

5 Black Health, Ethics, and Global Ecology

Ernst M. Conradie

Introduction

The reflections offered here come from someone the South African government classified as white or as European under apartheid, who continues to be classified in that manner under affirmative action, and who has worked at a historically black university, the University of the Western Cape, since 1993. I teach systematic theology and ethics in a religion and theology department, and I focus on Christian ecotheology. I welcome theologian Jürgen Moltmann's reversal of interlocutors in calling for Latin American liberation theology for the First World, black theology for white people, and feminist theology for men. Consistent with backgrounds and beliefs, I treasure finding ways to reflect about common challenges with colleagues and students, both locally and internationally, in ways that are not limited to one set of interlocutors but remain ecumenical in both vision and scope.¹

Two contrasting observations within global public discourse on the COVID-19 pandemic offer me a point of departure for reflection on black health. First, the pandemic has exposed grave social and economic inequalities (e.g., infections, associated disease burden, housing conditions, access to water and sanitation for personal hygiene, access to healthcare and to healthcare funding). Racial, gender, geographic location, and age reinforce economic inequalities of class. Public health statistics on infections and deaths only partially capture such inequalities. For example, where, how, and who tests for COVID-19, as well as the costs of testing, can influence data. In many instances, I propose, those who do not count to the powers-that-be are not counted. Inversely, what public officials and health experts cannot count—and, for me, human dignity comes to mind—does not really count within this public calculus.

The second observation is a truism: the pandemic has infected, and hence affected, all human societies, cultures, racial-ethnic groups, and tribes. While the virus possibly is the result of illegal global trade in animal products, and was first spread by travelling classes, it is not merely a white affluent disease. The novel coronavirus has reached every nook and cranny of the world, so complete isolation is impossible. This current outbreak has

reinforced, in theory at least, the equal vulnerability of the human body to viruses such as COVID-19. In practice, the same virus affects people in different ways depending on age, immune system, and underlying comorbidity. The resulting disease cannot be addressed selectively from one demographic to another, for example addressed among privileged groups but not among less privileged groups. If inadequate sanitizing due to lack of access or instruction leads to the spread of virus among less affluent populations, it has negative impacts on higher classes. The weakest link matters. This essay situates the current COVID outbreak within an analysis of broader human and environmental ecologies in which it operates.

Perspectives on Ecologies and Systems

In understanding the human and environmental ecologies in which we operate, there are creative tensions between the global and the local, the public and the private, the similar and the dissimilar, the universal and the particular. It is a focus upon the particular that allows for a discovery of what may be universal, or upon the private (e.g., patriarchy in the household) that allows for understanding of what is manifest in public. But a recognition of what is universal reinforces the significance of the particular.

The implication of my general observations is this: one has to understand black health in a planetary perspective and understand the health of the blue planet from a black perspective (i.e., from the perspective of how planetary health is manifested in black health). I argue that the one cannot be addressed adequately without the other. One needs to zoom out to see the bigger picture of the blue planet, but this is only possible from outer space and with sophisticated levels of technology, which necessarily skews the picture. Therefore, it also is necessary to zoom in on individual cases of health that result in black pain. There is a white fallacy that seeing the blue planet is best done from a white perspective because of white masculine, muscular science. Another part of the fallacy is that science is indeed a white prerogative and domain, which is clearly not the case. Instead, what is needed are perspectives on these urgencies from a broad range of intellectual vantage points, including nature conservation, social justice, and socio-structural analytical frameworks, and that incorporate ethical and experiential concerns identified by persons across spectrums of race, ethnicity, gender, geography, sexual orientation, and faith.²

Discourse on environmental racism across the Atlantic, from the United States to South Africa, has rightly focused on issues of toxic waste. It is not possible to remain healthy in a toxic environment. This applies especially to the water we drink, the air we breathe, and the food we eat.³ The energy we use is a source of many of these toxins so that all four the primal elements (earth, fire, water, air) are involved. However, the main point is that it is not possible to speak of a collective “we” here: the sources of pollution are not equally distributed amongst the population, while the victims

are predominantly those already marginalized—again along differences of race, gender, age, and especially class and caste. The sickness may be systemic but the symptoms are particular.

This argument is typically derived from experiences and observations at a local level, in local neighborhoods, based on local testimonies. However, there is a growing recognition that the same problem applies as one zooms out. The underlying systemic disease is not only applicable to ecosystems at a micro or even a macro level but also to whole bioregions and indeed to earth systems.⁴

The terms *earth system* and *earth system science* refer to the way planetary systems interact. These dimensions include the biosphere (living organisms), the atmosphere (various gases in different layers), the hydrosphere (oceans, fresh water, ice), and the lithosphere (solid earth). Each of these can be further subdivided and all are influenced by fluctuations in the earth's axis, the earth's orbit around the sun, solar radiation, the moon, and other forces in the solar system. One would also need to add the influence of the noosphere (the human mind) and its outcomes in terms of technology, culture, and (contested) notions of civilization.

Earth system science (in the singular) emerged over the past two decades to study the interaction between these sub-systems. The landmark “2001 Amsterdam Declaration on Earth System Science,” which the International Geosphere-Biosphere Programme issued, reported that the relative stability that characterized the Holocene (roughly the 12,000 years since the last ice age) and also the Pleistocene (roughly the last 2.5 million years characterized by intermittent ice ages) had become disturbed.⁵ The report observed that “The interactions and feedbacks between the component parts are complex and exhibit multi-scale temporal and spatial variability” and added the following:

Human activities are significantly influencing Earth's environment in many ways in addition to greenhouse gas emissions and climate change. Anthropogenic changes to Earth's land surface, oceans, coasts and atmosphere and to biological diversity, the water cycle and biogeochemical cycles are clearly identifiable beyond natural variability. They are equal to some of the great forces of nature in their extent and impact. Many are accelerating. Global change is real and is happening now... . Earth System dynamics are characterised by critical thresholds and abrupt changes. Human activities could inadvertently trigger such changes with severe consequences for Earth's environment and inhabitants. The Earth System has operated in different states over the last half million years, with abrupt transitions (a decade or less) sometimes occurring between them. Human activities have the potential to switch the Earth System to alternative modes of operation that may prove irreversible and less hospitable to humans and other life. The probability of a human-driven abrupt change in Earth's environment has yet to be

quantified but is not negligible... . In terms of some key environmental parameters, the Earth System has moved well outside the range of the natural variability exhibited over the last half million years at least. The nature of changes now occurring simultaneously in the Earth System, their magnitudes and rates of change, are unprecedented. The Earth is currently operating in a no-analogue state.⁶

Scholars have conducted ongoing research in the field of earth system science since 2001. Some have monitored changes in biogeochemical cycles regarding the nine planetary boundaries that define “a safe operating space for humanity based on the intrinsic biophysical processes that regulate the stability of the Earth system.”⁷ The nine boundaries focus on climate change, biosphere integrity, or the rate of biodiversity loss, stratospheric ozone depletion, ocean acidification, biogeochemical flows, especially phosphorous and nitrogen, land-system change, freshwater use, atmospheric aerosol loading, and the introduction of novel entities such as chemical pollution. The assumption is that these boundaries describe a state of the earth system that does not risk destabilizing the Holocene epoch within which human civilizations emerged.⁸ Humanity has faced environmental constraints throughout its history at local and regional levels, but one today should recognize constraints at the planetary level; furthermore, the magnitude of challenges now is vastly different than past generations.⁹

With regard to black health and environmental racism, as mentioned above, one of the planetary boundaries is the introduction of novel entities in the form of chemical pollution. Chemicals form part of nature, but their concentration is the result of human industries and power relations involved. More than 100,000 chemicals are used industrially, and it is well-nigh impossible to monitor the health impact of those chemicals in great detail; hence, black health in highly industrialized societies is important—for the sake of the victims of forces well beyond their control but also for all other people who perhaps are less exposed but still vulnerable to chemical use. Put bluntly, black health should be a concern for affluent whites as well as for black people.¹⁰

From the perspective of earth system science, people predicted pandemics such as COVID-19 before the World Health Organization labelled COVID a pandemic in 2020.¹¹ I think the pandemic will last longer than some persons expect; moreover, international citizens should anticipate further outbreaks involving different viruses and not simply mutations of existing viruses.¹² My predictions are sobering to me, given past and present impacts of COVID on human health and the global economy (e.g., unemployment, poverty, hunger).

Yet again, from the perspective of earth system science, I do not think the COVID pandemic is the worst challenge humanity will face during the twenty-first century. A 2009 report, updated in 2015, described the interaction

between the nine planetary boundaries. The climate and the biosphere are core because the climate system is a manifestation of the amount, distribution, and net balance of energy at Earth's surface, while the biosphere regulates material and energy flows in the earth system and determines its resilience to abrupt and gradual change.¹³ Both the climate and the biosphere have the potential to drive the Earth system into a new state should the two items be transgressed substantially and persistently. As the International Geosphere-Biosphere Programme suggested in 2015, "transgressing one or more planetary boundaries may be deleterious or even catastrophic due to the risk of crossing thresholds that will trigger non-linear, abrupt environmental change within continental to planetary-scale systems."¹⁴

The programme sought to quantify such boundaries to circumscribe what a safe operating space might be. On that basis, the programme could define a zone of uncertainty, with increasing levels of risk beyond such a boundary. The programme's findings suggest that nitrogen and phosphorous flows, together with genetic diversity loss, already pose high risks and that indicators for climate change and land-system change are in a zone of uncertainty with increasing levels of risk.¹⁵ During the same year, 2015, chemist Will Steffen and his research colleagues spelled out the implications of a failure to heed planetary boundaries:

Incremental linear changes to the present socioeconomic system are not enough to stabilize the Earth System. Widespread, rapid, and fundamental transformations will likely be required to reduce the risk of crossing the threshold and locking in the Hothouse Earth pathway; these include changes in behavior, technology and innovation, governance, and values... . The Stabilized Earth trajectory requires deliberate management of humanity's relationship with the rest of the Earth System if the world is to avoid crossing a planetary threshold. We suggest that a deep transformation based on a fundamental reorientation of human values, equity, behavior, institutions, economies, and technologies is required.¹⁶

Such notions of planetary boundaries have inspired a so-called lifebelt, or doughnut, economics that suggests a safe operating space for the economy between outer planetary boundaries and inner social boundaries vis-à-vis minimum requirements for decent living in terms of water, nutrition, healthcare, education, and equity—those boundaries appear as a lifebelt with a hole in the middle, hence the name. My sense is that two implications follow from such observations. On the one hand, people worldwide should expect inequalities to become aggravated as present challenges deepen and worsen. Climate change will affect all human beings, indeed all forms of life on this planet, but not equally. This occurrence translates into moral and ethical principles of common but differentiated responsibilities: countries with historically high carbon emissions should aid countries with

historically low carbon emissions, particularly in terms of mitigation and adaptation efforts, technological transfer, and financial support.

Conclusion

I think it is important to recognize inequality as at least one of the underlying causes of instability among earth systems. One needs to look no further than socioeconomic and other inequalities (e.g., sex, race, gender, ethnicity, class, caste) to understand this truism. In 2009, the South African Council of Churches asserted inequality was the reason many people worldwide thwarted efforts to address climate change.¹⁷ Consider carbon emissions. Consumer culture and significant acceleration in human activity across many metrics since 1945 have correlated directly with and manifested clearly in rising emissions. In highly unequal societies, such phenomena have had a double effect: lower and middle classes have aspired to emulate the lifestyles of affluent classes, only for those with affluence to thwart their dreams.

It comes as no surprise to me that consumerism, supported by the so-called gospel of prosperity, has spread rapidly from the North Atlantic to Asia, Latin America, Eastern Europe, and Africa. To maintain their position amidst the instabilities associated with stark inequalities, affluent people have sought to protect their privilege. For that reason, it is exceptionally hard to move the global economy toward sustainable alternatives or to advance collective thinking beyond hope in technological miracles to address what is at heart a cultural, moral, and spiritual problem.¹⁸

Notes

- 1 Jürgen Moltmann, *Experiences in Theology: Ways and Forms of Christian Theology* (Minneapolis, MN: Fortress, 2000).
- 2 In South Africa, the tension between green (nature conservation) and brown (social justice) agendas is a familiar topic of conversation. Red infers socialist movements; pink lesbian, gay, bisexual, transgender, queer or questioning, intersex, and asexual or allied; and purple faith-based organizations. See James Cone, “Whose Earth Is It Anyway?,” in Dieter T. Hessel and Larry Rasmussen, eds., *Earth Habitat: Eco-Injustices and the Church’s Response* (Minneapolis, MN: Fortress Press, 2000), 23–32; and Steve de Gruchy, *Keeping Body and Soul Together: Reflections by Steve de Gruchy on Theology and Development* (Pietermaritzburg, South Africa: Cluster Publications, 2015).
- 3 See Ernst M. Conradie and David N. Field *A Rainbow Over the Land: Equipping Christians to Be Earthkeepers* (Wellington, South Africa: Bible Media, 2016).
- 4 Ernst M. Conradie, *Secular Discourse on Sin in the Anthropocene: What’s Wrong with the World?* (Langham, MD: Lexington Books, 2020).
- 5 See Berrien Moore III et al., “2001 Amsterdam Declaration on Earth System Science,” *International Geosphere-Biosphere Programme*, July 13, 2001, <http://www.igbp.net/about/history/2001amsterdamdeclarationonearthsystemscience.4.1b8ae20512db692f2a680001312.html>.
- 6 Moore et al., “2001 Amsterdam Declaration.”

- 7 Will Steffen et al., “Planetary Boundaries: Guiding Human Development on a Changing Planet,” *Science* 347 (January 2015): 737.
- 8 Will Steffen et al., “Planetary Boundaries,” 747.
- 9 Steffen et al., “Planetary Boundaries,” 737.
- 10 Tyrone B. Hayes and Martin Hansen extend concerns about environmental racism to concerns for frogs, the proverbial canaries in the mine that serve as warnings that things have gone wrong. Hayes and Hansen, “From Silent Spring to Silent Night: Agrochemicals and the Anthropocene,” *Elementa Science of Anthropocene* 5 (September 2017), <https://www.elementascience.org/articles/10.1525/elementa.246/>.
- 11 “WHO Director-General’s Opening Remarks at the Media Briefing on COVID-19,” *World Health Organization*, March 11, 2020, <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19>. March 11, 2020.
- 12 See, for example, James Gorman, “Potential for New Coronaviruses May Be Greater than Known,” *New York Times*, February 16, 2021.
- 13 See Steffen et al., “Planetary Boundaries,” 737.
- 14 Rockström et al., “Planetary Boundaries.”
- 15 See Steffen et al., “Planetary Boundaries.”
- 16 Will Steffen et al., “Trajectories of the Earth System in the Anthropocene,” *Proceedings of the National Academy of Sciences of the United States of America* 115 (August 2018): 8257.
- 17 South African Council of Churches, *Climate Change: A Challenge to the Churches in South Africa* (Marshalltown, South Africa: South African Council of Churches, 2009).
- 18 For a set of recent reflections structured around global inequalities, see Ernst M. Conradie and Hilda P. Koster, eds., *The T&T Clark Handbook on Christian Theology and Climate Change* (New York, NY: Bloomsbury, 2019).