coexist alongside more or less formal norms, regulations, instructions, and procedures. It is as if a collective conscience spread that registered the need to strengthen ties and to communicate.

More generally, bridging cultural differences, citizens seem to understand that silence is not positive and damages the social body. Again the motto "Silence = Death" is seen to be relevant. The differences with AIDS are evident (among other things, Covid-19 did not carry stigma nor was it understood as a disease that affects others, but rather one that affects us), but the awareness of the need to act and communicate is similar. Slogans of all kinds circulated and continued to circulate in the media, but they also occupied façades and balconies, took precarious forms as messages in Post-It notes on the closed doors of bars, slogans of support, and pictures of hope multiply on the windows…like a collective stutter, the social body spoke.

The old normal was problematic, and so is the new normal. The difference is that the old normal was established and normalized and, except among some groups, its conventions and rules were accepted. But the new normal makes too many people uncomfortable; people are emotionally, socially, professionally, and economically affected, generating frustration, anxiety, fear, depression, and irritability to extremes that we probably cannot perceive because we're too close to the events. All this struggles to emerge in multiple ways, as Natashah Hitti describes: "In a piece I wrote about the vast proliferation of homemade signs over the course of the lock-down, I was struck by the power

of individual voices finding expression out on the street in the form of simple paper messages."[46]

An explosion of communication filled windows, doors, and even the streets once we were allowed to escape confinement. The first to do so, boys and girls began to leave indications of their presence in the streets with chalk drawings on the ground, or stones painted with encouraging motifs and phrases such as the so-called Way of Happiness[47] in León (Spain). Messages of support also appeared in some businesses and bars that were closed and struggling to overcome the crisis. And all kinds of signs particularly emerged indicating directions, capacities, closures, schedules, shifts, rules, informing the public how to act and behave in the changing environment. Likewise, some manifestations of outrage appeared, such as Spanish flags with a black ribbon, protest flyers, or banners carried by Coronavirus deniers in some demonstrations.

Most were contradictory, which is normal considering the difficulty of assimilating and accepting the initial lockdown situation and the subsequent strong restrictions of all kinds; messages filled the public space as much as applause or ambulance sirens did. Written, scribbled, or printed, a large number of them were placed in a multitude of media unprecedentedly politicizing — many in partisan ways, especially in strongly polarized countries such as Spain, but most expressing something that goes beyond political parties — our surroundings (fig. 8).

Communication and advertising are normally regulated in the public space in such a way that the majority of citizens are inhibited from participating in it with the understanding that it is an area that belongs to power in its various expressions or that is regulated by whoever holds this power. In fact, most signs, posters, and graffiti are regularly removed or cleaned, leaving

46 Natashah Hitti, "v&a Curator Picks Five Objects That Have Taken on New Meanings during the Pandemic," *Dezeen*, May 30, 2020, https://www.dezeen.com/2020/05/30/va-curator-picks-coronavirus-pandemic-objects-design/.

47 musac, "Piedras 'Camino de la Felicidad,'" *MUSAC,* http://documenta-musac.org/ficha/piedras-camino-de-la-felicidad/.

Fig. 8. Manuel Olveira, Photograph of the window of a closed store, Calle Huertas, Madrid, Spain, 2021. Courtesy of the author.

many voices absent and many communities with no expression in public spaces. However, with the lockdown, a plethora of messages appeared, many drawn or handwritten on paper or cardboard; many others were printed. This proliferation of communication cannot be understood without considering the accessibility of equipment, devices, and simple editing programs, as well as printers, which allowed messages to be received, adapted, personalized, and disseminated. For this reason, many had stereotypical formats since they were usually printed DINA4 sheets with phrases or drawings.

However, despite the apparent homogeneity and also despite the fact that many messages repeated the same or similar phrases, that repetition was not always identical. The same texts, information, and slogans were customized and edited based on individual subjectivity. The expressions were certainly very similar, but they always had variants that enriched and situated the communication. Drawings of the coronavirus or rainbows and the phrases "Andrà tutto bene" or "All will be well" were repeated, but they were also changed and adapted. In the man-

ner of apocryphal texts, the continuous editing processes on these drawings and sentences increased the network of meanings that these objects, slogans, and images had awaken.

It is undeniable that there were one or more official accounts of this healthcare crisis, which was also becoming an economic and social crisis, but it was also true that we could trace the presence of many other marginalized accounts. Several projects tried to give voice to these stories: the seminal publishing project Pandemic Objects[48] by the Victoria and Albert Museum; exhibition project Emergència! Dissenys contra la Covid-19[49] by Barcelona's FAD; project reflecting on the future of cities, such as Post-pandemic Cities[50] by León's MUSAC; production projects such as Unmetroymedio[51] by CA2M in Madrid; or more journalistically oriented projects, such as the Covid Archive[52] by the University of Alcalá. Among these projects, it is important to include Archivo Covid-19,[53] developed within the MUSAC Centro de documentación. It was created to include a large number of materials of a very diverse nature and origin, especially the most spontaneous and perishable, which account for a multitude of aspects that affect individual and social life. These produce a large number of transformations at all levels and are reflected and materialized in very different ways.

Archivo Covid-19 contained expressions of material culture, objects, and health products, institutional and domestic signs and posters, mobility permits and instructions for online teaching from schools, banners and messages of support and criti-

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48 *Victoria and Albert Museum: Pandemic Objects Blog.*

49 Associació de Disseny Industrial del FAD, "Emergència! Dissenys contra la COVID-19," *Foment de les Arts i del Disseny,* https://www.fad.cat/adi-fad/ca/agenda/6020/emergencia-dissenys-contra-la-COVID-19.

50 MUSAC, "Emergència! Dissenys contra la COVID-19," *MUSAC,* November 13, 2020–January 10, 2021, https://musac.es/#programacion/programa/ciudades-pospandemia.

51 CA2M, "Unmetroymedio," *Centro de Arte 2 de Mayo,* https://ca2m.org/exposiciones/unmetroymedio.

52 Alcalá University, *Archivo COVID,* http://www.archivoCOVID.com/.

53 MUSAC, *Archivo COVID-19,* http://documentamusac.org/archivo-COVID-19/.

cism, photographs and works of art, and the like. Most came from the city of León, but there were also materials from other cities. Among all of these, perhaps the most interesting part was the compilation of perishable materials, home and street posters, and all kinds of visual conformations, proclamations and textual slogans. Although many of these may seemed repetitive and although they use similar paper formats and fonts, in reality they were neither the same nor aseptic: they had a language, a history, a gender, an ideology, a social class, and a point of view that differentiates them within the whole.

It is true that we can affirm that there were messages that were "original" to a certain degree because someone had to initially give them form at some point. For example, the phrase "Andrà tutto bene" seemed to have arisen in the Lombardy region (Italy) and the drawings on the stones of the Way of Happiness initially came from Villaobispo and Navatejera, near León (Spain). However, they then spread to other places; they were changed, customized, and even distorted. We've seen how production and circulation were notably influenced by easy access to portable devices with all kinds of editing programs, in order to both make and reproduce these messages. However, what is interesting is not the mechanics of their production, but the dynamic drive for communication that encourages them.

Repetition is certainly something more than simple repetition, not only because of its obvious psychoanalytic implications, but because it is appropriation or difference or plurality or contamination, depending on your perspective. In Archivo Covid-19, subjectivization and plurality are of interest as phenomena linked to empowerment and agency in the face of the pandemic. The materials included in the archive are the many voices making the present and building memory; many voices that clash, from which sparks fly igniting public spaces, or that emphasize divergent points of view; many voices coming from that social body that stutters and speaks.

In the same way that it is not so much about giving importance to spectacular projects, but to survival designs, it is also not so much about collecting the stories from the center as it

is from the peripheries. Distributed and dehierarchical citizen creativity is more eloquent than the commercial and institutional publicity of power. The voices very often speak from the margins. The expansion of data and images that make up Archivo Covid-19 are contaminated and perverted, polarized, diverted, and turned into rumors, from terminal to terminal. And in relation to these stories from the fringes and generated by a socially distributed creativity that is marginal or deviant to different degrees, there is also official and temporary, false and controversial news from the press that has contributed to generating the plurality of stories and accounts of this pandemic.

Some of these stories were part of the sensationalist spectacular, others urban legends that stimulated the millennial imaginary; there were some common places and also denialist paranoias stimulated from extreme political positions, but all had the disorder of the turbulent, uncertain, and critical pandemic in common that generated new imaginary of survival. There is that social stuttering that must be carefully listened to give voice to this crucial historical moment.

Many of these voices reveal the ineffectiveness of the system that has led us here. The neoliberal paradigm — and its willingness to restrict the regulation of the state and to strengthen the freedom of the market — has led to the destruction of the public service, especially health care, but also culture and education, in favor of a privatization that only stimulates a few people installed in the center. Hence the relevance of listening to these many other voices coming from the margins.

In the social body's many voices we can find references and tools to interpret the imperative viral reality that requires a search for new keys and paradigms that are perhaps neither Eurocentric nor anthropocentric nor modern, that make new cultural, material, and mental facilities possible, defining or reimagining the bonds between humans and nonhumans. These stuttering voices seek to build a renewed public sphere and new meaningful relationships with what is real, from the grandiose gestures of power to, especially, the micropolitical initiatives of citizens momentarily empowered in their survival.

References

Alcalá University. *Archivo Covid.* http://www.archivoCovid.
    com/.

ASPO, eds. *Sopa de Wuhan.* La Plata: ASPO, 2020.

Associació de Disseny Industrial del FAD. "Emergència!
    Dissenys contra la Covid-19." *Foment de les Arts i del
    Disseny.* https://www.fad.cat/adi-fad/ca/agenda/6020/
    emergencia-dissenys-contra-la-Covid-19.

Beauvoir, Simone de. *The Second Sex.* Edited and translated by
    H.M. Parshley. London: Jonathan Cape, 1953.

Beck, Ulrich. *Risk Society: Towards a New Modernity.* London:
    Sage, 1992.

Benjamin, Walter. "Theses on the Philosophy of History." In
    Illuminations: Essays and Reflections, edited by Hannah
    Arendt, translated by Harry Zorn, 253–64. New York:
    Schocken, 1969.

Between Bridges Foundation. MUSAC. http://documentamusac.
    org/editorial/between-bridges-foundation/.

Byung-Chul Han. "La emergencia viral y el mundo de
    mañana." *El País,* March 22, 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.

Canadian Covid Creators Network. https://www.cccnetwork.
    ca/.

CA2M. "Unmetroymedio." *Centro de Arte 2 de Mayo.* https://
    ca2m.org/exposiciones/unmetroymedio.

Castro, Fernando. *Cuidado y peligro de sí.* Logroño: Pepitas de
    calabaza & Cultural Rioja & Los aciertos, 2021.

Conde, Fernando. *Lo esencial es invisible a los ojos: Crónica de
    la pandemia de la Covid-19.* http://www.asociacionisegoria.
    org/wp-content/uploads/Libro-cronica-Covid19.pdf.

Cormier, Brendan. "Pandemic Objects: AIDS Posters." *Victoria
    and Albert Museum: Pandemic Objects Blog.* https://www.
    vam.ac.uk/blog/design-and-society/pandemic-objects-aids-
    posters.

Corporate Europe Observatory. "When the Market Becomes Deadly: How Pressures towards Privatisation of Health and Long-term Care Put Europe on a Poor Footing for a Pandemic." *Corporate Europe Observatory,* January 26, 2021. https://corporateeurope.org/en/2021/01/when-market-becomes-deadly.

De los Ángeles, Álvaro. "Discurso de Incertidumbres." *1 Mira Madrid,* 2020. https://1miramadrid.com/admin/wp-content/uploads/2020/12/N°3-Discurso-de-incertidumbres_1-Mira-Madrid_2020-1.pdf.

———. "La repetición inexacta del futuro." *1 Mira Madrid.* https://1miramadrid.com/es/exhibitions/discurso-de-incertidumbres.

De Luis, Sonia. *La llegada de las mujeres al poder: ¿Un nuevo estilo de comunicación política?* Master's thesis, Universitat Oberta de Catalunya, 2021. https://openaccess.uoc.edu/handle/10609/128066.

Design in Quarantine. https://designinquarantine.com/.

Dezeen. "Andrés Jaque and Ivan Munuera Premiere Film Exploring the Visual Landscape of Covid-19." *YouTube,* April 22, 2020. https://www.youtube.com/watch?v=AD6khyFbBcQ.

Diccionario filosófico audiovisual Covid-19: Nuevas perspectivas para viejos conceptos. Madrid: Instituto de Filosofía, Centro Superior de Investigaciones Científicas, 2022. http://diccionariofilosoficoCovid19.org/.

Doce, Jordi. *La vida en suspenso: Diario del confinamiento (marzo–mayo 2020).* Madrid: Fórcola ediciones, 2020.

Duo Dickinson. "2020: The End of the 20th Century in Architecture." *ArchDaily,* January 2, 2021. https://www.archdaily.com/954210/2020-the-end-of-the-20th-century-in-architecture.

EFE. "Carolina Herrera, de la sastrería a la confección de batas y mascarillas para luchar contra el coronavirus." *ABC Estilo,* March 10, 2020. https://www.abc.es/estilo/gente/abci-carolina-herrera-sastreria-confeccion-batas-y-mascarillas-

fTHE PANDEMIC VISUAL REGIME

para-luchar-contra-coronavirus-202004101417_noticia.
html.

Farinotti, Rossella, and Gianmaria Biancuzzi. "The Colouring
Book." *Milano Art Guide.* https://milanoartguide.com/
thecolouringbook/.

Galería Elba Benítez, "Hospital de cartón Primož Bizjak,
Carlos Bunga: Proyecto comisariado por Ainhoa González."
Galería Elba Benítez, September 10–November 9, 2020.
https://elbabenitez.com/es/exhibition/hospital-de-carton/.

Giddens, Anthony, and Christopher Piersons. *Making Sense of
Modernity: Conversations with Anthony Giddens.* Stanford:
Stanford University Press, 1998.

Gara, Miguel Ángel. *Pequeño: Un día en Covid.* Madrid: Libros
de la resistencia, 2021.

Grey, Audrey. "8 Innovative Design Responses to the
Coronavirus." *Architectural Digest,* April 9, 2020. https://
www.architecturaldigest.com/gallery/8-innovative-design-
responses-to-the-coronavirus.

Harrouk, Christele. "Stefano Boeri Develops Concepts
and Pavilions for the Italian Anti-Covid-19 Vaccination
Campaign." *ArchDaily,* December 14, 2020. https://www.
archdaily.com/953236/stefano-boeri-develops-concepts-
and-pavilions-for-the-italian-anti-Covid-19-vaccination-
campaign.

Hitti, Natashah. "V&A Curator Picks Five Objects That Have
Taken on New Meanings during the Pandemic." *Dezeen*,
May 30, 2020. https://www.dezeen.com/2020/05/30/
va-curator-picks-coronavirus-pandemic-objects-design/.

Honigsbaum, Mark. *The Pandemic Century: A History
of Global Contagion from the Spanish Flu to Covid-19.*
Cambridge: Penguin, 2020.

Huddleston, Gemma. "Captain Tom Moore's 100th Birthday
Walk for the NHS." *JustGiving.com.* https://www.justgiving.
com/fundraising/tomswalk.

Kane, Natalie. "Pandemic Objects: The Door Handle." *Victoria
and Albert Museum: Pandemic Objects Blog,* May 14, 2020.

https://www.vam.ac.uk/blog/projects/pandemic-objects-the-door-handle.

Kennicott, Philip. "Designing to Survive." *Washington Post,* July 13, 2020. https://www.washingtonpost.com/magazine/2020/07/13/pandemic-has-shown-us-what-future-architecture-could-be/.

Lass. "Neil's Message to the #FabLab Network." *fabfoundation,* March 2020. https://mailchi.mp/fabfoundation.org/the-fab-foundation-march-blast-is-here-4355935.

Latour, Bruno. *Pandora's Hope: Essays on the Reality of Science Studies.* Cambridge: Harvard University Press, 1999.

Long, Molly. "Redesigning Surfaces for a Covid-proof Future." *Design Week,* July 15, 2020. https://www.designweek.co.uk/issues/13-19-july-2020/Covid-proof-surfaces/.

Matthews, Adam. "Review of Mark Honigsbaum (2020). *The Pandemic Century — A History of Global Contagion from the Spanish Flu to Covid-19.*" *Postdigital Science and Education* 2 (2020): 1006–14. DOI: 10.1007/s42438-020-00170-z.

Mongomeri. "Call of Corona: El videojuego contra el Covid-19." *NEO2,* May 20, 2020. https://www.neo2.com/videojuego-Covid-19/.

MUSAC. "Archivo Covid-19." http://documentamusac.org/archivo-Covid-19/.

———. "Emergència! Dissenys contra la Covid-19." *MUSAC.* November 13, 2020–January 10, 2021. https://musac.es/#programacion/programa/ciudades-pospandemia.

———. "Instituto del Tiempo Suspendido, ITS. Presentación de la web del proyecto de Raquel Friera y Xavier Bassas." *MUSAC,* 2020. https://musac.es/#programacion/programa/instituto-tiempo-suspendido-web-raquel-friera-xavier-bassas-2.

———. "Montserrat Rodríguez, and Guillermo Kozameh, La Covid-19: Extrañeza y desorden en la vida cotidiana." *MUSAC.* https://musac.es/#programacion/programa/encuentro_Covid_tres.

———. "Piedras 'Camino de la Felicidad.'" *Documenta MUSAC.* http://documentamusac.org/ficha/piedras-camino-de-la-felicidad/.

Olveira, Manuel. "Ensayo en movimiento." In *Exponer o exponerse: La educación en museos como producción cultural crítica,* edited by Belén Sola Pizarro, 27–42. Madrid: Los libros de la catarata, 2019.

———. *Habla del cuerpo social: Pandemia y politización del espacio público.* Colección Uno #63. Madrid: Brumaria, 2022.

———. "El museo ante las pandemias." *La Nueva Crónica,* May 29, 2020. https://www.lanuevacronica.com/el-museo-ante-las-pandemias.

Pandemic Silence Project. https://www.pandemicsilence.org/.

Paul Cockgsede Studio. "Here Comes the Sun, 2020." *Paulcockgsedestudio.com.* http://www.paulcocksedgestudio.com/here-comes-the-sun.

Public Protest Poster (@public_protest_poster). *Instagram.* https://www.instagram.com/public_protest_poster/

Ravenscroft, Tom. "Carlo Ratti Associati Designs Shipping-container Intensive Care Units for Coronavirus Treatment." *Dezeen,* March 24, 2020. https://www.dezeen.com/2020/03/24/shipping-container-intensive-care-units-coronavirus-Covid-19-carlo-ratti/.

Roy, Arundhati. "The Pandemic Is a Portal." *Financial Times,* April 2, 2020. https://www.ft.com/content/10d8f5e8-74eb-11ea-95fe-fcd274e920ca.

Sellin, Birger. *Quiero dejar de ser un dentrodemi.* Barcelona: Galaxia Gutenberg, 2017.

Stuckler, David, and Sanjay Basu. *Por qué la austeridad mata.* Madrid: Taurus, 2013.

Tufekci, Zeynep. "Keep the Parks Open." *The Atlantic,* April 7, 2020. https://www.theatlantic.com/health/archive/2020/04/closing-parks-ineffective-pandemic-theater/609580/.

Weng, Xiaoyu. "An Informal and Incomplete Journey." *e-flux* 108, April 2020. https://www.e-flux.com/journal/108/326261/an-informal-and-incomplete-journey/.

Vallín Madrid, Pedro. "Entrevista con Daniel Innerarity: 'No estamos ante un contagio, sino en medio de una sociedad contagiosa.'" *La Vanguardia,* March 17, 2020. https://www.lavanguardia.com/cultura/20200317/474219000735/daniel-innerarity-libro-coronavirus-entrevista.html.

Victoria and Albert Museum website. "About the 'All Will Be Well: Children's Rainbows from Lockdown' Display." *Victoria and Albert Museum.* https://www.vam.ac.uk/articles/about-the-all-will-be-well-childrens-rainbows-from-lockdown-display.

———. *Pandemic Objects Blog,* https://www.vam.ac.uk/blog/pandemic-objects.

Viral Art Project. https://viralartproject.com/.

Virilio, Paul. *Politics of the Very Worst.* Edited by Sylvère Lotringer. Translated by Michael Cavaliere. Los Angeles: Semiotext(e), 1999.

———. *Unknown Quantity.* Paris: Fondation Cartier pour l'art contemporain 2002.

Wanzala, Justus. "Kenyans Are Innovative in Finding Ways to Fight Covid-19." *InDepthNews,* April 27, 2020. https://www.indepthnews.net/index.php/the-world/africa/3496-kenyans-are-innovative-in-finding-ways-to-fight-Covid-19.

Yiu, Marisa. "Critically Homemade." *Design Trust,* 2020–21. https://designtrust.hk/design-trust-critically-homemade/.

———. "Lead Curator's Message." *Design Trust: Critically Homemade Programme Portfolio.* https://designtrust.hk/design-trust-critically-homemade-programme-portfolio/.

Žižek, Slavoj. *Pandemic! Covid-19 Shakes the World.* Madrid: Anagrama, 2020.

The Rise of Digital Governmentality in the Era of Covid-19

Ramón Reichert

A decisive effect of the worldwide spread of the corona virus was the transformation of digital lifestyle media into state-used recording, storage, and distribution media. With the pandemic spread of the virus, the tectonics of digital power may have shifted the way forward. The global threat posed by the coronavirus has transformed mobile media and their software applications into state-organized surveillance technologies. The Big Five of the digital economy — Microsoft, Apple, Google, Facebook, and Amazon — faced competition in data collection and analysis. With the Covid-19 outbreak, national health authorities, secret services, and police apparatuses, together with IT companies, initiated a systematic collection and evaluation of usage data.

Mobility tracking was regarded by health authorities and government officials as a reliable data basis for enforcing political decisions as legitimate. Seen in this way, digital media took over the empirical basis of political action. The disciplinary techniques of state surveillance and punishment migrated into all areas of digital communication and affected mobile media
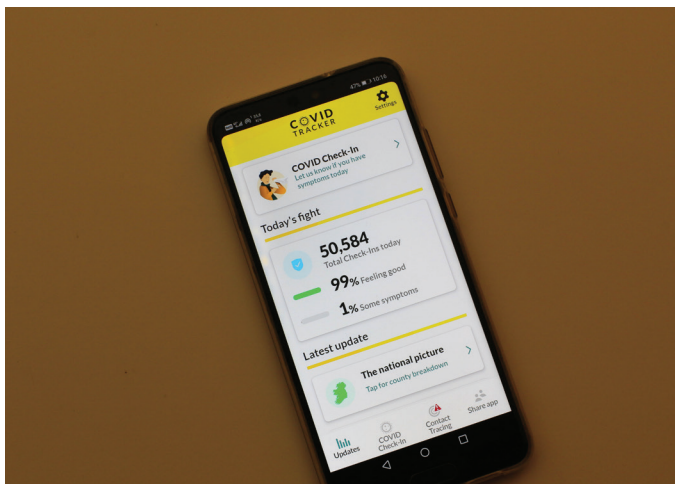
Fig. 1. Smartphone with open COVID Tracker app, 2020. Photo by Marco Verch.

(geotracking), stop corona apps (monitoring), social media (blaming), and selfies (self-evidence). In a global comparison, I will compare different national strategies and include non-Western countries. In this context, I am investigating the bio-surveillance in China, Singapore, and Hong Kong (SenseTime, TikTok, etc.).

This chapter explores image-political and media-technological aspects of the data visualizations of mobility, which were used by internet companies, national governments, and health authorities for different purposes in the context of the Covid-19 pandemic. What are the consequences of these shifts in the procurement of information in the era of the corona control system? How has Covid-19 changed the digital world we live in? Has Covid-19 initiated an authoritarian framing of digital control media? Have push media conquered power in the digital space?

Power of Knowledge: Mobility Tracking

Mobility tracking, carried out based on smartphone geoloca-
tion, is one of the common survey methods used today to assess
the mobility behavior of the population. Health authorities and
government officials use it as a reliable database from which to
derive political decisions as legitimate and ultimately to enforce
them.

With the help of Covid-19 trackers, real-time data was con-
stantly being collected from various sources around the world
(fig. 1). As a result, epidemiologists, scientists, doctors, and
policymakers were equipped with the latest information to take
appropriate and responsive measures to prevent the disease
from spreading. In particular, areas affected by Covid-19 were
displayed in the system and strictly monitored with the help of
big data analyses. Accordingly, human movement patterns from
previously infected locations were analyzed to identify, track,
and predict the outbreak of the disease in likely locations. For
example, in the, data collected by the National Health Service
(NHS) telephone networks were analyzed in collaboration with
Amazon, Microsoft, and Hancock to provide available resources
to fight the pandemic.[1] In China, the Chinese Health Commis-
sion allowed local governments to use AI-powered big data to
model, estimate, and track the Covid-19 pandemic in real time.[2]

In press conferences, the data material was demonstrated
on display boards as evidence and was used as an aid in mak-
ing health policy decisions. Seen in this way, digital media and
their visualizations also take over the empirical basis of political

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1   See Dean F. Sittig and Hardeep Singh, "COVID-19 and the Need for a
    National Health Information Technology Infrastructure," *JAMA* 323, no.
    23 (2020): 2373–74.
2   See Minfei Peng et al., "Artificial Intelligence Application in COVID-19
    Diagnosis and Prediction," *Journal of Personalized Medicine* 11, no. 9
    (2021): 886, and Quoc-Viet Pham et al., "Artificial Intelligence (AI) and Big
    Data for Coronavirus (COVID-19) Pandemic: A Survey on the State-of-the-
    Arts," *IEEE Access,* July 15, 2020.

action in a certain way.[3] What have been the consequences of these shifts in information-gathering in the era of the corona control system? The disciplinary techniques of state surveillance and punishment have migrated into all areas of digital communication and now affect mobile media (geotracking), stop corona apps (monitoring), social media (blaming), and selfies (self-evidence). The conquest of the mass markets by sensors and biometric recognition processes can sometimes be explained by the fact that mobile, web-based end devices are equipped with a large number of different sensors. In this way, more and more users have come into contact with sensor technology, tracking apps, and self-tracking communities on online platforms: "Sensing technologies and apps for the smart phone industry alone have spawned a rapidly expanding market as new sensing frontiers unfold."[4]

A new iPhone used to be a trendy consumer item for unrestrained self-marketing, but in corona times it became more like a digital ankle cuff or a spy satellite. Digital connectivity based on smartphones and apps enables evidence-based politics today, virtually in real time. For example, the evaluation of mobility data from telecommunications companies shows the statistical reaction to ordered curfews. Police, health authorities, and IT companies set up access systems to personal data around the world in order to make collective movement patterns visible, to search for infected individuals individually, and to monitor quarantine regulations in private.

The state's use of digital media for the political control of the population is a reflection of political conditions and must therefore be viewed in a differentiated manner. Right-wing conservative and antiliberal governments, for example, sensed a unique opportunity to cynically bet on the "war against the invisible enemy" with dramatic rhetoric of the state of war in order to

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3   See Mark Andrejevic and Mark Burdon, "Defining the Sensor Society," *Television & New Media* 16 (2015): 19–36.

4   Ibid., 21.

expand their authoritarian power interests (Hungary, Russia, Poland, etc.). According to Petra Guasti:

> The Covid-19 pandemic represents a new and unparalleled stress-test for the already disrupted liberal-representative democracies. The challenges to such contemporary democracies cluster around the three democratic disfigurations (and their possible mixtures): 1. Technocracy: the pandemic strengthens the role of experts (virologists and epidemiologists) and has the potential to undermine accountability. 2. Populism: populist leaders might instrumentalize the pandemic to strengthen exclusionary rhetoric and weaken institutional safeguards (minority protection). 3. Plebiscitarianism: elected leaders might use emergency powers to weaken the role of the parliaments and undermine both the opposition and civil society.[5]

In addition, personal rights have been restricted, and individual misconduct made publicly visible (photo database of those who tested positive in Russia; publication of travel arguments from infected people in South Korea). War rhetoric and emergency ordinances have created the basis for the repressive use of digital media, which are seen as an extension of state influence.

Public Health Emergency Regime

In connection with the Covid-19 pandemic, national governments repeatedly spoke of "necessary measures," of curfews, emergencies, and states of emergency that must be implemented in order to protect the infrastructures of health and supply systems.[6] If governments understand how to justify the expan-

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5   Petra Guasti, "The Impact of the COVID-19 Pandemic in Central and Eastern Europe: The Rise of Autocracy and Democratic Resilience," *Democratic Theory* 7, no. 2 (2020): 48.

6   See Natalie Ram and David Gray, "Mass Surveillance in the Age of COVID-19," *Journal of Law and the Biosciences* 7, no. 1 (2020).

sion of their power and portray it as absolutely necessary, then extensive monitoring of personal data could also be set up permanently in the normal state, namely, on the grounds that the personal data should be used for preventive health monitoring. The networked media of everyday use are available to provide monitoring data for government intervention: smartphones, apps, credit cards, and social media. In addition, drones, AI, robotic systems, and video surveillance check compliance with quarantine measures.

The geolocation process is used to identify collective and individual behavioral mobility. Combined with so-called push apps, which recommend guidelines to their users, give commands, and threaten sanctions, private cell phones and software applications have now mutated into control media that can be used flexibly and individually for monitoring. The political culture of nation-states ensures the right framing here: in the discussion about the Stop Corona app of the Red Cross in Austria, the noncompulsory use of the app addressed the personal responsibility of users, and in authoritarian societies, individual rights and data-protection concerns are now seen as dispensable, with a strong preference for the state's right to intervene.[7]

Covid-19 acted as a pioneer for national security and prevention discourses when it comes to delimitation, isolation, identification, and risk assessment of potential disease carriers. Against this background, a globally effective control power has established itself, which has shifted to the structures of health scoring, mobility tracking, data mining, credit card detection, drone surveillance, and face detection. It operates internationally and has made a new arsenal of knowledge techniques available, which many countries are considering as a prototype of future health policy.

The rigid measures that the East Asian and especially the Chinese health authorities have taken are judged by numerous

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7   See Danielle L. Couch, Priscilla Robinson, and Paul A. Komesaroff, "COVID-19 — Extending Surveillance and the Panopticon," *Journal of Bioethical Inquiry* 17, no. 4 (2020): 809–14.

political decision-makers to be an efficient package of measures to contain Covid-19. There is a risk here that (1) a monitoring standard could develop that would neglect differences between civil society and data-protection authorities, and that (2) state-supported citizen monitoring could continue even in normal times.

When Covid-19 first spread from China to Singapore, Hong Kong, Taiwan, and South Korea, the details of where patients stay, live, and work in all countries mentioned were published online in real time in order to protect healthy people. Early social monitoring was considered to be the key to effective control of the chains of infection. This also applied to careful tracking, enforced quarantines, and careful social distancing — all coordinated by a leadership that was ready to initiate a social scan in the event of eminent danger. The technical ideal of this measure is the transparency society that can be made accessible with the help of digital media. These digital monitoring and control technologies were still used proactively and persuasively in the mapping and monitoring of Covid-19 infections in order to accelerate the process of identifying and segregating "cases." These monitoring technologies have subsequently been adopted by numerous governments and in some cases even tightened.

Against this background, some studies have shown that there is a connection between social surveillance, restricted civil rights, and successful pandemic control. Authoritarian societies would therefore have had better conditions to fight Covid-19 more efficiently. Liberal democratic societies with a high standard of civil rights, civil liberties, and established data-protection law would have found it more difficult to legitimize and implement control measures.[8]

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8   See Raj Verma, "China's 'Mask Diplomacy' to Change the COVID-19 Narrative in Europe," *Asia Europe Journal,* no. 18 (2020): 205–9; Martin French and Torin Monahan, "Dis-ease Surveillance: How Might Surveillance Studies Address COVID-19?," *Surveillance & Society* 18, no. 1 (2020): 1–11; and Azadeh Akbari, "Authoritarian Surveillance: A Corona Test," *Surveillance & Society* 19, no. 1 (2021): 98–103.

Automated Face Recognition

In the pandemic, control technologies such as automatic facial recognition conquered public urban spaces. This use of technology was not entirely new. The first nationwide use of automatic face recognition was established as part of the fight against terrorism after 9/11.[9] The algorithmic face recognition comes from this time, which subsequently caused an epistemic upheaval in the field of control culture, which is still relevant more than twenty years. The term "algorithmic surveillance" was coined by Gary Armstrong and Clive Norris in their pioneering 1999 book *The Maximum Surveillance Society:*

> It is in literal terms surveillance that makes use of automatic step-by-step instructions. It is used specifically to refer to surveillance technologies that make use of computer systems to provide more than the raw data observed. This can range from systems that classify and store simple data, through more complex systems that compare the captured data to other data and provide matches, to systems that attempt to predict events based on the captured data.[10]

Algorithmic monitoring customizes the user by creating a visual entity, but at the same time it also creates relationships and characteristics in order to be able to locate and organize subjectivity on a categorical level. Claudio Celis Bueno argues:

> Algorithmic face recognition is a technology that expresses a key aspect of contemporary capitalism: the problematic position of the individual in light of new forms of algorithmic and statistical regimes of power. While there is a clear relation between modern disciplinary mechanisms of indi-

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9   See Lucas D. Introna and David Wood, "Picturing Algorithmic Surveillance: The Politics of Facial Recognition Systems," *Surveillance & Society* 2, no. 3 (2004): 177–98.

10 Gary Armstrong and Clive Norris, *The Maximum Surveillance Society: The Rise of CCTV* (New York: Routledge, 2020), 38.
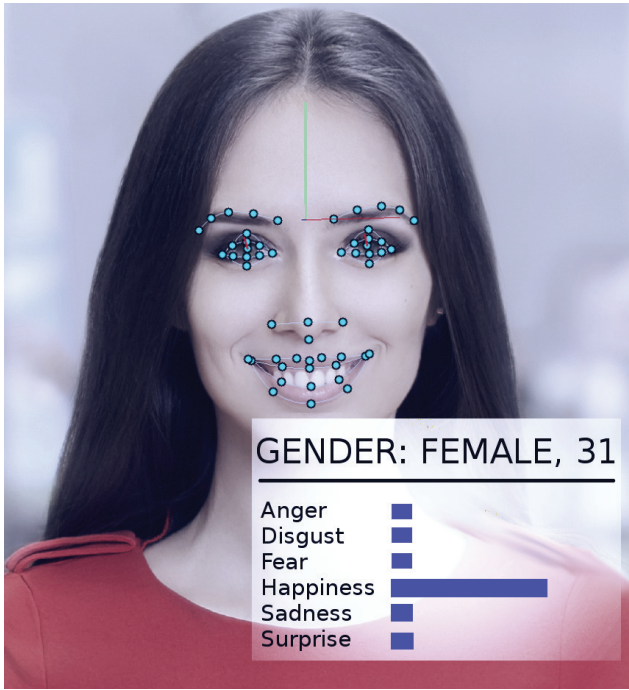
Fig. 2. Face and head tracking, Visage SDK software, 2016.

vidualization and the face as a sign of individuality, in control societies this relation appears as a contradiction.[11]

The scene of this mentioned contradiction is the face: on the one hand, it stands for an individual uniqueness, on the other, it also stands for a statistical size and potential that goes beyond the individual. Face recognition searches not only for the individual, but also always for the statistical type, for the cultural stereotype and for the political stigma (fig. 2).

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11 Claudio Celis Bueno, "The Face Revisited: Using Deleuze and Guattari to Explore the Politics of Algorithmic Face Recognition," *Theory, Culture & Society* 37, no. 1 (2020): 73.

As different as these two case applications (terror, pandemic) may be, they demonstrate that contagion and violence have been turned into a public safety problem. In both cases it is about dealing with a diffuse threat that eludes experience and is difficult to recognize. Against the background of this threat situation, public life and civil liberty are seen as a risk and the spheres between victim and perpetrator can no longer be clearly separated. Finally, there is the systematic use of control technologies that are classified as "necessary" and "without alternative" for the survival of the "public," "freedom," and "democracy."

The introduction of automatic face recognition shows to what extent public space has gradually dissolved into a police order of knowledge and become closely linked to the order of subjectivities. The aim of automatic face recognition is to capture the public space in clearly recognizable distinctions and categories. This recording of all people in a spatial environment should be seamless and unambiguous. According to Onur Erdur:

> Collecting data in all behaviour-critical and consumption-relevant everyday spheres appears to be something like a panoptic practice that permeates public space as a whole. Techniques and phenomena such as video surveillance, automated face recognition, motion detection, user traces in the network and digital payment transactions make everyone think of a Benthamian transparency machine. For the surveillance studies, the latter seems to be the same as an early form of individualized total recording or at least provides a comparative case that exemplifies the peculiarities of today's surveillance that is intensified by digital technology.[12]

Chinese Monitoring Tools

The People's Republic of China has set itself the goal of becoming the world market leader in artificial intelligence by 2025.

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12 Onur Erdur, "Vierzig Jahre Überwachen und Strafen und kein Ende," *Le Foucaldien* 4, no. 1 (2018): 3.
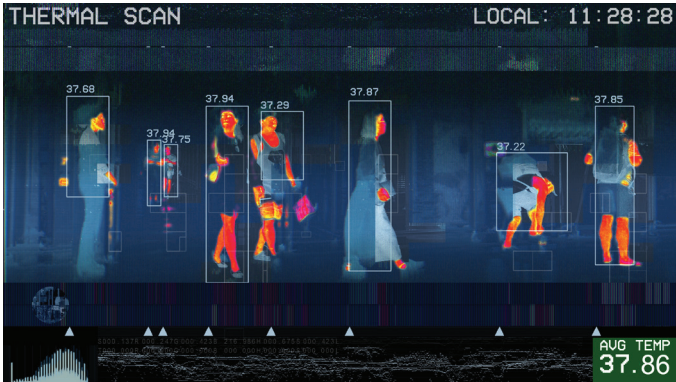
Fig. 3. Infrared thermal scan camera at international airport, 2020.
Image by Remotevfx.

As Covid-19 spread, SenseTime, an AI R&D company, rose to become one of the largest industry leaders. As part of epidemiological diagnostics, the company focused on facial recognition and thermal tracking of passers-by, and supplied software that enabled Chinese authorities to identify and address potentially infected people by health police.[13] Citizens who used the SenseTime app were immediately addressed with a pop-up alarm, and passers-by in public spaces who did not wear a mask could also be recognized and tracked. The biometric border control system with integrated fever detection developed by SenseTime was used in building security to control entry — people who did not wear their masks adequately and who had a high body temperature were excluded from entry (fig. 3).

The face and image recognition software architectures were connected to camera surveillance systems installed in public facilities, squares, traffic areas, and ATMS. This software was also installed on more than 100 million Chinese smartphones. The surveillance images could be transmitted live, evaluated, and

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13   See Lydia Khalil, "Digital Authoritarianism, China and COVID," *Lowy Studies Analysis,* November 2, 2020, https://www.lowyinstitute.org/publications/digital-authoritarianism-china-covid.

merged in a single system. Together with the Chinese government, there were plans to build high-performance computers with 8,000 computer-aided graphics cards in China's largest cities, which could evaluate at least 100,000 live images in real time.[14]

In addition to SenseTime, well-known companies such as Baidu and Megvil Technology developed an AI-based contactless body-temperature screening system that could be installed in public places to identify those infected with Covid-19. In particular, AI-based systems with contactless remote temperature shielding could shield around fifteen people per second from a distance of three meters.

During the Covid-19 pandemic, the wearing of masks was widespread among the urban public. So SenseTime modified its facial recognition software to identify people based only on their eyes and the upper nasal area. To match, the SenseTime algorithm scanned 240 facial features. The face scan functioned as a biometric identity card in semipublic or private rooms and decided whether a person had access to a hermetically sealed facility. This biometric identification system combined automated biometrics with the recognition and processing of the recorded body data at high speed.

Highly contagious diseases, such as Covid-19, which can be transmitted via aerosols, ensure that everyone is a potential messenger of the virus. Covid-19 did not show a clearly recognizable clinical picture — there were people who carried the virus and had no or no clearly assignable symptoms. The disease took place in the invisible to human perception, and there were only general speculations and a vague suspicion that someone actually carried the virus. One of these general patterns that an algorithm can work with is increased body temperature, which can be detected with the help of thermal-imaging cameras. For the persons recorded by SenseTime, the identification procedures

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14 See Simon James Fong, Nilanjan Dey, and Jyotismita Chaki, "An Introduction to COVID-19," in *Artificial Intelligence for Coronavirus Outbreak* (Singapore: Springer Singapore, 2020), 1–22.

appeared as a black box. For them, Covid-19 was located in the realm of the invisible and the imperceptible. The people affected by the automatic face recognition, or the heat scan, experience these control technologies as silent instruments of surveillance, the functioning and consequences of which remain hidden for themselves. Lucas D. Introna and David Wood suggest:

> Facial recognition algorithms in "smart" CCTV is a particularly good example of a silent technology[. ...] This obscurity is due to two factors. First, most of the software algorithms at the heart of facial recognition systems are propriety software objects. Thus, it is very difficult to get access to them for inspection and scrutiny. Thus, for most ordinary members of society facial recognition systems are somewhat exotic and obscure "black boxes."[15]

Whether another person is a carrier of disease cannot be decided *ad oculos.*

For the affected subject, however, this governmental intervention, in which police, pathological, and administrative measures were combined, remained largely unnoticed. The subject is unaware of being monitoring and has no way of evading this observation, analysis, and storage. The conversion of cities into sensor technology control centers has been characterized by this asymmetrical relationship between being observed and observation.

Cities as Control Centers

The Covid-19 pandemic gave China the support it needed to transform its cities into technological control environments with the help of the industrial Internet of Things (IoT), which is an umbrella term for technologies of a global infrastructure that enable the interaction between humans and any electronic system and to allow them to work together through information

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15 Introna and Wood, "Picturing Algorithmic Surveillance," 183.

and communication technologies. IoT describes the linking of clearly identifiable physical objects (things) with a virtual representation in a networking structure. In the public presentation of these technical and media transformations, euphemistic terms such as "smart" or "intelligent" cities are often used. These paraphrases often serve to present social control through technical systems as an efficient measure of the urban administration.[16] In this context, the impression should be created that the transformation of cities into sensor-controlled control environments should be a kind of neutral process. This view is taken by the World Health Organization (WHO) and numerous representatives of Western governments.[17]

In the fight against the Covid-19 pandemic, the WHO announced that China's success was largely because of the application of cutting-edge technologies in China's smart cities. Living in Chinese cities meant recognizing that digital networking technologies increase a city's visibility and that of its inhabitants. Informational cities have become to be in a state of permanent collective observation as the peer-to-peer networks of social media facilitate socially shared ways of perceiving the city. Smart cities in China used the cloud and cell phones to fight the Covid-19 pandemic. Cell phones collected personal information about their citizens with their embedded cameras and biosensors. The sensors of the cell phones, which use an AI-based framework, recorded movement data, heart rates, and coughing noises, which were then encrypted, compressed, and sent to the cloud for training purposes in deep learning.

The use of drones plays an important element of mobile and flexible surveillance in IoT cities. They could be used to fol-

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16 See Jung Won Sonn and Jae Kwang Lee, "The Smart City as Time-Space Cartographer in COVID-19 Control: The South Korean Strategy and Democratic Control of Surveillance Technology," *Eurasian Geography and Economics* 61, nos. 4–5 (2020): 482–92.

17 See Allam Zaheer, Gourav Dey, and David S. Jones, "Artificial Intelligence (AI) Provided Early Detection of the Coronavirus (COVID-19) in China and Will Influence Future Urban Health Policy Internationally," *AI* 1, no. 2 (2020): 156–65.

low people in public who had come into contact with Covid-19 patients. In Hubei, camera-equipped drones were used systematically across the board to track people who violated the quarantine measures. Drones were also used to ensure compliance with the wearing of face masks and to monitor residents of a district for social distancing rules. Drones can also be used to remotely monitor patients in quarantine or in heavily infected areas. In addition, AI-based CCTV cameras with facial recognition capabilities were installed in private residential buildings to ensure residents complied with quarantine rules and did not leave their homes.

The biometric measurement of public life was largely implemented in China before the Covid-19 pandemic. In retrospect, however, the massive control of the Chinese public through basic IoT infrastructures and smart city technology was recognized as a sustainable measure to contain epidemics.[18] The government of China, with its smart tech, wanted to lead the economic recovery. There is increasing evidence in the literature that the connection between state authority and technological control in the era of Covid-19 was viewed as effective management. However, this is not an exceptional case used in the event of a crisis: state-administered and organized technology power is mentioned in numerous expert reports. In this regard, Klaus R. Kunzmann argues:

> It is the most obvious experience in neoliberal times during the Covid-19 pandemic. The public sector has regained unexpected power and trust. In contrast to pre-coronavirus times, the public sector at all tiers of planning and decision-making has taken over control of policies to contain the spread of the virus. Police and public authorities have efficiently executed control[. …] During the pandemic, the coronavirus successfully partnered with the digital industry to speed up

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18 See Bei Chen, Simon Marvin, and Aidan While, "Containing COVID-19 in China: AI and the Robotic Restructuring of Future Cities," *Dialogues in Human Geography* 10, no. 2 (2020): 238–41.

the digitalisation of society, in education, health services and public surveillance. Citizens will be more inclined to accept the digitalisation of services. Despite all other social and ecological challenges that dominated public discourse before Covid-19, the business- and convenience-driven smart city transformation will go on.[19]

At the same time, the social control associated with these technologies has been legitimized and normalized, because the Chinese government wanted to implement smart city technology in the daily lives of its citizens. For example, in 2010, as part of its commitment to building smart cities, China published its twelfth Five-Year Plan with a draft social, economic, and political goal. The model of the informational city planned by the Chinese government was based on ideas of a vertical top-down structure between state administration and citizens. The users of the city did not have the opportunity to independently participate in the design of the smart city, and they were not inaugurated via the procedures in the back-end area of the informational city. For them, the control of their own life in the city was a black box from which signals emerged imperatively aimed at disciplining, sanctioning, or changing behavior.

Push Media as the New Normal?

The vision of a computerized society in which smart everyday objects are equipped with sensors and network as learning machines in the IoT has become a concern of international research and development. The media technologies and practices of digital self-measurement emerging in this field of force have blurred the boundaries between technology and society, private and public, experts and ordinary people.[20] Smartphones

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19   Klaus R. Kunzmann, "Smart Cities after Covid-19: Ten Narratives," *disP — The Planning Review* 56, no. 2 (2020): 22.

20   See Rafael A. Calvo, Sebastian Deterding, and Richard M. Ryan, "Health Surveillance during Covid-19 Pandemic," *BMJ* 369 (2020), https://www.bmj.com/content/369/bmj.m1373.

with their microsensory components, portable computer systems in bracelets, watches, or glasses (wearables), mobile technical devices (gadgets), the spread of mobile networking technologies, and application software for mobile devices such as smartphones and tablet computers (apps) have been superimposed on communication media with personalized test arrangements. This network has increasingly moved onto the agenda of state-administrative health prognosis in recent years. In the health information and quarantine policy of Covid-19, push media in particular have come to play a major role.[21]

"Push media" refers to media formats in the form of apps, advertising, subscriptions, or newsletters that are sent to users without them requesting the content themselves. Push content and its parameters cannot be changed by the recipients, that is, recipients cannot change the content themselves, but rather select it in a menu, if necessary. The information from the sender to the recipient of the message is unidirectional, and the recipient often has no means of giving the sender direct feedback about the content sent.

The health smartphone apps, which were widely used during the Covid-19 pandemic, go one step further. It is a unidirectional government software, which was designed to police and identify its addressees, to guide pedagogically, or to lead to legal responsibility. Geolocation tracking applications of numerous Covid-19 apps collect transactional data, such as phone numbers and location data. These government-operated digital control media are top down. In contrast to peer-to-peer media, interactive participation is undesirable. Your dashboard signals requirements, rules, and violations that the user must follow. Critical comments are overridden in unidirectional media systems.

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21 See Kirsten Grind, Robert McMillan, and Mathews A. Wilde, "To Track Virus, Governments Weigh Surveillance Tools That Push Privacy Limits," *Wall Street Journal,* March 17, 2020, https://www.wsj.com/articles/to-track-virus-governments-weigh-surveillance-tools-that-push-privacy-limits-11584479841.

The difficulty of separating scientific facts from unreliable information is exacerbated by the speed of events. Polarizing distrust, fake news, pranks, or troll content that circulates the planet in microseconds also plays a major role in the reevaluation of social media. As the coronavirus continued to spread, the effects of this misinformation were devastating. Against this background, state actors tried to discredit the communication culture of social media across the board in order to make profit from the seriousness requirement of the hour. In authoritarian states that exercise massive media censorship, social media are considered freedom technologies. On Facebook, Instagram, and Twitter, for example, the concealment and deliberate misinformation of the extent of Covid-19 by the governments could be discussed. This example shows that civil society social media can be used as an alternative information channel. Anyone who wants to abolish them also destroys diversity of opinion and freedom of reception.

On the other hand, in the era of Covid-19, online content was also used on social media to specifically standardize or change behavior. The propagation of hygiene standards and social behavior during the pandemic should have motivated users of online platforms to reflect, adapt, or change their behavior. The TikTok video platform played an important role in this context.[22] On the TikTok platform, public health messages were produced by the users themselves.[23] The audience was addressed directly

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22 See Corey H. Basch et al., "Promoting Mask Use on TikTok: Descriptive, Cross-sectional Study," *JMIR Public Health and Surveillance* 7, no. 2 (2021), https://publichealth.jmir.org/2021/2/e26392, and Corey H. Basch, Grace C. Hillyer, and Christie Jaime, "COVID-19 on TikTok: Harnessing an Emerging Social Media Platform to Convey Important Public Health Messages," *International Journal of Adolescent Medicine and Health* (2020), https://www.degruyter.com/document/doi/10.1515/ijamh-2020-0111/html.

23 See Chen Qiang et al., "Factors Driving Citizen Engagement with Government TikTok Accounts during the COVID-19 Pandemic: Model Development and Analysis," *Journal of Medical Internet Research* 23, no. 2 (2021), https://www.jmir.org/2021/2/e21463/, and Pavel Sidorenko-Bautista, José María Herranz de la Casa, and Juan Ignacio Cantero de Julián, "Use of New Narratives for COVID-19 Reporting: From 360° Videos to Ephemeral

and motivated to participate in supporting and disseminating a new code of conduct.

TikTok became an influential platform for teaching health monitoring, lifestyle, and behavior modification. In the online communication of behavioral norms in the age of the corona pandemic, TikTok established itself primarily as a persuasive medium. Its media content aimed at changes in everyday behavior required users to be willing to refer to this content actively and productively.

Because push media and push content, like classic media content, run unidirectionally and have no way of turning individual users into broadcasters. Media in a state of emergency are governmental push media that address, monitor, and regulate without their users being given the opportunity to participate and participate. The digital future after Covid-19 has begun and is not only a "necessary measure," but also open to discourse and changeable.

TikTok Videos in Online Media," *Tripodos* 1, no. 47 (2020), http://www. tripodos.com/index.php/Facultat_Comunicacio_Blanquerna/article/ view/806.

References

Akbari, Azadeh. "Authoritarian Surveillance: A Corona Test." *Surveillance & Society* 19, no. 1 (2021): 98–103. DOI: 10.24908/ss.v19i1.14545.

Andrejevic, Mark, and Mark Burdon. "Defining the Sensor Society." *Television & New Media* 16 (2015): 19–36. DOI: 10.1177/1527476414541552.

Armstrong, Gary, and Clive Norris. *The Maximum Surveillance Society: The Rise of CCTV.* New York: Routledge, 2020.

Basch, Corey H., et al. "Promoting Mask Use on TikTok: Descriptive, Cross-sectional Study." *JMIR Public Health and Surveillance* 7, no. 2 (2021). DOI: 10.2196/26392.

Basch, Corey H., Grace C. Hillyer, and Christie Jaime. "Covid-19 on TikTok: Harnessing an Emerging Social Media Platform to Convey Important Public Health Messages." *International Journal of Adolescent Medicine and Health* (2020). DOI: 10.1515/ijamh-2020-0111/html.

Calvo, Rafael A., Sebastian Deterding, and Richard M. Ryan. "Health Surveillance during Covid-19 Pandemic." *BMJ* 369 (2020). DOI: 10.1136/bmj.m1373.

Celis Bueno, Claudio. "The Face Revisited: Using Deleuze and Guattari to Explore the Politics of Algorithmic Face Recognition." *Theory, Culture & Society* 37, no. 1 (2020): 73–91. DOI: 10.1177/0263276419867752.

Chen, Bei, Simon Marvin, and Aidan While. "Containing Covid-19 in China: AI and the Robotic Restructuring of Future Cities." *Dialogues in Human Geography* 10, no. 2 (2020): 238–41. DOI: 10.1177/2043820620934267.

Couch, Danielle L., Priscilla Robinson, and Paul A. Komesaroff. "Covid-19 — Extending Surveillance and the Panopticon." *Journal of Bioethical Inquiry* 17, no. 4 (2020): 809–14. DOI: 10.1007/s11673-020-10036-5.

Erdur, Onur. "Vierzig Jahre Überwachen und Strafen und kein Ende." *Le Foucaldien* 4, no. 1 (2018): 1–11. DOI: 10.16995/lefou.49.

Qiang, Chen, et al. "Factors Driving Citizen Engagement with Government TikTok Accounts during the Covid-19 Pandemic: Model Development and Analysis." *Journal of Medical Internet Research* 23, no. 2 (2021). DOI: 10.2196/21463.

Ram, Natalie, and David Gray. "Mass Surveillance in the Age of Covid-19." *Journal of Law and the Biosciences* 7, no. 1 (2020). DOI: 10.1093/jlb/lsaa023.

Sidorenko-Bautista, Pavel, José María Herranz de la Casa, and Juan Ignacio Cantero de Julián. "Use of New Narratives for Covid-19 Reporting: From 360º Videos to Ephemeral TikTok Videos in Online Media." *Tripodos* 1, no. 47 (2020). http://hdl.handle.net/10578/26040.

Sittig, Dean F., and Hardeep Singh. "Covid-19 and the Need for a National Health Information Technology Infrastructure." *JAMA* 323, no. 23 (2020): 2373–74. DOI: 10.1001/jama.2020.7239.

Sonn, Jung Won, and Jae Kwang Lee. "The Smart City as Time-Space Cartographer in Covid-19 Control: The South Korean Strategy and Democratic Control of Surveillance Technology." *Eurasian Geography and Economics* 61, nos. 4–5 (2020): 482–92. DOI: 10.1080/15387216.2020.1768423.

Verma, Raj. "China's 'Mask Diplomacy' to Change the Covid-19 Narrative in Europe." *Asia Europe Journal* 18 (2020): 205–9. DOI: 10.1007/s10308-020-00576-1.

Zaheer, Allam, Gourav Dey, and David S. Jones. "Artificial Intelligence (AI) Provided Early Detection of the Coronavirus (Covid-19) in China and Will Influence Future Urban Health Policy Internationally." *AI* 1, no. 2 (2020): 156–65. DOI: 10.3390/ai1020009.

Societies in Movement: Pandemic Crisis and Prefigurative Responses

Marina Sitrin

This chapter explores the new networks of mutual aid, solidarity, and care that emerged around the world in response to the Covid-19 pandemic, and through describing them, often using the voices of those organizing on the ground, argues that within these day-to-day relationships of care we saw not so much social movements as traditionally understood, but rather societies in movement, within which were the seeds of a new society. This phenomenon was linked to the previous twenty years of horizontal, autonomous, and affective (care- and trust-based) forms of organizing, which had been striving to prefigure a new society in the shell of the old. As with many prefigurative movements, as I will describe so as to better locate this global rise in mutual aid, they generally did not come from people organizing with a plan to change society or even people who had been involved in political organizing, but they arose from necessity, and in that need found that the most useful — and most empowering and enjoyable — way of organizing was horizontally, sharing power and creating space for equal participation and mutual care.

To write or talk about this current historical moment is to hold a lot of things together at once. There was a constant over-arching fear, a fear that is collective and something we, people living today, had not experienced at this level of collectivity. And, yes, we were all in the same terrible storm that was Covid-19, but we were not all in the same boat. Structural inequality shows itself in crisis and disaster, and this one revealed all the ugliness and systemic oppressions and inequalities most all of our societies were built upon, that privilege the very few, and try and pit the rest of us against one another — locally, region-ally and globally.

And, as the Covid-19 crisis deepened and revealed all that is oppressive and intentionally divisive in the systems we live under, it also opened a new space — the crisis and inability of governments to meet people's needs created a vacuum that peo-ple not only filled but went beyond. In towns, cities, and villages all over the world, people reached out and helped one another, door to door, with friendship and neighborhood groups, net-works and larger evolving networks of networks, to meet peo-ple's daily survival needs, including social and emotional needs, finding ways to get food and medicine to people, and also break solitude, find connections, and create new ways of relating. And, in the creation of these networks, new relationships emerged that were rethinking how our necessities are distributed and organized, and how the future could be different.

It is unclear how many millions of people are and have been involved in these various networks globally, and it is important we hold the sheer number of people in our minds when think-ing about how we might restructure society — just how many people are ready to organize beyond the current institutions and structures that we have, such as FEMA in the United States and other such disaster agencies globally. I coedited a book with more than a dozen people, mostly women, from around the world.[1] We did not begin the project as coeditors but found

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1   See Marina Sitrin and Colectiva Sembrar, eds., *Pandemic Solidarity: Mutual Aid during the Covid-19 Crisis* (London: Pluto Press, 2020).

in the process of working together that it was not "my" book, but rather a collective story, vision, and collaboration — not dissimilar to the networks and groups whose voices we were striving to facilitate. In a matter of a few months, a handful of people reached out to another handful of friends and political collaborators, from various parts of the globe, and we put together a book of stories of solidarity and mutual aid in pandemic times. It is important to note that I, and we, did not make a list of places around the world where we thought there would be more expressions of solidarity, but rather we used our networks and found that everywhere, from Brazil and Argentina to Taiwan and South Korea, southern Africa and Italy to northern Iraq and Rojava, people were self-organizing, and doing so in horizontal and effective ways.

We found that it was almost always women leading and facilitating these processes, even if they were not always the ones to step forward first for an interview. This chapter draws upon the various interviews that were collected as a part of that project. I did not conduct these interviews myself, but Colectiva Sembrar, the collective we became in putting the book together, helped to edit them and put them together.

In other areas, and including my *The New Revolutions: From Social Movements to Societies in Movement (*University of California Press, forthcoming), I compile experiences from around the globe, demonstrating that in vastly different places people came together in ways remarkably similar — the networks and groups that responded to the Covid-19 crisis, albeit not the same, had enough in common that I argue here we should consider them all together as a part of a general trend and shift in the ways in which people are organizing for change. Not to create a new theory per se, but to use a descriptor to distinguish what is taking place from traditionally understood social movements, I use the term coined by Raúl Zibechi, "societies in movement."[2]

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2   See Raúl Zibechi, *Dispersing Power: Social Movements as Anti-State Forces* (Oakland: ᴀᴋ Press, 2010), and Zibechi, *Territories of Resistance: A Cartog-*

Fig. 1. Homage to Comandante Ramona, First Women's Encuentro, Zapatista Territory, Chiapas, Mexico. Photo by the author.

In a break from conventionally understood forms of organizing and movements, since approximately 1989, with the fall of the Berlin Wall and a specific definition of socialism and social change losing ground, forms of change and the understandings of the location of change have been shifting. Something new is happening — something new in content, depth, breadth, and global consistency. Societies around the world are in movement. Since the early 1990s, millions of people have been organizing similarly, and in ways that defy definition and former ways of understanding social movements, protest, and resistance. There is a growing global movement of refusal, and simultaneously in that refusal is creative movement. Millions are shouting "No!" as they manifest alternatives in its wake.

Beginning in the highlands of Chiapas Mexico, with the Zapatistas emergence in 1994, declaring a resounding *"Ya Basta!"* (Enough!) and rather than making demands on institutional power, they created dozens of autonomous communi-

raphy of Latin American Social Movements (Oakland: AK Press, 2012).

ties, with forms of directly democratic governance, on land they took back and recuperated (fig. 1). And in Argentina in 2001 the popular rebellion sang, *"Que Se Vayan Todos! Que No Quede Ni Uno Solo!"* (Everyone Must Go! Not Even One Should Remain!). As with the Zapatistas, the movements focused on creating horizontal assemblies, not asking power to change things, but creating that alternative in the present with new social relationships — taking over and running workplaces by the hundreds, retaking land, creating new collectives and cooperatives, from media to art, and breaking from past hierarchical ways of relating — forming what they call a new subjectivity and dignity. The year 2011 witnessed the beginning of a similar form of movement around the world, with millions refusing to remain passive in untenable situations. And in that space, in various towns, villages, and cities, in regions all over, people created new social relationships and ways of being.

People from below are rising up, but rather than going toward the top, "from the bottom up," they are moving as the Zapatistas suggested, "from below and to the left, where the heart resides." Power over, hierarchy, and representation are being rejected, ideologically and by default, and in this rejection mass horizontal assemblies are opening new landscapes with the horizon of autonomy and freedom. As Kurdish scholar and activist Dilar Dirk so beautifully put it, "Today, around the world, people resort to alternative forms of autonomous organization to give their existence meaning again, to reflect human creativity's desire to express itself as freedom. These collectives, communes, cooperatives and grassroots movements can be characterized as the people's self-defense mechanisms against the encroachment of capitalism, patriarchy and the state."[3]

What has been taking place in disparate places around the world is part of a new wave that is both revolutionary in the day-to-day sense of the word and without precedent with regard

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3   Dilar Dirk, "Building Democracy without the State," *ROAR* 1 (Spring 2016), https://roarmag.org/magazine/building-democracy-without-a-state/.

to consistency of form, politics, scope, and scale. The current frameworks provided by the social sciences and the traditional Left to understand these movements have yet to catch up with what is new and different about them. Specifically, the theoretical frameworks for protest and contentious politics within social movement theory are not sufficient to understand the emergent horizontal and prefigurative practices.[4] This chapter will not go into detail about these frameworks, nor about the more traditional, past, and ongoing movements to which they refer. There is a significant and well-researched body of work on these frameworks. Instead, I would like to add the current phenomenon of *mutual-aid networks* that arose during the Covid-19 crisis to our larger lexicon of societies in movement that have arisen since the early 1990s.

The main reason that the politics of contention is not sufficient to explain contemporary autonomous social movements lies in these movements' choice not to focus on dominant institutional powers, such as the state, but rather develop other relationships and powers, looking to one another and self-organizing before looking "up."[5] This reconceptualization of power is linked to the nonhierarchical and directly democratic vision and practice in their organizing. It is not that they begin with an ideological break with a particular form of organizing — they

4   Charles Tilly, Doug McAdam, and Sidney Tarrow are three of the most important and widely read US contemporary social movement theorists. The following definition is taken from the introduction to their 2001 book *Dynamics of Contention:* "By contentious politics we mean: episodic, public, collective interactions among makers of claims and their objects when (a) at least one government is a claimant, an object of claims, or a party to the claims and (b) the claims would, if realized, affect the interests of at least one of the claimants"; Tilly, McAdam, and Tarrow, *Dynamics of Contention* (Cambridge: Cambridge University Press, 2001), 5.

5   Meyer and Tarrow define contentious politics as "collective challenges to existing arrangements of power and distribution by people with common purposes and solidarity, in sustained interaction with elites, opponents and authorities"; David S. Meyer and Sidney Tarrow, *The Social Movement Society: Contentious Politics for a New Century* (Lanham: Rowman Littlefield Publishers, 1997), 4. Tarrow and Meyer view social movements functionally as a "way of making claims in national politics."

are responding to a concrete situation with tools they find useful and rejecting those that have not worked.

These newer movements are often described as "prefigurative," that is, movements that are transforming the world, focusing on the long term, and attempting to model — prefigure — this future in the present.[6] They are not looking to the state as their desired end or creating political party platforms to this end. They do not look to one leader, but make space for all to be leaders, sometimes using the language of "leaderful." They place more importance on asking the right questions than on providing the correct answers. They resolutely reject dogma and hierarchy in favor of direct democracy and consensus. In the process, they create themselves anew and reflect on this changed subjectivity. Taken together, their ideas of justice and freedom change as they change, and thus the movements are theoretically constantly moving, changing, and evolving, conceptually and subjectively. Thus, the focus on relationships and things being relational.

These societies in movement are in many regions and states throughout the world, including the rainforest of Chiapas and lowlands/desert of Guerrero, Mexico, from the Cordillera to Patagonia in Argentina, cities and towns in southern Europe, Canada, and the United States, and the autonomous zones of northern Syria (Rojava) and those self-organized across Bolivia and Brazil. There are working-class people recuperating workplaces; middle-class urban-dwellers, many recently declassed, organizing in assemblies; the unemployed, like so many, facing the prospect of never encountering regular work, self-organizing, taking over land, and creating micro projects; and entire autonomous zones and towns, commoning as they defend and create commons. People are coming together in moments of cri-

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6   See Marianne Maeckelbergh, *The Will of the Many: Alterglobalisation Movement Is Changing the Face of Democracy* (London: Pluto Press, 2009), and Maeckelbergh, "Doing Is Believing: Prefiguration as Strategic Practice in the Alterglobalization Movement, *Social Movement Studies* 10, no. 1 (2011): 1–20.

sis and continuing to organize in horizontal and affective ways to survive and re-create relations in the process.

It is not so much what these societies in movement are doing — creating networks of care to get people food and medicines, defending land from exploitation, creating barter networks, or taking over workplaces to run them in common — but that this is all being done with a newfound agency, one grounded in community and the society as a whole, horizontally.

These "new" forms are not new in and of themselves, but when taken together in their diversity and similarity, they become something new. Similarly, mutual aid and horizontal, autonomous, and care-based forms of organizing in times of crisis are not new, this is the way groups and communities have come together for centuries,[7] but as these moments of togetherness last, become more intentional, and create long-term networks and structures, something new can be seen and should be examined further. I use examples from the local-global responses to Covid-19, and place this experience with others over the past twenty-five years. I do not attempt to summarize or generalize all global experiences, but simply to make links and connections with those things in common with this new global phenomenon of prefigurative societies in movement.

First, I explore the experiences and voices of those who were organizing around the globe in response to the Covid-19 crisis, what some of the mutual-aid networks were doing, and how they reflected on this action. I conclude with an examination of prefigurative societies in movement and argue that these networks are part of a growing phenomenon of process- and means-focused movements, ones that are about developing horizontal and affective (care- and love-based) relationships, rather than demand and institutionally focused social movements. Each of the regions selected below have a wide variety of articulations of their meanings, internally, from within the networks, but I have taken a bit of liberty in using a few key interview selections to

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7   See Rebecca Solnit, *A Paradise Built in Hell: The Extraordinary Communities That Arise in Disaster* (London: Penguin, 2009).

demonstrate areas consistent with the newer prefigurative societies in movement, such as affect, changing social relationships, anticapitalist and/or anti-institutional powers, and horizontalism. I need to clarify that these are my interpretations of meaning, and I was not the person who conducted the interviews, so any mistaken interpretations are mine.

To begin, the description that Eleanor, a creative activist, organizer, and journalist, shares in an interview done with carla bergman in the Turtle Island chapter of *Pandemic Solidarity* is a version of one that is consistent all around the globe. In this case it was of a mutual-aid network that was formed by the coming together of other networks and groups, but in many places the networks emerged via social media calls to come together, or flyers on street posts, or groups of friends inviting others, and, of course, teachers. Eleanor explains:

> DC Mutual Aid is a women of color led effort that grew out of existing networks of mutual aid and grassroots organizing to respond to the pandemic. We've set up a hotline to take requests from community members, a place to sanitize and pack goods and then deliver those to our neighbors. DC Mutual Aid is split up by wards and while each ward's workflow is autonomous, we're all part of the same city that is uniquely DC. We're scrappy and underfunded but like all mutual aid efforts, we roll with what comes. As my friend Maurice Cook puts it, "when the systems fail, the people show up." And people really have shown up — proving in spotlit contrast the uselessness of the state. We're constantly changing our protocols, for instance setting up emergency delivery protocols to address dire needs between scheduled delivery days, working to get folks fresh food by building relationships with local, small-scale farmers who have been hit hard by the downturn in farmers' market access and restaurant purchases.[8]

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8   Eleanor, quoted in carla bergman and magalí rabasa, with Ariella Patchen and Seyma Özdemir, "Turtle Island," in Sitrin and Colectiva Sembrar, *Pandemic Solidarity,* 222.

تواصل معنا إذا كنت بحاجة إلى التضامن

التسوق

الأعمال المنزلية

نحن جيرانك نعيش في كاديكوي، وبسبب فيروس كورونا، نعتقد أنه من الإيجابي ألا نخرج من اجلنا ومن أجل بعضنا البعض.

ومع ذلك، تستمر الحياة ونحن بحاجة إلى تلبية احتياجاتنا اليومية. نحن نعلم أن الفيروس يؤثر على الأشخاص الذين يعانون من ضعف المناعة، لذلك نطلب من جيراننا الذين تزيد أعمارهم عن ٦٥ عامًا والمريض و/أو ذوي الاحتياجات الخاص للتواصل معنا

محادثة هاتفية ودية

رعاية حيوان

للتواصل عبر الهاتف:
0535 354 41 23
0505 269 52 11
0532 468 34 79

رعاية صحية وطبية

حالات طوارئ أخرى

شبكة كاديكوي للتضامن

Fig. 2. Cemre Can Aşlamacı, *Kadıköy Solidarity Network — Pandemic Solidarity Flyer in Arabic,* 2020. Courtesy of the artist.

In the chapter on Turkey, authored by Seyma Özdemir, the interviewees responded collectively, as networks, not individuals, reflecting already their practices of nonhierarchical organizing and shared leadership. Below is a reflection from the Kadıköy Solidarity Network, in Istanbul (fig. 2). Their reflections speak to the changing subjectivities that arise in horizontal networks of solidarity and mutual aid, and how it is a clear break from relations that the state and institutions of power facilitate:

Solidarity makes people feel incredible emotions nowadays. My phone number is one of the contact numbers on posters. We hear this sentence many, many times: "You reminded us that we are human beings!" I heard this both from those who

have resources to share and those who are in need. This is so real! Solidarity makes us human beings indeed! People calling me, especially the ones 80–90 years old, tell me that they would like to see my face when these days are over, and meet over a coffee. Yes, I reply, "We will definitely meet one day." […] The system, the state that you pay taxes to wants to get rid of you, leave you to death[. …] However, there are others who care about you, who stick by you in solidarity without any expectation. Then you start feeling like a society[. …] You start realizing that you are in the same boat, whether young or old, employed or unemployed, health worker, baker, as ones who have been left to their own destiny. You realize that you are stronger together and you must act collectively![9]

Nancy Piñeiro facilitated the following interview with teachers in Mendoza, in the chapter she coauthored on Argentina. In so many places around the world, it was and is teachers who began to organize first, knowing the needs in the neighborhoods and communities. In the case of Argentina, it was declared illegal to organize support outside state institutions, and yet the teachers did. The ways in which they did this engaged a horizontal process and focused on care and support, not only of the material but also the emotional and artistic — feeding the soul:

So many people offered their help, some of them are artists (and they don't have money to spare! On the contrary). We asked them if they could send us songs for the families, the other fundamental aspect of sustenance, which is art. It became a spontaneous virtual network where some are sending us lullabies, beautiful, tender, caring. Each teacher selects and decides what to send and to whom, it's not just about sending stuff. It's about feeding with art, fostering tenderness.[10]

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9   Kadıköy Solidarity Network, in Seyma Özdemir, "'Capitalism Kills, Solidarity Gives Life': A Glimpse of Solidarity Networks from Turkey," in Sitrin and Colectiva Sembrar, *Pandemic Solidarity,* 28.

10 Nancy Piñeiro, in Nancy Viviana Piñeiro and Liz Mason-Deese, "Argentina: Injustices Magnified; Memories of Resistance Reactivated," in Sitrin

How these affective relationships can then shift perceptions of one another was seen in the conversations Debarati Roy had with network participants and observers in India. She spoke with Ayantika, from Kolkata, west Bengal, who reflected on a number of networks and areas of solidarity. In one such reflection, she spoke of how large segments of Indian society stigmatize *hijras* (perceived as a third gender). Ayantika shared: "We generally encounter hijras in public settings — such as when we see them boisterously dancing and singing while asking for money on a train or blessing a wedding[. …] and the very sight of a hijra would cause discomfort and fear in many people."[11] She then spoke of the role of hijras in supporting solidarity efforts, bringing food, supplies, and other material aid to centers. In this context, she found that people were open, accepting, and shifting their preconceived notions and prejudices.

In South Korea, chapter author Ji Young Shin manifests the solidarity about which she writes, as she traveled throughout South Korea, during the height of the pandemic, as we were still learning about it, to gather stories and stand with movements of disability rights. Her chapter, titled "Standing in Solidarity with Those Who Must Refuse to Keep Social Distance: Disability Activism in South Korea," goes into detail on the conditions suffered by people with various disabilities, and what it means when there is a lockdown. People who survived because of the support they received from those able to move about were no longer coming, isolation and desperation took hold, and individuals and groups refused to quit, came together. Pak Kyŏngsŏk told Shin: "Say no to social distancing. Although we'd have to keep physical distance, we must socially stick together and stand in solidarity!"[12] People not only refused to give up, but then also held demonstrations to bring attention to the condi-

and Colectiva Sembrar, *Pandemic Solidarity,* 239.

11 Ayantika in Debarati Roy, "Rethinking Minority and Mainstream in India," in Sitrin and Colectiva Sembrar, *Pandemic Solidarity,* 92.

12 Pak Kyŏngsŏk, in Ji Young Shin, "Standing in Solidarity with Those Who Must Refuse to Keep Social Distance: Disability Activism in South Korea," in Sitrin and Colectiva Sembrar, *Pandemic Solidarity,* 71.

tions people with disabilities faced, and, quoting from the rally, she said, "We have gathered here again today, as if we had never been discriminated against, as if we had never lost hope[. …] We felt so much pain as we saw on the news the patients dying behind the closed doors of psychiatric wards[. …] We are all standing here today because we fought our way out, and were able to come out the other end."[13]

It was only because of these brave acts of mutual aid that people survived.

The above two examples are often seen in times of collective action, where the biases we are taught by mainstream society shift as we learn that we have more in common with one another than with those institutions and structures teaching us divisions. This phenomenon is not new in the history of movements and action, but the placing of importance on this shift and discussing it as a part of what is powerful and central in movement is, and is a part of what brings together the larger landscape of societies in movement.

Similarly, not only how we see one another changes in movement and in times of crisis, but entire groups and networks, with whom we have had differences, historical, political, and otherwise, can shift and new solidarities emerge. This is the case with southern Africa, as Boaventura Monjane reflects in his chapter "Confronting State Authoritarianism: Civil Society and Community-Based Solidarity in Southern Africa." In particular, he speaks to the new spaces of solidarity and alliance-building that have opened during the pandemic:

> With very few exceptions, civil society groups are not in the habit of working together on common agendas. This is true in Mozambique as it is in Zimbabwe and South Africa. For example, in South Africa, an attempt to articulate civil society groups from various sectors — such as the c19 People's

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13   Chang Hyeyŏng, in Sitrin and Colectiva Sembrar, *Pandemic Solidarity,* 71.

Coalition, with more than 300 organizations — was attempted in the period following the abolition of apartheid.[14]

Kelly G. explains in the same chapter:

[In South Africa] there has been post-apartheid attempts coalition building. None of them has really worked. Often they fall apart because there was not something specific to work on. What is most interesting about this coalition is that almost organically, out of the program of action, it is the organic emergence of working groups around particular issues. So there is a whole range of issues and in those working groups, some people have worked together before, but a lot of people haven't work together before. And a lot of people haven't been compelled by a progressive vision of how this is in services of poor and working class communities. So there is something about the time of the crisis and the possibility that the coalition has afforded to have people to sit down and actually work together regardless of their differences. The kinds of relationships that have emerged out of that have been very important[. …] It has also been very common to see the segregation of struggles and movements among Mozambique civil society groups, which has long contributed to the segregated processes of resistance among social movements and activists[. …] It is therefore a novelty that in the C1-19 Civil Society Alliance there are almost 70 intersectorial organizations, including the largest — and first formed — trade union in Mozambique, the Sindicato dos Trabalhadores Moçambicanos (OTM, Mozambican Workers Union).[15]

14 Boaventura Monjane, "Confronting State Authoritarianism: Civil Society and Community-Based Solidarity in Southern Africa," in Sitrin and Colectiva Sembrar, *Pandemic Solidarity,* 107.

15 Kelly G., in Sitrin and Colectiva Sembrar, *Pandemic Solidarity,* 110.

In the chapter on Turtle Island, coauthor carla bergman spoke with Klee Benally (Diné/Navajo), a volunteer with Táala Hooghan Infoshop and Kinlani/Flagstaff Mutual Aid, who is also a writer, musician, and filmmaker. In their conversation, Klee makes clear the break from capitalist relations in their organizing, and explains their visioning beyond forms of power and exploitation endemic to capitalism. He points to the historical and current rejection of these forms of relating, highlighting care and shared power — going beyond capitalism in practice and theory — a theory-based practice. To begin, he describes how these practices are not "new":

> The idea of collective care and support, of ensuring the well-being of all our relations in non-hierarchical voluntary association, and taking direct action has always been something that translated easily for me. That's how I was raised. *T'áá hwó' ají t'éego* means if it is going to be, it is up to you. No one will do it for you. We also have a Diné philosophy rooted in *Ké',* or our familial relations, which means that no one would ever be left to fend for themselves, we are all relatives in some way so we have to care for each other. We built these understandings into Táala Hooghan Infoshop from the beginning[. …] We're organizing with the vision that these efforts have the power to make capitalism and colonialism irrelevant. We are actively establishing interventions to ensure that these systems don't recuperate. To that end we've established an Indigenous Mutual Aid network to build connections through and beyond this crisis. Since most of the current Indigenous mutual aid organizing is an extension of work that has been ongoing in sacred land and water struggles, for unsheltered relatives, or elder support, we already have a lot of those deep relationships and experiences working together. We want to radically redistribute resources and power but we also don't want to be burdened by leftist political baggage.
>
> In many ways that and the threat of non-profit industrial cooptation are perhaps our biggest challenges. That's part of why we're asserting the need for a specific tendency of In-

digenous Mutual Aid; we've dealt with white saviors and so much "decolonial" fetishism from radicals. We need them to get out of the way so we can do what we need to do. They have a role, but if we're not organizing on our terms than it's the same charity bullshit we've faced before, no matter how much people say it's "solidarity."[16]

Similar to the reflections by Klee Benally above, the Lena Modotti Brigade, in Milan, Italy, also discusses this historical moment and the needs to go beyond the state. Eleanor Finley spoke with them about their organizing for the chapter she authored on Italy. The Lena Modotti Brigade is a neighborhood-based network that distributes food, medicine, and supplies to homebound vulnerable families. They did not begin organizing with the conclusions below but came to them in the process of working together:

The experience of the brigades must be a turning point, an impetus for reflection by everyone about all of the struggles we've fought until now. The state has taken everything from us over the last years [health care, public education funding, etc.] and it has been *totally* absent during this moment of emergency. Only the work of solidarity has helped the poorest people. The lowest classes are the ones paying for what the government hasn't been able to do. The ones who do this work are solidarity people [*persone solidale*] like us who understood the situation and entered the field to help — even though it is risking our lives.[17]

A question that arises for me, and perhaps many of us, is if these horizontal mutual-aid networks that arise in times of crisis are indeed movements, and if so, then how do we understand them

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16 Klee Benally, quoted in bergman and rabasa, "Turtle Island," 188.
17 The Lena Modotti Brigade, in Eleanor Finley, "Solidarity Flourishes under Lockdown in Italy," in Sitrin and Colectiva Sembrar, *Pandemic Solidarity,* 152–53.

Fig. 3. Image from the MST food distribution. Photo by Raúl Miranda.

in the lexicon of movements? The concept of societies in movement is useful here, as it reflects, as it sounds, groupings of people and communities who come together and move — to oppose a dam, a pipeline, police brutality, and racism in the neighborhood, people that come together not because they have been mobilized or are a part of a movement or group, but because they have to move — because standing still is not an option, silence is no longer an option. These people and societies in movement are not the same as our understandings of traditional social movements where people are mobilized for or against something or someone, with demands on people or institutions in power to remedy the situation, but people who come together because that is the only place to go — that is the only place to look at one another — and so, horizontally. And from there we make decisions together.

In crisis, time after time, institutions are nonresponsive, or not able to respond because they are not directly on the ground. Their hierarchical structures get in the way of their ability to respond quickly and in a way that meets people's needs. It is not so much that people choose autonomy or horizontality because they think it is better theoretically, but because in practice it is necessary and creates the most affective relationships — and effective practices (fig. 3).

The interview by Seyma Özdemir with Ataşehir Solidarity Network, reflects:

> This is a great opportunity in two ways: what really matters is not the state, it is the people living together. Secondly, people can claim agency and have the power to create solutions to their problems without a state, a governing power above, of course in a local level.
>
> We say that another world is possible, so we are now building that political culture, the prototypes of that possibility in this process of pandemic. This is a historical moment. It is a moment that demonstrates the inability of governing. This is actually becoming an agent. This exists in our culture but the system pushes you to forget it, the system tells you that we will give you orders, what to do and how to do it. If there is any problem, you won't raise your voice and question so much, and you won't dare to search for solutions with the ones around you. But now people remember that, well, this is what a society is, this is what we were before.[18]

The influence of the movements on one another goes without question, as does the role of prior movements. What this looks like and how it happens is an entirely different question. Many of us used the language and categories of diffusion or contagion to describe these relationships, but since so many were not direct, or were more in the imagination of the movement participants than grounded in actual experience or readings of history, it becomes unclear. Many movements identified with what others were doing at the time and replicated their experiences, or as they imagined their experiences, and this is a sort of resonance.

And perhaps it is something much bigger. Without discounting the discussing above, perhaps what is going on globally is most of all a massive response to a system that does not represent people, identified both as states and international financial

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18 Seyma Özdemir, "'Capitalism Kills, Solidarity Gives Life,'" 22.

institutions, together with the failure of a model of change that says we need to take over and change these institutions from the inside, and thus the result is massive movements of people looking to one another, using direct democracy and seeing power as something to construct from below, and keep below. What is taking place perhaps, then, is a new way of doing politics, creating a new theory around which it is organized.

Klee Benally (Diné/Navajo) described it this way, when carla asked his thoughts on creating a more autonomous, anticapitalist and anticolonial world:

> I've grown up in a world of ruins. We have teachings and prophecies of the endings of cycles, but that's always how it's been here. An anti-colonial and anti-capitalist world already exists, but as my father who is a traditional medicine practitioner says, "there aren't two worlds, there is just one world with many paths." Colonial and capitalist paths are linear by design. If that path of greed, domination, exploitation, and competition doesn't accept that it's reached its dead end, then we have to make sure of it.[19]

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19 Benally, quoted in bergman and rabasa, "Turtle Island," 190.

References

Clarke, Lee. *Mission Improbable: Using Fantasy Documents to Tame Disaster.* Chicago: University of Chicago Press, 1999.

Dirk, Dilar. "Building Democracy without the State." *ROAR*, no. 1 (Spring 2016). https://roarmag.org/magazine/building-democracy-without-a-state/.

Maeckelbergh, Marianne. "Doing Is Believing: Prefiguration as Strategic Practice in the Alterglobalization Movement." *Social Movement Studies* 10, no. 1 (2011): 1–20. DOI: 10.1080/14742837.2011.545223.

———. *The Will of the Many: Alterglobalisation Movement Is Changing the Face of Democracy.* London: Pluto Press, 2009.

Meyer, David S., and Sidney Tarrow. *The Social Movement Society: Contentious Politics for a New Century.* Lanham: Rowman and Littlefield, 1997.

Sitrin, Marina, and Colectiva Sembrar, eds. *Pandemic Solidarity: Mutual Aid during the Covid-19 Crisis.* London: Pluto Press, 2020.

Solnit, Rebecca. *A Paradise Built in Hell: The Extraordinary Communities That Arise in Disaster.* London: Penguin, 2009.

Tilly, Charles, Doug McAdam, and Sidney Tarrow. *Dynamics of Contention.* Cambridge: Cambridge University Press, 2001.

Zibechi, Raúl. *Dispersing Power: Social Movements as Anti-State Forces.* Oakland: AK Press, 2010.

———. *Territories of Resistance: A Cartography of Latin American Social Movements.* Oakland: AK Press, 2012.

Pandemic Pastoral

Julia Ramírez-Blanco

The pandemic experience, devastating the ways of life of the entire planet, presents itself concretely as a set of fragments. A set of symptoms of perception, which changes the ways of feeling the categories that separate "nature" and "culture," "country" and "city." In the emotional management of the Covid-19 pandemic, there was a sense of punishment for urban life and a search for its opposite — the "country" — as escape and atonement. Many people's intuitive sense connects with scientific discoveries. Already in 2020, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) stressed that the emergence of pandemics "is entirely driven by human activities" because the destruction of ecosystems facilitates the infection of people with viruses that affect animals.[1]

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1   "The risk of pandemics is increasing rapidly, with more than five new diseases emerging in people every year, any one of which has the potential to spread and become pandemic. The risk of a pandemic is driven by exponentially increasing anthropogenic changes. Blaming wildlife for the emergence of diseases is thus erroneous, because emergence is caused by human activities and the impacts of these activities on the environment. Unsustainable exploitation of the environment due to land-use change, agricultural expansion and intensification, wildlife trade and consump-

The prevention of pandemics would imply ceasing these environmentally destructive activities, upon which extractivist capitalism is based.

These studies do not seem to have had a political response. However, at the collective level there has been a resurgence of postmodern biophilia whose meaning is more about an emotional response than a political program. This chapter seeks to explore the idealizations and poetic images related to the idea of "nature" that offered meaning and consolation during the forced confinement that many people experienced in the pandemic of Covid-19, including recordings of empty cities, footage of animals entering the metropolis, animal refuges offering the opportunity to hug cows, and the massive desire to move to a rural environment. In exploring these imaginaries, I also seek to make clear that the environmental response to the pandemic needs to go beyond the pastoral.

The City as an Empty Shell

Within the complex visual culture that was seeking aesthetic compensations for the tragedy, there was a proliferation of a

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tion, and other drivers, disrupts natural interactions among wildlife and their microbes, increases contact among wildlife, livestock, people, and their pathogens and has led to almost all pandemics[. …] Climate change has been implicated in disease emergence (e.g. tick-borne encephalitis in Scandinavia) and will likely cause substantial future pandemic risk by driving movement of people, wildlife, reservoirs, and vectors, and spread of their pathogens, in ways that lead to new contact among species, increased contact among species or otherwise disrupts natural host-pathogen dynamics. Biodiversity loss associated with transformation of landscapes can lead to increased emerging disease risk in some cases, where species that adapt well to human-dominated landscapes are also able to harbour pathogens that pose a high risk of zoonotic transmission. Pathogens of wildlife, livestock and people can also directly threaten biodiversity, and emerge via the same activities that drive disease risk in people (e.g. the emergence of chytridiomycosis in amphibians worldwide due to the wildlife trade)"; P. Daszak et al., eds., *Workshop Report on Biodiversity and Pandemics of the Intergovernmental Platform on Biodiversity and Ecosystem Services* (Bonn: IPBES, 2020).

Fig. 1. Still from Skydrone Film & Futuria Production, "Paris Confiné 2020 — Lockdown Paris," May 7, 2020.

particular type of video of empty cities and, to a lesser extent, empty landscapes. Filmed from the omniscient perspective allowed by drone shooting, they showed what most people locked in during the confinement could not see: beautiful and emblematic places that were once populous, but were now without traffic. In a way, they suggested the divine gaze looking at the emptiness of New York, Boston, Budapest, Chicago, Istanbul, Mumbai, São Paolo, Rio de Janeiro, and San Francisco.

A montage of Paris made by Skydrone Film shows the Eiffel Tower, the Arc de Triomphe, the Tuileries gardens next to the Louvre, and the Château de Versailles abandoned, with only a few cars circulating occasionally, in a testimonial way (fig. 1).[2] Alternating the bird's-eye view with the journey through the traffic-less streets, the camera reaches the interiors and crosses the bridges. The places containing people are spectral and correspond to the manufacture of face masks or to food banks. And the video ends with the applause for health workers. The canals of Venice appear without gondolas, without vaporettos, without

2   Skydrone Film & Futuria Production, "Paris Confiné 2020 — Lockdown Paris," *YouTube,* May 7, 2020, https://www.youtube.com/watch?v=a00zgvkJrzI.

tourists.[3] As if everyone had abandoned the watery metropolis suddenly, leaving it intact and beautiful, ready for the contemplation enabled by drone's mechanical eye. Only the occasional boat is in motion, as if confronting the extraordinary desolation of restaurants without service, abandoned hotels, and bridges that no one crosses. Pristine and uninhabited, the Renaissance façades are reflected in the lagoon in their inorganic perfection. A Kyoto free of tourists shows the space without the foreign "invasion." The wide pavements allow solitary strolling and unobstructed mountain views. Orderly walkers seem to enjoy a sunny day in a state of emergency.[4] There are similar videos of big cities. Lászlo Mundeán speaks of how "regardless of the differences among these cities, the videos share an aesthetic repertoire, which employs soothingly uplifting music as an atmospheric background to panoramic views of empty streets forming embroidery patterns on a gigantic carpet unfolding without end."[5] For this author, "urban drone videos also turn cities into a sublime artifact, human-made and at once beyond human scale, overwhelming and at once uplifting to survey from above."[6]

The truth is that there is a strange pleasure derived from the contemplation of these productions, which generate an awe similar to the aesthetic category of the "sublime," as proposed by Edmund Burke in *Philosophical Enquiry into the Origins of Our Ideas of the Sublime and Beautiful* (1757) to refer to those experiences that combine pleasure and fear: "it is, like all things which grow out of pleasure, capable of being mixed with a mode of uneasiness."[7] Burke speaks of "peace": as followed with

3   ABC News, "Drone Video Shows Deserted Streets, Square of Venice under Lockdown," *YouTube,* April 20, 2020, https://www.youtube.com/watch?v=pI6eVDHggkA.

4   4K Japan-Tripgig, "Empty Kioto-4K-ASMR," *YouTube,* June 20, 2020, https://www.youtube.com/watch?v=E5bPeqiVrUk.

5   László Munteán, "The Pandemic Sublime," *Culture Weekly,* https://cultureweekly.tumblr.com/post/618078883997204480/the-pandemic-sublime.

6   Ibid.

7   Edmund Burke, "A Philosophical Inquiry into the Origins of our Ideas of the Sublime and Beautiful with an Introductory Discourse Concerning Taste, and several other additions" (1756, 1757), *Burke's Writings*

Romanticism, the subject that enjoys the spectacle of disaster is a privileged subject. It is necessary to have a certain economic security, a certain material comfort, plus physical and mental health, to be able to enjoy a controlled and aestheticized fear. This recalls the scene in Lars von Trier's film *Melancholia* (2011) in which the protagonists watch the beauty of the meteorite that hits the earth ending their lives and the lives of everyone. In the technological age, the Romantic sublime becomes a mediatized spectacle.

The filming of the city without people also provided an extensive reflection on the urban phenomenon. In 2021, artist Antoni Muntadas's exhibition at the Museo de Bellas Artes in Bilbao was symptomatically titled "La ciudad vacía" (The Empty City). His video installation *Vacuum/Plenum* (2019–20) was marked by the pandemic: "In 2019, Muntadas travelled by boat across the Bilbao estuary, which showed large infrastructures on both sides — some converted to tourism — and imagined Bilbao empty. He thought about what the city would be like without these inhabited large constructions. Then, the city emptied itself for real."[8]

The work superimposed on two screens footage of Bilbao during the months of lockdown in 2020 (*Vacuum*) and the same streets in later months, when the population returned to the streets (*Plenum*), as the two sides of urban use. In the Basque context — where sculptors such as Chillida and Oteiza have made emptiness one of the main materials of their work — Muntadas translated this artistic exploration to Bilbao, where it implies a commentary on the processes of urban change and gentrification around the estuary area.

For his part, in a powerful performance, invoking with intense emotion those affected by the pandemic, Pope Fran-

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and Speeches (Project Gutenberg, 2005), https://www.gutenberg.org/files/15043/15043-h/15043-h.htm.

8 Museo de Bellas Artes de Bilbao, "Muntadas: La ciudad vacía," https://bilbaomuseoa.eus/exposiciones/muntadas-la-ciudad-vacia/. See the catalogue of this exhibition: Joseba Zulaika et al., *Muntadas: La ciudad vacía/The Empty City* (Bilbao: Museo de Bellas Artes de Bilbao, 2021).

Fig. 2. Stefano Dal Pozzolo, *Way of the Cross. Pope Francis During the Ceremony and the Procession.* Saint Peter's Square, Vatican City, April 10, 2020. Courtesy of the photographer.

cis decided to deliver an exceptional *Urbi et orbi* blessing on March 27, 2020. Transmitted live from a St. Peter's Square that was completely empty, here this space without people seemed to invoke the very presence of God[9] as it emerges from Stefano Dal Pozzolo's photographs (fig. 2). The startling spectacle convoked the dead, the living, and the presence of the supernatural in a prayer shared in an immaterial way with the whole world. The emptiness became transcendence, and the silence was a solemn way of connecting with the divine. Maybe the solemnity had something to do with the apocalyptic feeling.

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9   Pope, "Pope at Urbi et orbi: Full Text of His Meditation," *Vatican News,* March 27, 2020, March 27, 2021, https://www.vaticannews.va/en/pope/news/2020-03/urbi-et-orbi-pope-coronavirus-prayer-blessing.html, and Catholic Sat, "Extraordinary Moment of Prayer with Pope Francis, for the End of Coronavirus 27 March 2020 HD," *YouTube,* March 27, 2021, https://www.youtube.com/watch?v=P6mMM8uZXkY.

Worlds That End

In the Western and Judeo-Christian tradition, the apocalypse implies judgment, punishment, and the beginning of a better age. The question of guilt and its atonement did not disappear in a world that believes itself to be secular. As Dahlia Schweitzer suggests in her contribution to this book, "the sense of culpability in our own destruction is a major theme in both our culture of fear and the outbreak narrative."[10]

Within the triumph of what Marc Fisher called "capitalist realism," the idea first voiced by Fredric Jameson that it would be "easier to imagine the end of the world than to imagine the end of capitalism"[11] has become a stereotype. Thus, in the framework of the anthropogenic Sixth Mass Extinction, we can paraphrase Jameson and claim that it is easier to imagine the end of humanity than the possibility of an ecological transition. In his introduction to *After Extinction,* Richard Grusin used the concept of "premediation" as "the logic with which one tries to mediate future events."[12] Grusin asked himself the following:

> Could it be possible then, that our current preoccupation with questions of extinction, like our preoccupation with the Anthropocene in all of its varieties, represents not an engagement with the pressing concerns the twenty-first century but rather the opposite? Could our theorization and speculation about anthropogenic mass extinction be a way of escaping, avoiding, or minimizing such concerns through the premediation of anthropogenic climatological apocalypse? [13]

If the postapocalyptic sensation corresponds to the narrative of thousands of works of science fiction, some mediatic narratives make one think of the thought exercise that the journalist Alan

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10 See Chapter 2 by Dahlia Schweitzer in this volume.

11 See Jameson, *Seeds of Time* (New York: Columbia University Press, 1994).

12 Richard Grusin, "Introduction," in *After Extinction,* ed. Richard Grusin (Minneapolis: University of Minnesota Press, 2018), 9.

13 Ibid.

Weisman developed in his 2005 article "Earth without People" in *Discover,* which later became a bestseller when expanded into the book *The World without Us* (2007). Following a sci-fi trope, Weisman interviewed specialists in various fields of knowledge to explore how the planet might evolve if human beings suddenly disappeared from its surface. What would occur with the houses, cities, and animals? How would nature once again expand and invade the urban space? Weisman in turn looked at literary classics promoting simpler ways of life, such as *Earth Abides* (1949) by George R. Stewart, in which the protagonist, returning from a retreat in the mountains, discovers that a fatal disease has devastated civilization. The catastrophe served to put an end to civilizational excess.

The Covid-19 situation also provoked reflection on this type of change. In her *Diary of a Disease,* originally published on *e-flux* journal, the architect Beatriz Colomina offered her thoughts during the quarantine:

> New York has always been excessive, so why not now? More cases, more hospitalizations, more ICU admissions, more intubations, more deaths. The news is terrifying and at the same time completely at odds with the day-to-day experience of the city, which has become so strangely quiet, so peaceful. No traffic, no construction noise, no annoying car alarms, no random screams in the middle of the night. Even the ambulances are mostly silent without cars to fight against. The birds wake us up in the morning. Who knew there were so many birds downtown?[14]

Animals That Return to the City

In their introduction to the special edition of *Animal Studies Journal,* Chloë Taylor, Kelly Struthers Montford, and Eva

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14 Beatriz Colomina, "Diary of a Disease," *e-flux,* March 20–August 7, 2020, https://www.e-flux.com/architecture/sick-architecture/364166/diary-of-a-disease/.

Kasprzycka highlight how "animals have been everywhere in the COVID-19 pandemic, for those who were paying attention,"[15] from the pangolins or bats eaten in Asian markets blamed for the origins of the disease to those "many more more-than-human animals [which] were adversely affected by the pandemic. These include the animals who were sacrificed in animal study trials for vaccines, and the millions of fur and agriculturally farmed animals who, already destined for premature deaths, were killed sooner and in even more merciless manners than they would have been otherwise."[16]

This reality seemed much less visible while much of the population was focused on images of wild animals that had entered the cities during the lockdowns. Videos of animals increased exponentially on the internet. A new genre was that of wild animals reaching cities, villages, and beaches.

A wild boar and her calves cross Barcelona's central Avinguda Diagonal. It is normal to see these animals in the neighborhoods close to the mountains, but it was not until March 2020 that they ventured into the heart of the city, where they could cross streets and highways without fear of people; people who watch them amazed via their screens, through videos that go viral and contribute to the romanticization of confinement by some of the people who experienced it from a position of privilege. The phenomenon is transnational. A group of fourteen elephants get drunk on fermented wheat in a Chinese village, as if in a celebration without people, which culminates in a tea garden. Deer roam the Japanese city of Nara (fig. 3). In Madrid, peacocks escape from Retiro Park where they usually live: they seek food. The press goes overboard in describing what seems to be a utopian frenzy: "Sea lions sunbathing in Argentinian Patagonia, monkeys roaming the cities or goats on the loose in Wales. In Paris, two deer have even been spotted in the French

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15 Chloë Taylor, Kelly Struthers Montford, and Eva Kasprzycka, "Introduction: Critical Animal Studies Perspectives on Covid-19," *Animal Studies Journal* 10, no. 1 (2021): 1–2.

16 Ibid., 3.

Fig. 3. Deer in Nara, Japan, 2020. Photo by oakdennis/Twitter.

capital."[17] Dolphins navigate the canals of Venice whose waters are described as "crystal clear." A scene from William Morris's classic utopian novel *News from Nowhere* (1890), in which a society reconciled to its environment led the author to wonder "how clear the water is" on seeing that the River Thames had been populated by salmon, seems to come to mind.

While incursions of nonhuman animals into the urban space were taking place, Reut Vardi, Oded Berger-Tal, and Uri Roll spoke of how the idea of "wildlife reclaiming cities" can be considered "exaggerated." Thus, they state that "while pumas ventured deeper into urban habitats during the COVID-19 pan-

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17 Más vale tarde, "Ciervos paseando por París y delfines en los canales de Venecia: Los animales toman las ciudades durante la cuarentena," *La Sexta,* April 13, 2020, https://www.lasexta.com/programas/mas-vale-tarde/ noticias/ciervos-paseando-por-paris-y-delfines-en-los-canales-de-venecia-los-animales-toman-las-ciudades-por-la-cuarentena_202004135e949bc431 c6450001ed5eb0.html.

demic, bears, bobcats, coyotes, and moose did not."[18] Regarding the sound of birds, Oscar Gordo, Lluís Brotons, Sergi Herrando, and Gabriel Gargallo refer to having found that "birds did not increase their probability of occurrence in urban areas during the lockdown, refuting the hypothesis that nature has recovered its space in human-emptied urban areas. However, we found an increase in bird detectability, especially during early morning, suggesting a rapid change in the birds' daily routines in response to quieter and less crowded cities."[19]

In fact, many of these reports of the return of the natural were, like Morris's narrative, fictions. The dolphins in Venice had been filmed in Sardinia, the elephants had not become drunk, and their incursions were not an isolated phenomenon. Even so, to see this return of nature — for all that it was semifictional — provided relief: it seemed that the sacrifice was generating a better world. This framework also seemed to provide a meaning to the harshness of the lockdown, which would serve not only to prevent infection but also to cure some of humanity's toxic effect on the planet.

At the same time that viewers consumed these images of animals in the city, there was also a proliferation of a new commercialized realm of digital encounters with the "natural" world. In the sense of direct interaction, it is important to view them as part of a series of digital animal-tracking devices that Alexander Pschera, in his book *Animal Internet* (2016), understood as an opportunity for communication between human and nonhuman animals.

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18 Reut Vardi, Oded Berger-Tal, and Uri Roll, "iNaturalist Insights Illuminate COVID-19 Effects on Large Mammals in Urban Centres," *Biological Conservation* 254 (February 2021).

19 Oscar Gordo, Lluís Brotons, Sergi Herrando, and Gabriel Gargallo, "Rapid Behavioural Response of Urban Birds to COVID-19," *Proceedings of the Royal Society B* 288 (2021). Environmental scientist Alejandro Baladrón says that something subtler was more real: a cleaner sky, freed of many of the emissions from human transport. And, on the other hand, an increase in pollution in the form not only of masks, gloves, and other physical protection but also from the use of disinfectants that, despite filtering, ends up as toxic spills (personal interview with the author).

Researchers Jonathon Turnbull, Adam Searle, and William M. Adams explored this question during the pandemic in their article "Quarantine Encounters with Digital Animals: More-Than-Human Geographies of Lockdown Life."[20] One of the ways of establishing a live relationship with real animals through the screen was the system of animal cameos in Zoom video calls: for a fee, animal sanctuaries would connect and an animal would suddenly appear as one of the participants in the call. These cameos brought something that was completely absent for months: the unexpected encounter. And nature. One of the sanctuaries spoke of how "one person will notice and be like 'is there an animal here?' and everyone else is just like 'what?! Is that a goat? Why is there a goat here?'"[21]

Turnbull, Searle, and Adams emphasize that "this novelty factor, or surprise, produces an affective encounter that not only impulsively distracts from quarantine — many reported people crying or laughing uncontrollably from sheer confusion — but also, we suggest, from the stresses of corporate capitalism. One viewer, for instance, jokingly asked one of the goats *'if she had any updates to bring to the budget meeting'* (sanctuary 4)."[22] The sanctuaries received a huge increase in demand, with all the online appearances of animals booked up for three months.[23] The animals had also seen their lives change in being placed regularly in front of the cameras: some received more attention from their keepers and "worked" more often because of being preferred by the remote public — for example, cows who "played" soccer in Colorado.[24] As if part of a television series, some animals briefly became minor celebrities.

20 Jonathon Turnbull, Adam Searle, and William M. Adams, "Quarantine Encounters with Digital Animals: More-than-human Geographies of Lockdown Life," *Journal of Environmental Media* 1, s1 (2020): 6.8.

21 Ibid.

22 Ibid.

23 Ibid.

24 Barn Sanctuary, "Cows Playing Soccer with Their Human Friend," *You-Tube,* August 24, 2017, https://www.youtube.com/watch?v=u71bUdnu09g.

Another way of establishing direct and virtual contact with animals was by taking part in online visits to the exclusion zone in Ukraine after the Chernobyl nuclear disaster. Like a kind of excursion into the lands of Andrei Tarkovsky's 1979 sci-fi film *Stalker*,[25] customers found a guide who, transforming helplessness into sadness, would show the wild dogs and give them food to eat. As in a kind of emotional pornography, the camera adopts the POV (point of view) position, as if it was the viewer stroking the animals. Less intrepid was the fantasy offered by webcams, which allowed the observation of birds' nests as they grew. For Turnbull, Searle, and Adams, during the lockdown the netcams "allow for interpersonal relationships to form between viewers and individual animals, a form of digitally mediated multispecies care perhaps, albeit awkwardly entwined with more-than-human surveillance and the anthropocentric gaze."[26]

The desire to connect with nonhuman animals "relies on a physical and technological separation between watchers and watched." This ephemeral meeting with nature depends on the use of specific machines, such as computers or smartphones, certain software programs, the internet, and the multinational companies that provide the services. In this way, the digital animals become part of the whole postmodern spectacle.[27] In this respect, Alexander Pschera, speaks of how "the further we distance ourselves from nature, the more we produce, reproduce, and disseminate images of animals — all without moving a single step closer to nature in the process. Postmodern awareness of nature simulates green structures and represents animals merely by pictures, or pictures of pictures, or links to pictures. But these representations do not replace the animals; instead, they simply fake their presence."[28]

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25 Andrei Tarkovsky, dir., *Stalker* (1979).

26 Turnbull, Searle, and Adams, "Quarantine Encounters with Digital Animals."

27 Ibid.

28 Alexander Pschera, *Animal Internet: Nature and the Digital Revolution* (New York: New Vessel Press, 2016), 28.

Pschera is optimistic about the possibilities of using technology to reverse the alienation that it has itself generated, opening novel ways of communication.[29] But perhaps nonhuman animals do not think the same. In their study, Turnbull, Searle, and Adams refer to distinct attitudes by different animals, from enjoyment to rejection of the digital interactions of which they are protagonists. At this time, we cannot avoid recalling the anecdote, which also became a viral video, of the chimpanzee who, in 2015, used a stick to break the drone that was filming him — cameras taking undesired surveillance are in no way invisible, and they interfere in the habitat.

Humans Who "Return" to the "Country"

Many locked-in people adopted pets. In some countries, such as Spain, walking the furry friends allowed people to go out into the street several times a day, and not just for essential services or goods.[30] Many other people cultivated plants, made urban allotments, or grew mushrooms. These changes were transmitted across social networks, creating an imitative effect.

The desire for reconnection with the animal world also took the form of passionate gestures when the mass confinement ended: in the United States, the *Washington Post* reported an exponential increase in visits to refuges that offered the chance

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29 "Technology, which first brought about and subsequently heightened humans' alienation from nature, is now part of the solution[. …] The Animal Internet has the potential to revive the human-animal relationship, thereby reinventing nature, as it were" (ibid., 29).

30 Taylor, Montford, and Kasprzycka, "Introduction: Critical Animal Studies," 1–6. Already in the summer of 2021 it seemed that this tendency had slowed and the refuges returned to being overwhelmed; see Lulu García-Navarro, "Pet Adoption Soared during the Pandemic. But Now, Shelters Report Overcrowding," *NPR,* June 21, 2021, https://www.npr.org/2021/06/06/1003713898/pet-adoption-soared-during-the-pandemic-but-now-shelters-report-overcrowding. However, despite the journalistic headlines, it does not seem that people abandoned pets but rather that the number of adoptions had fallen. See Michael Levenson, "No, People Are Not Returning Pandemic Dogs in Droves," *New York Times,* May 22, 2021, https://www.nytimes.com/2021/05/22/us/dog-adoptions-pandemic.html.

to hug cows. Aimee Takah, owner of the Farm Animal Sanctuary in Queen Creek, Arizona, said that the cows are "just like happy pills, just to be around."[31] It seems that some visitors swore that they would become vegetarians. Suzanne Vullers of Mountain Horse Farm in Naples, New York, said that "it's a particular draw for city dwellers who have been cooped up and are seeking to immerse themselves in nature to de-stress"[32] (fig. 4). But this emotional and therapeutic approach to nonhuman animals also has its limitations and, at the same time, other animal refuges have been forced to close because of the lack of volunteers.[33]

Just as non human animals were returning to the city, humans wanted to return to the country. Already during lockdown, many of those who had the means moved to their second homes in more rural areas. The scientist Gérard Weisbuch speaks of how in fact this served to reduce the number of infected people, even though the arrival of urban dwellers brought the epidemic to rural areas, generating strong social condemnation. "It is worth noticing that the same reactions to epidemics that

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31 The *Washington Post* gathered various revealing testimonies: "Renee Behinfar lives alone in Scottsdale, Ariz. The pandemic has been painfully isolating for her and has left her longing for warmth and touch. On a recent afternoon, she finally was smothered in long-awaited hugs — by a 2,000-pound cow. 'It was really my first real hug of the year,' said Behinfar, 43, a psychologist who sought out bovine comfort with a friend[. …] When Sammy the cow, who was rescued from a dairy farm, laid her head in Behinfar's lap and fell asleep, Behinfar began to cry. The pandemic, she said, has been a time of unprecedented loneliness. 'In the end, I really didn't want to let her go,' Behinfar said"; Kellie B. Gormly, "Cow Cuddling Has Become a Thing for Lonely Hearts in the Pandemic," *Washington Post,* March 8, 2021, https://www.washingtonpost.com/lifestyle/2021/03/08/cow-cuddle-sanctuary-covid/. See also BBC Reel, "Is Cow Hugging the World's New Wellness Trend?," *BBC,* October 9, 2020, https://www.bbc.com/travel/article/20201008-is-cow-hugging-the-worlds-new-wellness-trend.

32 Gormly, "Cow Cuddling."

33 Nino Williams, "Animal Sanctuary That Saved 300 Horses in Seven Years Pushed to the Brink of Closure by Pandemic," *Wales Online,* July 27, 2021, https://www.walesonline.co.uk/news/wales-news/animal-sanctuary-saved-300-horses-21148227.

Fig. 4. Promotional image from Mountain Horse Farm in Naples, New York, 2020. Image from Facebook page.

occurred in the Middle Ages such as strangers exclusion can still be observed nowadays," Weisbuch said.[34]

After the lockdown, the limitations of the cities were exacerbated: small spaces, little light, abusive prices. In this context, many people decided to leave.[35] There was also a somewhat later phenomenon of people opting for teleworking from their main

34 "The castigation of moving city dwellers by the French media raises more questions. In general people have a poor understanding of exponential dynamics. Often exponential is interpreted as fast without taking into account the magnitude and the sign of the exponent. And too often journalists care more about negative moral opinions than scientific reasoning"; Gérard Weisbuch, "Urban Exodus and the Dynamics of COVID-19 Pandemics," *Elsevier Public Health Emergency Collection,* May 1, 2021, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7825970/.

35 See Pablo de Llano, "La utopía urgente de volver al campo," *El País,* January 25, 2021, https://elpais.com/elpais/2021/01/20/eps/1611145093_375643.html.

residence. The areas emptied by the industrial revolution promised to be repopulated in part thanks to a new wave of the back-to-the-land movement. Already since the nineteenth century, the movement from the city to the country had started to be put forward as a voluntary option that rejects the ways of life of the industrial world.

With various waves that became overwhelming at the end of the nineteenth century, the tendency was shared across different Western countries: the Victorian "simple life" movement, the *Lebensreform* in Germany, the *milieux libres* of France and Belgium, transcendentalism in the United States, and so on. In particular, adepts of the Lebensreform equated urbanization with illness, and living a more "natural" life with enjoying a better health and well-being. Many of the practices of that time were revived during the interwar period and became mass movements during the counterculture of the 1960s and 70s with the proliferation of communes.[36]

In a less countercultural sense, Julia M. Puaschunder highlights how those with higher incomes see in the countryside the possibility of having better houses in safer environments and with more resources to bring up children. Puaschunder believes that "we now may have reached an irreversible tipping point in comparison to previous pandemics, tragedies and terrorist threats to metropolitan bundles of human concentration."[37] The reason is also to be found in the internet:

> Especially those fields that traditionally benefited most from the city network effect have proven to be able to shift much of their activity into cyberspace by allowing remote work — for instance some of the large technology companies completely

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36 I explored these movements in the course "Pastoral: Utopías de la vuelta al campo," Centro de Cultura Contemporánea Barcelona, February 3–24, 2022, and I am preparing a book on the subject.

37 Julia M. Puaschunder, "The Future of the City after COVID-19: Digitionalization, Preventism and Environmentalism," *Proceedings of the ConScienS Conference on Science & Society: Pandemics and their Impact on Society* (September 28–29, 2020): 126–27.

transitioning to a remotely working taskforce. The city premium has thus shrunk, while the cost of city life has not yet adjusted downwards. But how will the post-COVID-19 digital globe now e-urbanize? […] With city populations moving to rural areas and travels to outskirts ruling over airborne travels, individuals will reconnect with nature and environmental attention will become accentuated. Already now we see attention to local communities rising. With the age of globalization having halted, we will likely return to a more environmentally sound living that pays attention to the larger environmental impact of individuals' footprint for this generation and the following.[38]

The sublime pandemic emptiness has ended up generating an immense collective desire for the pastoral that, in turn, has produced specific changes. The effects can be varied: an increase in the prices of rural properties, the gentrification of the countryside, the increase of the rural population and perhaps the reversing its lack of inhabitants in certain countries, an increase in environmental awareness. It may be an ephemeral movement, but if it lasts, it must become a movement for ecological conservation or it will end up becoming yet another image of capitalist consumption and gentrification.

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38 Ibid.

References

4ᴋ Japan-Tripgig. "Empty Kioto-4K-ASMR." *YouTube,* June 20, 2020. https://www.youtube.com/watch?v=E5bPeqiVrUk.

ᴀʙᴄ News. "Drone Video Shows Deserted Streets, Square of Venice under Lockdown." *YouTube,* April 20, 2020. https://www.youtube.com/watch?v=pI6eVDHggkA.

Barn Sanctuary. "Cows Playing Soccer with Their Human Friend." *YouTube,* August 24, 2017. https://www.youtube.com/watch?v=u71bUdnu09g.

ʙʙᴄ Reel. "Is Cow Hugging the World's New Wellness Trend?" *BBC,* October 9, 2020. https://www.bbc.com/travel/article/20201008-is-cow-hugging-the-worlds-new-wellness-trend.

Burke, Edmund. *Burke's Writings and Speeches.* Project Gutenberg, 2005. https://www.gutenberg.org/files/15043/15043-h/15043-h.htm.

Catholic Sat. "Extraordinary Moment of Prayer with Pope Francis, for the End of Coronavirus 27 March 2020 ʜᴅ." *YouTube,* March 27, 2020. https://www.youtube.com/watch?v=P6mMM8uZXkY.

Colomina, Beatriz. "Diary of a Disease." *e-flux.* March 20–August 7, 2020. https://www.e-flux.com/architecture/sick-architecture/364166/diary-of-a-disease/.

———. *X-Ray Architecture.* Zurich: Lars Müller, 2019.

Daszak, P., C. das Neves, J. Amuasi., D. Hayman, T. Kuiken, B. Roche, C. Zambrana-Torrelio, P. Buss, H. Dundarova, Y. Feferholtz, G. Foldvari, E. Igbinosa, S. Junglen, Q. Liu, G. Suzan, M. Uhart, C. Wannous, K. Woolaston, P. Mosig Reidl, K. O'Brien, U. Pascual, P. Stoett, H. Li, and H.T. Ngo, eds. *Workshop Report on Biodiversity and Pandemics of the Intergovernmental Platform on Biodiversity and Ecosystem Services.* Bonn: ɪᴘʙᴇѕ, 2020. ᴅᴏɪ: 10.5281/zenodo.4147317.

De Llano, Pablo. "La utopía urgente de volver al campo." *El País,* January 25, 2021. https://elpais.com/elpais/2021/01/20/eps/1611145093_375643.html.

García-Navarro, Lulu. "Pet Adoption Soared during the Pandemic. But Now, Shelters Report Overcrowding." *NPR,* June 21, 2021.https://www.npr.org/2021/06/06/1003713898/pet-adoption-soared-during-the-pandemic-but-now-shelters-report-overcrowding.

Gordo, Oscar, Lluís Brotons, Sergi Herrando, and Gabriel Gargallo. "Rapid Behavioural Response of Urban Birds to COVID-19." *Proceedings of the Royal Society B* 288 (2021). DOI: 10.1098/rspb.2020.2513.

Gormly, Kellie B. "Cow Cuddling Has Become a Thing for Lonely Hearts in the Pandemic." *Washington Post,* March, 8, 2021. https://www.washingtonpost.com/lifestyle/2021/03/08/cow-cuddle-sanctuary-covid/

Grusin, Richard. "Introduction," in *After Extinction,* edited by Richard Grusin. Minneapolis: University of Minnesota Press. DOI: 10.1098/rspb.2020.2513.

Jameson, Fredric. *Seeds of Time.* New York: Columbia University Press, 1994.

Levenson, Michael. "No, People Are Not Returning Pandemic Dogs in Droves." *New York Times.* May 22, 2021. https://www.nytimes.com/2021/05/22/us/dog-adoptions-pandemic.html.

Más vale tarde. "Ciervos paseando por París y delfines en los canales de Venecia: Los animales toman las ciudades durante la cuarentena." *La Sexta,* April 13, 2020. https://www.lasexta.com/programas/mas-vale-tarde/noticias/ciervos-paseando-por-paris-y-delfines-en-los-canales-de-venecia-los-animales-toman-las-ciudades-por-la-cuarentena_202004135e949bc431c6450001ed5eb0.html.

Munteán, László. "The Pandemic Sublime." *Culture Weekly.* https://cultureweekly.tumblr.com/post/618078883997204480/the-pandemic-sublime.

Museo de Bellas Artes de Bilbao. *Muntadas: La ciudad vacía.* March 18–October 25, 2021. https://bilbaomuseoa.eus/exposiciones/muntadas-la-ciudad-vacia/.

Pope. "Pope at Urbi et orbi: Full Text of His Meditation." *Vatican News,* March 27, 2020. https://www.vaticannews. va/en/pope/news/2020-03/urbi-et-orbi-pope-coronavirus-prayer-blessing.html.

Pschera, Alexander. *Animal Internet: Nature and the Digital Revolution.* New York: New Vessel Press, 2016.

Puaschunder, Julia M. "The Future of the City after COVID-19: Digitionalization, Preventism and Environmentalism." *Proceedings of the ConScienS Conference on Science & Society: Pandemics and their Impact on Society* (September 28–29, 2020): 125–29.

Skydrone Film & Futuria Production. "Paris Confiné 2020 — Lockdown Paris." *YouTube,* May 7, 2020. https:// www.youtube.com/watch?v=aoozgvkJrzI.

Sontag, Susan. *AIDS and Its Metaphors.* New York: Farrar, Straus & Giroux, 1989.

———. *Illness as Metaphor.* New York: Farrar, Straus & Giroux, 1978.

Tarkovsky, Andrei, dir. *Stalker.* 1979.

Taylor, Chloë, Kelly Struthers Montford, and Eva Kasprzycka. "Introduction: Critical Animal Studies Perspectives on Covid-19." *Animal Studies Journal* 10, no. 1 (2021). DOI: 10.14453/asj.v10i1.1.

Turnbull, Jonathon, Adam Searle, and William M. Adams. "Quarantine Encounters with Digital Animals: More-than-human Geographies of Lockdown Life." *Journal of Environmental Media* 1, s1 (2020): 6.1–10. DOI: 10.1386/ jem_00027_1.

Vardi, Reut, Obed Berger-Tal, and Uri Roll. "iNaturalist Insights Illuminate COVID-19 Effects on Large Mammals in Urban Centres." *Biological Conservation* 254 (February 2021). DOI: j.biocon.2021.108953.

Weisbuch, Gérard. "Urban Exodus and the Dynamics of COVID-19 Pandemics." *Elsevier Public Health Emergency Collection,* May 1, 2021. https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC7825970/.

Williams, Nino. "Animal Sanctuary That Saved 300 Horses in Seven Years Pushed to the Brink of Closure by Pandemic." *Wales Online,* July 27, 2021. https://www.walesonline.co.uk/news/wales-news/animal-sanctuary-saved-300-horses-21148227.

Zulaika, Joseba, Guadalupe Echevarría, Antoni Muntadas, and Arantxa Rodríguez. *Muntadas: La ciudad vacía/The Empty City.* Bilbao: Museo de Bellas Artes de Bilbao, 2021.

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