Science in culture

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Residents of Harlem, New York City, wait to be tested for COVID-19.

The double toll of viruses and social injustice

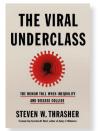
COVID-19 is just the latest disease to expose persistent racism and poverty. **By Jennifer Hochschild**

he COVID-19 pandemic has made clear how social, economic, racial and political disadvantages occur alongside – and help to cause – inequities in health conditions and health care. People living in crowded circumstances, individuals with existing conditions and those working in unprotected, public-facing settings were all hit earlier and harder than others. From polio in the 1950s to the HIV epidemic of the 1980s and the Ebola disaster of the 2010s, viruses rampage along structural inequalities.

Steven Thrasher's *The Viral Underclass* explores these inequalities through powerful case studies of people in the United States who had been doubly harmed – both by viruses and by the circumstances surrounding their illnesses. Examples range from university wrestler Michael Johnson, who received a 30-year prison sentence for having unprotected sex while infected with HIV, to Black residents

of Brooklyn, New York, who could not lower their risk of getting COVID-19 by fleeing to the countryside or improvising a home office.

The book includes Thrasher's original research, analyses of others' work, reflections on political and economic structures, and on analytical and philosophical concepts. Although Thrasher has a PhD in American studies and has published in academic journals, he is primarily an investigative journalist. *The Viral Underclass* is mostly a descriptive



The Viral Underclass: The Human Toll When Inequality and Disease Collide Steven W. Thrasher Celadon (2022) work of advocacy. If I evaluate it as a social scientist, I find it accurate and insightful, but analytically incomplete – I kept scribbling notes such as "but what about XXX?" in the margins. If I evaluate it as a political and moral plea, I find it moving and absorbing yet insufficient – I kept scribbling, "but what do we do?".

Thrasher starts with a crucial observation made as COVID-19 spread in New York in March 2020: the maps of areas with the highest risk of SARS-CoV-2 infections and deaths were the same as those showing where people were most likely to become infected with HIV, get incarcerated or be harassed by police.

As with other disasters such as floods and fires, viruses do not consciously discriminate, Thrasher says. But "their effects do discriminate against the bodies of the underclass, because those bodies have been placed in proximity to danger by the structural design of powerful humans". That design encompasses capitalism, racism, environmental destruction, speciesism, ableism, heteronormativity, individualized shame, as well as a 'carceral state' (in which the population is controlled by fear of criminalization and imprisonment) and the myth that white people are immune to social evils ranging from illness to unjust treatment. The combined effect is what Thrasher describes as the United States' distinctive and damaging insistence on individual responsibility, even in the face of shared needs and numerous inequalities.

Johnson's story runs through several chapters. He was a Black athlete who had been recruited by a small university in Missouri. In 2013, he was accused of having had unprotected sex with at least five men, without telling them that he had HIV. He maintained his innocence but, in 2015, was sentenced to two concurrent prison terms of 30 years each. Many protested against the sentence, and Johnson was released in 2019 after an appeals court deemed his trial to be "fundamentally unfair".

The case of Andrew Cuomo, a former Democrat governor of New York, shows a different dynamic, in which a decision by a powerful person affects many powerless individuals. Under Cuomo, a state advisory released on 25 March 2020 directed New York's nursing homes to accept people who had been hospitalized with confirmed or suspected COVID-19, as long as they were medically stable. Nursing homes were not permitted to test the prospective residents for the coronavirus. More than 6,000 people with COVID-19 were moved from hospitals to nursing homes before 8 May 2020, when the policy was changed. An official from the administration of then-president Donald Trump accused Cuomo of planting

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"seeds of infection that killed thousands of grandmothers and grandfathers", an opinion shared by some Democrats.

Thrasher is an excellent investigator. The reader sees how and why the narratives develop in particular ways, and feels fury and despair, as well as occasional glimmers of hope. But the stories also leave lots of questions. Wasn't the core exploitation of Johnson the fact that he was allowed to graduate from high school despite being barely literate, and had been enrolled in a university just because he would add lustre to its wrestling team? How much should Cuomo be blamed for (according to him and his followers) following the best medical advice for rehabilitating older people, during the first panicky months of 2020?

Thrasher assumes that if only other people had the right perspectives and information, their values would lead them to endorse his social and policy proposals. In his view, knowing the right context would surely lead us all to agree that Johnson did not deserve a substantial jail sentence, and that the US government broadly failed to disseminate HIV medication because "the priority became protecting private pharma profits and intellectual property over providing public prophylaxis". Thrasher might be correct on both points, but if recent US politics has taught us anything, it is that people who share commitments to justice and dignity cannot be assumed to agree on appropriate policies and practices to bring them into being.

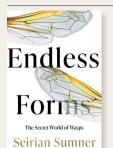
The Viral Underclass will provide motivation and evidence to people who already agree with Thrasher's views, but it might not be persuasive to others. Something more is needed for those unconvinced that the United States has a viral underclass or, at least, that the members of any such group are not responsible for their situation. What is to be done? The book's list of unjust structural designs is dauntingly long and deep; it is insufficient to conclude, as Thrasher does, that "if we believe that 'you' and 'I' are not separate, but that we face common challenges, then our hierarchies might melt away". Well, I wish, but history shows that a commitment to the collective good does not imply the rejection of hierarchies.

Thrasher knows, of course, that his moral commitment is not a plan of action or even the beginning of one. So he offers one more proposition: that viruses "offer us perhaps the best possibility of a new ethic of care". They "have the potential to help us make a world predicated upon love and mutual respect for all living things".

I hope Thrasher is right, but I still think that we also urgently need a serious debate about structural reforms for the collective punishment he posits.

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Books in brief



DAVID J. ANDERSON

THE

NATURE OF

THE BEAST

HOW

EMOTIONS

GVIDE US

Endless Forms

Seirian Sumner William Collins (2022)

There are more than 100,000 species of wasp, compared with a mere 22,000 for bees. Wasps are crucial pest controllers, pollinators, seed dispersers and decomposers. Yet much less is known about them than about bees, writes entomologist Seirian Sumner, who disliked wasps as a child — but embraced them during her PhD, after an experience lying flat on a jungle floor with a wasp nest above her nose. Her enchanted, engaging study observes that "bees are simply wasps that have forgotten how to hunt".

The Nature of the Beast

David J. Anderson Basic (2022)

What are emotions, and what is their role? Neurobiologist David Anderson explains all the ways in which we cannot know. Brain scanning reveals blood flow, not electrical activity — and it's unclear whether emotion causes brain activity or vice versa. Scientists resemble the blind men in the parable, describing separate parts of an elephant, and "don't even have the same word for 'elephant'", he says. Animals — key to this deep, delightful book — cannot, alas, confirm or deny pet-owners' emotional readings of their behaviour.



Beyond Measure

James Vincent Faber (2022)

Journalist James Vincent became engrossed in measurement while interviewing scientists in 2018, when the kilogram was formally redefined in terms of Planck's constant. His appealing book encompasses much more than science; measurement, he says, is "a mirror to society itself". Consider warehouse workers whose labours are monitored every second — a complex relationship that Vincent compares to William Blake's classic satirical portrait of Isaac Newton obsessively measuring minutiae with a compass.



Transformer

Nick Lane Profile (2022)

Biology has for too long been dominated by genetic studies, argues biochemist Nick Lane. Genes do not reveal whether a cell is alive or dead, nor how it undergoes one billion metabolic transformations per second. These involve the Krebs cycle, a sequence of reactions by which cells generate energy, and the focus of this analysis. Deeply researched and cogently written, it is sometimes tough going, as Lane admits: "for many people", biochemistry is "full of runic symbols that suggest a priesthood intent on concealing the path to meaning".



Confronting Climate Gridlock

Daniel S. Cohan Yale Univ. Press (2022)

"Faced with the grandest environmental challenge of our times," observes environmental engineer Daniel Cohan, "the US Congress has repeatedly failed." In his proposals for how to break this gridlock, he argues that action will come not from one piece of legislation, but from international diplomacy to leverage US actions, policy to stimulate innovation, and investment in infrastructure. Chapters consider technological efficiency, clean fuels, carbon capture and geoengineering. **Andrew Robinson**