

**AUTHOR:**Solomon R. Benatar^{1,2} **AFFILIATIONS:**¹Emeritus Professor of Medicine and Senior Scholar, University of Cape Town, Cape Town, South Africa²Adjunct Professor, Dalla Lana School of Public Health, University of Toronto, Toronto, Canada**CORRESPONDENCE TO:**

Solomon Benatar

EMAIL:

Solomon.benatar@uct.ac.za

DATES:**Received:** 30 Jan. 2022**Revised:** 02 Aug. 2022**Accepted:** 06 Oct. 2022**Published:** 30 Nov. 2022**HOW TO CITE:**Benatar SR. Health in a post-COVID-19 world. *S Afr J Sci.* 2022;118(11/12), Art. #14995. <https://doi.org/10.17159/sajs.2022/14995>**ARTICLE INCLUDES:**

- Peer review
- [Supplementary material](#)

DATA AVAILABILITY:

- Open data set
- All data included
- On request from author(s)
- Not available
- Not applicable

EDITOR:

Leslie Swartz

KEYWORDS:

new paradigms, post-COVID world, capacity for change, impediments, hope

FUNDING:

University of Cape Town



Health in a post-COVID-19 world

In the previous article in this issue (*S Afr J Sci.* 2022;118(11/12), Art. #13165), the emergence and spread of COVID-19 *pari passu* with climate change and planetary degradation were interpreted as late manifestations in the trend towards gradual decline into disorder (entropy) in an unstable and ecologically threatened planet. In this article, as we contemplate a post-COVID world, the question is whether new insights could generate courageous, prescient leadership towards new paradigms of health, politics, economics, society, and our relationship with nature. A gloomy prognosis is postulated because of the power of many impediments to such changes, both in an increasingly polarised world and in South Africa as a microcosm. Despite many squandered opportunities and a decline in local and global cooperation between all who have a stake in the future, some hope is retained for innovative shifts towards sustainable futures.

Significance:

Precarious local and global instabilities are vivid reminders of our interconnectedness with each other and with nature. Insights into local and global threats and opportunities, call for paradigm shifts in thinking about and taking action towards a potentially sustainable future in a country that has its own unique history and problems but is also a microcosm of the world. The impediments to making appropriately constructive paradigm shifts in many countries with their tendencies to authoritarianism that threaten peace and democracy, are even more complex in South Africa, where opportunities for dialogue and cooperation are diminishing. Retaining some hope, with vision and courage for innovative shifts towards a sustainable economic/ecological paradigm locally and globally, is arguably essential.

The key to good decision-making is not knowledge. It is understanding. We are swimming in the former. We are desperately lacking in the latter.

Malcom Gladwell¹

Introduction

Our global predicament today can be viewed as an interregnum between returning us to the *unsustainable* status quo before the COVID pandemic, or to embracing paradigm shifts that could propel human beings collectively towards developing *sustainable* long-term goals. The short-sighted choice would be limited to the current pandemic control measures, new vaccines, some strengthening of healthcare systems, small-scale poverty alleviation, and development of renewable forms of energy. A more desirable trajectory would include a new vision of the future, supported by transdisciplinary teams of scholars/researchers evaluating means of changing complex global systems, and public participation in creating the political will and administrative capacity to grasp such daunting challenges.^{2,3} Wise stewardship into the future would be characterised by more modest material entitlements, enhanced attention to energy conservation and making peace rather than war.

Which path will be chosen? By whom will the choice be made? Will we continue as a global community along the current socially, ethically and ecologically unsustainable trajectory of 'progress', defined as expanding knowledge, developing new technology, promoting endless economic growth and philanthropy? Are we trapped within the ideological illusion of endless, market-driven, economic growth that currently pervades and corrupts all aspects of our lives? Alternatively, do we have the will and capacity to take the more difficult, but potentially sustainable trajectory through new framings, metaphors, and paradigms of living⁴⁻⁷, with a new ethics for 'being' that is sensitive to future generations?⁸⁻¹¹ These ideas, expressed briefly here are more expansively articulated in many books and articles, some referenced herein with many more cited in those publications and in a rapidly expanding literature.

Return to the status quo ante?

It is unlikely that the world could be returned to a resemblance of the status quo ante. Yet it seems from current trends that the most privileged and powerful, with their conservative tendencies, are attempting, as in the past, to restore *their normality* without reducing disparities or their consumption patterns contributing to climate change. Within this scenario, climate change disasters would escalate on a continually degrading planet^{12,13}, with newly emerging infectious diseases and increasing anti-microbial resistance. Thirty years ago, US Vice President, Al Gore, opined that those with '... a vested interest in the status quo will probably continue to stifle any meaningful change, until enough citizens are willing to speak out and urge their leaders to bring the earth back into balance'¹⁴.

This path further reveals the current global economic system as both fraudulent and immoral – even considered as a crime against humanity^{15,16} for having spawned both extremely wealthy and desperately poor population groups through its focus on profit and wealth accumulation by exploitation of the middle and poor classes, and free-riding on the environment^{10,11,17}. The resulting perpetuation of divergencies in health, wealth and living status, exemplified by life expectancies at birth that differ by up to 30 years, the unseen suffering associated with egregious differences in wealth and health, and neglect of our vital biosphere, could be interpreted as consequences of ecocidal activities with genocidal effects.

In her analytic comparison of the world in 1914 and 2014, Margaret McMillan perceived disquieting parallels between failure to understand the factors that propelled Europe to war in 1914, and events in the world 100 years later that have placed us at risk of a similar catastrophe.¹⁸ Paul Rogers concurred that by 2020, available evidence inspired little confidence that there was sufficient wisdom to avert the destructive potential of some scientific and

technological developments, even if inevitable catastrophes had not yet materialised.¹⁹ John Gray contended that states' struggle for power over natural resources, had led to an era of geopolitical rivalry reminiscent of a century ago, but with new participants and higher stakes.²⁰ Other eloquent descriptions of the ravages of the global political economy, reveal the extent to which our inability to learn from history contributes to failure of the much cherished projects of international peace and world government.^{21–23} Consequent ongoing human conflict and domino effects will enhance a trajectory of progressive ecosystem entropy, with a potentially fatal outcome for human life on our planet.

A new trajectory of progress: Changing our global/planetary paradigm

Recognition and acknowledgement of tipping points

Our position at many tipping points^{24,25} makes it essential to acknowledge that solutions to 21st-century problems of global health and security are not accessible solely through scientific and technological innovation, biomedicine and endless economic growth within our current competitive, hyper-individualistic paradigm that has given rise to these problems^{26,27}. *Knowing how* ideas sparked the 'swerve' into the modern age through the Renaissance²⁸ could provide the impetus to pursuing another 'swerve' through new paradigms of health, politics, economics and social relations towards improved lives on a sustainable planet²⁹. In contemporary language, this would involve updating our cerebral software and its now defunct 'processes' with a new program geared to the reality of our time.

Changing the health paradigm

The first challenge is to understand that dangerous health inequities within and between countries cannot be addressed by highly technical, individualised approaches to health care. Contemplating health from the broadest perspective is crucial to revealing the myriad forces influencing population health that need to be corrected. The valid criticism that a narrow *focus* on care predominantly for patients with COVID excessively displaced care for patients with other often urgent medical and surgical needs, does not require discarding the biomedical focus on diseases that is so vital to caring for individual people through medicine's enduring bedside technical and humanitarian skills.³⁰ It does mean that a comprehensive way of thinking about population health is needed by extending the notion of health beyond the individualistic, biomedical model towards a holistic, ecological perspective.^{2,5,9}

In the face of still evolving global economic and health crises in a low-growth economy, a vital question for upper- and middle-income countries is not whether more money is needed for health care or the well-being of their citizens, but rather whether available resources could be spent more wisely. The goal would be to protect/improve social infrastructures and provide adequate social living conditions with optimal, easily accessible and effective care services. This could be achieved through transparent, accountable resource allocation procedures³¹, and a continuing quest for greater equity in balanced healthcare expenditure on individual health and public health through coordinated, evenly spread teams of health professionals^{32–34}.

Changing the political paradigm

At the beginning of this century, Michael MccGwire argued that the adversarial national security paradigm's evolution over the previous 60 years, shaped by beliefs of specific times and events, had lost its way.³⁵ He described this now dying paradigm as characterised by: (1) *relationships* of exclusion, confrontation, domination and enmity; (2) *diplomacy* that is adversarial, intransigent, unilateral, vengeful and exploitative; (3) *power* that maintains superiority through compulsion and punishment; and (4) *security* based on inequality, deterrence, coercion, and national interests. He then advocated a shift to a new paradigm characterised by: (1) inclusive and engaging relationships; (2) cooperative and reciprocal diplomacy; (3) the use of power to persuade and reward; and (4) the pursuit of security through re-assurance and cooperation on a global scale.³⁶ Much remains to be learned and implemented from his prescient analysis and from new political ideas for an era beyond the Anthropocene.³⁷

Changing the economic paradigm and the values guiding global governance

Examining the impact of the political economy on planetary health provides deeper insights into our current predicament and highlights the need to strive for a peaceful, globally sustainable economy.^{38,39} In so doing we should contemplate that during the 4½ billion years' history of our planet, *Homo sapiens* appeared about 200 000 years ago and 'modern' life began only 10 000 years ago with the Agricultural Revolution. Carbon dioxide levels in the atmosphere remained somewhat stable at below 300 parts per million, and life on earth was sustainable until the First and Second Industrial Revolutions 270 years ago, and were intensified by the first oil-producing wells in 1857. Fossil fuels accumulated over millions of years have been exponentially extracted and consumed, especially over the past 50 years. Increasing easy access to food and improved living conditions enhanced the quality of human lives, extended life expectancy at birth from less than 40 years to almost 80 years for some and allowed the world population to increase from 1 billion people in 1800 to 2.5 billion in 1950 and almost 8 billion today.

Widening disparities in health and wealth, despite massive economic growth and global ethical frameworks such as the Universal Declaration of Human Rights, questions the values that direct our actions today in global health. Global governance for health⁴⁰ has been critiqued on grounds inclusive of duty dumping⁴¹, exploitation⁴² and incoherence^{43,44}. The foundations of modern society's current approaches, based on economic liberalism, corporatism, managerialism, a focus on biomedical science, respect for human rights limited to civil and political rights, and healthcare services within an exploitative 'medical industrial complex', are distorted by power asymmetry and so-called 'global social norms' that limit the range of choice and constrain corrective action on health inequity.^{40,42,45}

J.K. Galbraith's insights into the complacency of affluence and the need for a humane economic agenda^{46,47}, as well as many cautions against being fooled by a window-dressing agenda in feel-good societies, remain relevant. Ignoring such advice while conditions of life remain desperate for the majority in the face of continuing exponential consumption of energy by a minority, without concern for the future, augurs poorly for achieving a secure world. Global challenges and crises will likely get worse within such a trajectory, as presciently predicted indirectly decades ago^{48,49} and directly more recently^{50,51}. Such trends reveal limited insight into the health implications for wealthy countries if an uncontrolled pandemic becomes prolonged⁵², and have neither moral justification nor any basis in any ethical theory. Reports that 50% of the initial COVID-19 vaccine supply was purchased for use by 13% of the world population, reflects the striking lack of solidarity with distant others (vaccine nationalism) during a devastating global pandemic.⁵³

Correction requires new mental software capable of seeking global political solutions to counter powerful global political forces detrimental to health and planetary sustainability. The challenge is to develop an ethically justifiable economic path towards solidarity, cooperation, interdependence, a sense of responsibility for future life on earth, a fairer international distribution of resources³¹, and a continuing quest for greater equity in health care.

A good starting point would be to redefine severe poverty more realistically, from the current level of per capita income of less than USD2/day to USD4–5/day, to catalyse significant poverty alleviation. This could strongly supplement poverty alleviation endeavours such as the Brazilian Bolsa Familia scheme and others cited in the WHO Commission on the Social Determinants of Health report.⁵⁴

Sustainable health needs to be rooted in commitments to global solidarity and shared responsibility, and in wise global governance for health within an economic and political system that serves a global community of healthy people on a healthy planet. Rectifying the regnant economic system must be preceded by recognition of how this is sustained by distortions of our values; for example, the claimed rights by some for excessive freedom to satisfy endless entitlements without attention to the associated balancing responsibilities that are essential to satisfying rights and protecting the common good.²⁶

A comprehensive reconsideration of the current economic paradigm⁵⁵ should be enhanced by questioning the validity of excessively affluent lifestyles. More resources should be allocated to improving the public infrastructure and institutions of social reproduction (e.g. education, health care), and placing quantifiable monetary value on the unpaid work of women for contributions to society that are currently not included in measurements of GDP. Revisions to how debt is created and perpetuated, as well as new forms of taxation, would be vital to supporting better lives and health in low- and middle-income countries, and to discouraging wealthy countries from living at the expense of future generations.⁵⁶

Social innovation

Enlightenment values of freedom, rationality and economic growth are the drivers of innovation. Yet innovation is preferentially limited to siloed scientific progress and improvements in technological applications, not least in the predatory power of war to accumulate resources as a mechanism for survival.⁵⁷ New broadly based socially innovative ideas and projects are needed. For example, a 'not-for-profit world beyond capitalism and economic growth'⁵⁸, aimed at narrowing egregious disparities in human flourishing, could shift the global mindset by influencing the hearts and minds of whole populations. Collective social efforts to reduce anger and conflict through wider community interest and stake-holding in developing a sustainable future, shaped by innovation, political commitment, and social action^{59,60}, could become a means of promoting a shift towards solidarity and cooperation within a new narrative for planetary survival in a potential Symbiocene era^{61,62}.

Expanding the bio-political-ethical discourse

In 1971, Van Renselaer Potter argued for the integration of biology, ecology, medicine, and human values within the concept of a new term 'bioethics'.⁶³ Those who were developing their own conception of biomedical ethics largely ignored Potter's prescient warning about unsustainable progress, particularly in healthcare systems. The moral compass they developed was almost entirely focused on individuals and protection of civil and political rights with little attention to the public good.

In the 1990s, Hans Kung's pursuit of the idea that antagonistic ways of thinking and acting would not be sufficient to resolve 21st-century challenges, amazingly succeeded in getting all the religions to sign a doctrine of mutually supported beliefs.⁶⁴

Subsequently, secularly based recommendations (and the rationale for these) were made to extend the bioethics discourse beyond the ethics of interpersonal relationships to include the ethics of institutional and international relationships, and ecological ethics in the pursuit of public, global and planetary health.^{4,8,9} This was followed by a critique of the global political economy¹⁰, and an interphilosophies dialogue methodology to facilitate peaceful communication across divisive cultural beliefs⁶⁵.

The deeply disturbing ethical insensitivity and inadequate responses to political threats of mass human violence, including nuclear weapon proliferation⁶⁶, more wars and major pandemics that threaten to annihilate and disrupt many lives, point to the urgency for stimulating our moral imagination regarding the human predicament^{4,67,68}.

Changing our attitude to nature

Extensive use and depletion of non-renewable natural resources, with consequent global warming, rising sea levels, floods, fires, and degradation of land, sea, and air, with multiple interlinking adverse effects on health^{11,13,21,39} make it critical to radically reduce ecology-damaging use of energy⁶⁹. In 2000, the World Bank's vice-president for Europe identified 20 specific problems regarding the global environment that required action within 20 years.⁷⁰ These goals were subsumed under three headings: (1) sharing our planetary concerns regarding the global commons; (2) sharing our humanity through issues requiring a global commitment; and (3) sharing a rule book for issues needing a global regulatory approach. Little attention has been paid to these recommendations aimed at changing a complex global system, and his goals have not been remotely achieved. These failures are exemplified by the increasing use of coal by 17% in the US in 2020, after a slow

decline in the preceding years, and persistent refusal by successive US Congresses to support climate change legislation.⁷¹

Much could be done by each of us individually as well as by nations collectively. Ecology-preserving lessons could also be learned from indigenous people's stewardship of nature. Energy conservation through a range of feasible greening activities becomes essential. These would include dietary shifts away from animal products to plant foods; reduction in domestic and business energy use for lighting, cooling in summer, heating in winter, as well as increased use of solar power, reduced wasteful night-lighting in cities, unnecessary global travel and enhanced use of public transport. Lower levels of air pollution, and renewal of degraded natural resources, evident from reduced global travel during the COVID-19 pandemic, are supportive evidence for such suggestions.

It is incumbent on all of us globally to share in reducing both energy use and our ecological footprint to sustainable levels. Fairness requires that the greatest onus should fall on those with the highest per capita ecological footprint. Some recent steps in the right direction to address such issues of profound importance are gratifying but come late considering earlier insights⁷², and remain associated with high levels of ongoing denial⁷³, duplicitous government behaviour⁷⁴, and obstruction to relevant legislation⁷¹. The already well-advanced development of alternative sources of renewable energy must continue, although it is unlikely that enough could be provided in time to avert ongoing climate change and planetary degradation⁷⁵ before many coastal cities and islands have become submerged, costing many lives and making the existence of survivors more precarious⁷⁶.

Are we capable of making radical global changes?

Prerequisites for making potentially more effective changes include widespread social acceptance of the need to ensure our future survival through prescient and effective global political leadership and health governance.⁷⁷ The question is whether we can muster sufficient solidarity through political^{38,39}, public³, social⁷⁸, moral^{6,8,79}, and ecological¹¹ imaginations to find new solutions to egregious disparities⁸⁰. These utopian paradigm shifts seem unlikely in the face of many impediments.

Impediments to change

While there are many reasons for denial, resistance and inaction, it is plausible to suggest that a dominant barrier to meaningful change lies in reluctance – even refusal – to admit that our predicament is in large part attributable to privileged populations' (wastefully) consuming highly disproportionate levels of energy. An inordinate sense of entitlement, and no real desire to reduce their consumption is reflected in the myopic view stated by George H.W. Bush at the first Earth Summit in Rio de Janeiro in 1992 that 'The American way of life is not up for negotiation. Period.'⁸¹ This attitude does not seem to have changed since then. It has also been buttressed by the explanation that we lack the evolution of 'hard wiring' to face future threats!⁸² The implausibility of this excuse is that it offers a narrow biological explanation rather than a broader social one. Our ability to face threats in the future *is evident* in the extent to which we purchase life and other insurance policies, and even more strikingly in how we invest in a massive military machinery in anticipation of future security threats.

The major impediment to *shifting from paradigms* of living that have resulted in such a small proportion of people in the world being privileged (about 20%), is the invisibility of power structures and a belief system (in which power is embedded and perpetuated) that determines the dominant way of thinking and the framing of ideas, values and actions [see Note³]. Daniel Kahneman explains our predicament by suggesting that 'We can't live in a state of perpetual doubt, so we make up the best story possible and we live as if the story were true.'⁸³ Currently dominant belief systems, their frames and metaphors for global thinking are characterised by an emphasis on individualism, freedom and a market economy that places economic considerations above all else.

Our global plight is not entirely due to failure to pursue such hard-won and highly prized values as individual rights, tolerance, self-

determination, and democracy with checks and balances on political power, that have contributed to advancing human well-being. We are also culpable of pursuing distortions of these values in ways that improve the lives of some while excluding others who constitute the vast majority. For example, a self-destructive mode of life is propagated when individualism becomes hyper-individualism and when freedom of the powerful reduces the freedom of the weak. When human rights discourse is narrowly focused on civil and political rights – with little attention to social, cultural, and economic rights²⁸ – short-term interests are highlighted within what has become the favoured minimalist moral compass in secular societies⁹⁴. Fraudulent economic dogma that pervades all aspects of life further dilutes other values such as a sense of community and solidarity with others. Additional examples include ignoring the interdependence of all life within a natural world of limited resources, toleration of a medical research agenda that is heavily skewed towards illnesses afflicting the wealthy, and marketing new therapies at large multiples of the cost of production.

The Lancet/University of Oslo Commission Report⁴⁰ illustrated the failure to acknowledge the multifactorial sociological underpinnings of ongoing global crises, and the role of the commitment of the wealthiest to fraudulent economic policies in the complex causal chain of multiple threats to global health and security.⁸⁵ While the Commission made an accurate diagnosis of global health inequities, the solutions proposed were closely linked to the structures and processes that caused the problems, and failed to link into the structures of both the governance for global health and the global political economy as some of their root causes.^{42,43}

Most of the world's poor are people of colour, and the roots of structural racism and structural poverty are complex.⁸⁶⁻⁸⁸ Honesty requires that the long-overdue attention now being paid to marginalised communities in the Global North should be extended to acknowledgement that impoverished lives in Africa and in the rest of the Global South also matter.⁸⁹ All lives are of value, regardless of wealth or educational level, and we are all diminished and threatened by allowing billions to live with preventable and unnecessary suffering.

Other overlapping rationalisations for inadequately addressing these human imperfections include a trajectory of history too complex and opaque to be widely understood and accepted⁹⁰; the extreme discomfort of confronting human failures; the depth of shame and regret aroused by structurally discriminatory forces locally and globally⁹¹; the complexity of engaging open-mindedly in dialogues between contrasting belief systems^{92,93}; distortions of our value systems; and lack of visionary leadership. There is also a strong tendency to avoid contemplating paradigm shifts in thinking and to restricting the expectations of the most privileged who mortgage the lives of future generations.⁹⁴ Confronting power relationships⁹⁵ and structural violence⁹⁶ that support deeply entrenched cultural patterns with their revered narratives, are further aggravated by global geo-political antagonisms with pursuit of power and wealth that preclude visionary collaboration and action across many deep cultural and socio-political-economic barriers⁹⁷⁻⁹⁹.

John Maynard Keynes observed that 'the difficulty lies not so much in developing new ideas, as in escaping from old ones'¹⁰⁰. The big question is: Can our species undertake and achieve the ambitious goals outlined here? Given the relentless pursuit of power and resources to meet unsustainable lifestyles, together with denial of human culpability, it seems highly unlikely that we have the volition or ability as a global community to escape from a competitive and destructive paradigm and move into a globally cooperative future. Friedrich Hegel expressed such skepticism and he warned that 'What experience and history teach is this – that nations and governments have never learned anything from history or acted upon any lessons they might have drawn from it.'¹⁰¹

Glimmers of hope

There are several reasons for retaining glimmers of hope. The first relates to our having acquired some insight into the fact that ongoing 'progress' is not sustainable and that both human advancement and social retrogression are becoming inescapable features of life. Our human capacity for empathy, as witnessed so frequently in everyday

life, and the potential for some sense of global citizenship and solidarity under the threat of possible extinction, add hope to our ability to shape the future. Recent focused attention on the serious shortcomings of neoliberalism¹⁰² and on imagining better worlds^{3,4} is also gratifying.

Our ingenuity in addressing such complex issues as the human genome and targeted medical therapies, as well as space exploration and travel, suggest that we also have the ingenuity to address the complexity of social innovation challenges on a grand scale. The magnitude of the financial investment required to pursue such work is within our reach as mentioned in relation to the 2008 financial crash¹⁰, and given that today the International Monetary Fund provides subsidies of USD5 trillion each year to the fossil fuel industry¹⁰³, and that almost USD2 trillion is spent on the military globally each year. If we could resolve to use our intellectual and material resources to make peace instead of war, and use our human ingenuity to undertake research and education on socially innovative changes, impressive advances could be achieved. While transition towards renewable energy will not be sufficient in the timeframe available, devoting more attention to reducing energy consumption, and doing better with less could be of great value if these were to become high priorities.¹⁰⁴

The polarised extremes of several systems of belief (world views), each with their own ontology (what it means to be human), epistemology (how knowledge is defined) and axiology (study of the nature of values and valuation), provide conflicting challenges in many aspects of life. It has become popular to assert that the world's dominant belief system, caricatured as western, white male and capital-oriented, lies at the heart of the problem, and that solutions lie in replacing this with one or other version of indigenous and identity-related 'decolonised' ideologies. It is vital to acknowledge the roles of empires, colonisation and other means of creating 'the other' that have oppressed so many and undermined their health and dignity.¹⁰⁵ However, what decolonisation and transformation entails and how these would be implemented remain vague (at least in South Africa).^{106,107} But it is surely evident that, rather than reciprocated revengeful attitudes, it would be more constructive to embark on mutually respectful, innovative, cooperative dialogue to identify overlapping values within the best notions of both the western and alternative world views. Humility will be needed to implement well-described and justifiable effective methods from other world views to deal with health issues responsive to such measures, for example, as argued in relation to the mental health of culturally abused children of residential schools in Canada, when western methods of psychotherapy are ineffective or even harmful.¹⁰⁸

Such collaboration should be possible without rejecting or diminishing the value of reason and the scientific method. Emphasis is also needed on enhancing relationships within broader spectra of world views than those caricatured by their polar extremes. Full participation in the dialogue by all parties is essential to use the tension between competing ideas creatively rather than destructively. Ethical motives and reasoning can assist in recognising that while relationships within families and communities are primary, solidarity within an extended web of relations should also be highly valued. Indeed, components of both the dominant tradition and of alternative philosophies remind us of the greater complexity of real-world relationships, and direct us towards recognition and support for essential ethical relationships within and between communities, institutions, and nations, and with our natural environment.

Jared Diamond has opined that we can learn from the errors that led to the collapse of previous civilisations.¹⁰⁹ Bill Gates is also optimistic and centres his hope on technological innovation that could include geo-engineering.¹¹⁰ Martin Rees¹¹¹, an imaginative scientist, has expressed faith (probably overinflated) in the benefits of artificial intelligence and space exploration for the future of humankind. Niall Ferguson gingerly shares some of this optimism but with the following caveat:

It would be wonderful if the advance of science had liberated us from at least some of the irrational ways of thinking that characterized the ancient and medieval world... But other ways of magical thinking have grown even as religious belief has diminished.¹¹²

Vaclav Smil, who has intensively focused on using the best knowledge available to advance the human predicament, is neither entirely skeptical that we are facing an apocalypse nor dismissive of new pathways through scientific advances towards long-term peaceful survival.⁸² David Graeber and David Wengrow in their monumental reinterpretation of human history, with emphasis on the unacknowledged contributions of indigenous societies, have also offered new positive insights into the forces that could shape a better future.¹¹³

Power dynamics are critical. Rather than concentrating on *power over others* (money and force), *power with others* (community values) has the potential to allow us to forge collective goals that have become vital to survival. This alternative perspective envisages a *shift in metaphor from competition to cooperation*. Judicious use of financial power, the power of empirically based knowledge and the power of well-reasoned moral authority are the three forms of power that could be used non-coercively to reduce the social instability that results from preventable poverty and disease that pose major security threats to the health and lives of all across the globe.

Conclusions

Framing global health in terms of a healthy planet requires an understanding of the adverse impact of our transition from a species dependent on nature for our survival, to one capable of manipulating nature, and most recently to ambitious (even overambitious and potentially harmful) endeavours to re-engineer life and the biosphere.¹¹⁴

Any serious attempt at improving global health will have to address such tough questions as: Are we willing to acknowledge what lies at the core of global health inequities? Can we promote deeper insights into who we are? Can we revise our expectations as global citizens and internalise the extent and nature of our responsibilities to those who are distant or less fortunate? Can we restore a balance in undistorted enlightenment values and ways of thinking? Can we communicate with those who have different belief systems, and in so doing craft an improved shared belief system? Are there visionary local and global leaders willing to face these challenges?

These questions could also be asked about South Africa, a country that is a microcosm of the world. The sorry state of its failed aspirations and the new government's shameless, corrupt use of power for the self-interest of its leaders, their friends and families rather than the population it should serve, have been eloquently revealed.¹¹⁵⁻¹¹⁷ With the global being visible within the local, and vice versa, the message of interdependence is highlighted. Cooperation and building on the best are more likely to offer optimism than reactive destruction in the hope of building anew.

Ongoing advances in science and technology will assist in making progress towards a better world, but it has become essential to address the adverse upstream economic and social forces that are radically reshaping the viability of our planet and all its inhabitants. For hope to be retained it is essential that human ingenuity and benevolence will be applied to social innovation to promote peace, reduce inequities, and enhance democracy nationally and internationally.¹¹⁸ With the evolution of the COVID pandemic and the ongoing emergence of more infectious diseases such as monkeypox, the writing is more clearly on the wall than ever before.

Pursuit of the ambitious trajectory described above is *the* crucial challenge facing humanity at a profoundly threatening time in the history of life on our planet. Rather than being daunted by the enormity of the task, hope should be garnered from the example of imaginative planetary systems-thinking, sustained research, collaborative strategies, and success in raising the resources for exploration of outer space.

The quest for sustainable global health will be elusive if we continue to neglect the upstream forces, particularly the pervasive destructive impacts of a wicked economic system on all the domains discussed that cause, sustain, and aggravate the impoverished lives of over half the world's population. Failure to act, will likely result in our being consumed by the conflict, confusion, and chaos of a world out of balance and in entropy. Deriving dazzling pleasure from seeing millions of light years

into the past should not blind us to what lies ominously in front of our eyes! Although the outlook for constructive change is bleak, the ideas briefly outlined here could hopefully be used as study springboards to stimulate such work. Promoting a sense of 'global consciousness' within educational systems to enable children, adolescents and young adults to identify more effectively with others locally and globally, should be included in developing character and values for the 21st century. Educational institutions at all levels should include these goals as a central component of their endeavours.

***Note:** *Frames and metaphors are mechanisms of mind that shape our perceptions and structure our most basic understandings of our experience and actions that are used 'unconsciously', automatically and in repetitious ways to determine how knowledge is constructed and debated.¹¹⁹ They allow us to understand reality, to create what we take to be reality and to facilitate our most basic interactions with the world by structuring our ideas and concepts, shaping the way we reason, and impacting on how we perceive and how we act.⁶ The dominant belief system, as with other contrasting belief systems, mobilises feelings and motivations through symbols that work most powerfully when subconscious. What is believed becomes an important aspect of reality, whether true or not, and this applies to religious and secular belief systems.¹²⁰*

Competing interests

I have no competing interests to declare.

Acknowledgements

I am grateful to the Editor and anonymous reviewers for constructive comments on the original submission. I am indebted to the University of Toronto for opportunities to meet and collaborate with many distinguished colleagues in other disciplines who have influenced my thinking during annual invitations from 2000 to 2019 to teach and continue with my research. Having a foot in both the Global North and South broadened my perspective on the challenges we face, as well as on the strengths and weaknesses across the globe in adapting to necessary change. Some of the data and analysis within these articles were included in the Stuart J Saunders Lecture (2019) and the Marinus van den Ende Lecture (2021) at UCT. I take this opportunity to acknowledge my wife, Evelyn, for her dedicated and unflagging lifelong support of my work.

References

1. Gladwell M. *Blink: The power of thinking without thinking*. New York: Little, Brown & Company; 2007.
2. Benatar S, Brock G, editors. *Global health: Ethical challenges*. 2nd ed. Cambridge, UK: Cambridge University Press; 2021. <https://doi.org/10.1017/9781108692137>
3. Faessel V, Falk R, Curtin M, editors. *On public imagination: A political and ethical imperative*. New York: Routledge; 2019. <https://doi.org/10.4324/9780429343599>
4. Benatar SR. Moral imagination: The missing component in global health. *PLoS Med*. 2005;2(12), e400. <https://doi.org/10.1371/journal.pmed.0020400>
5. Benatar SR. Health: Global. In: Ten Have H, editor. *Encyclopedia of global bioethics*. Cham: Springer; 2016. <https://doi.org/10.1007/978-3-319-05544-2>
6. Benatar SR. Politics, power, poverty and global health: Systems and frames. *Int J Health Policy Manag*. 2016;5(10):599–604. <https://doi.org/10.15171/ijhpm.2016.101>
7. Gray B. How should we respond to the global pandemic: The need for cultural change. *Challenges*. 2021;12(1), Art. #8. <https://doi.org/10.3390/challe12010008>
8. Benatar S, Daar A, Singer P. Global health ethics: A rationale for mutual caring. *Int Affairs*. 2003;79:107–138. <https://doi.org/10.1111/1468-2346.00298>
9. Benatar SR, Gill S, Bakker I. Making progress in global health: The need for a new paradigm. *Int Affairs*. 2009;85:347–371. <https://doi.org/10.1111/j.1468-2346.2009.00797.x>
10. Gill S, Bakker IC. The global crisis and global health. In: Benatar S, Brock G, editors. *Global health and global health ethics*. Cambridge, UK: Cambridge University Press; 2011. <https://doi.org/10.1017/CBO9780511984792.020>



11. Butler C. Ecological ethics, planetary sustainability, and global health. In: Benatar S, Brock G, editors. *Global health: Ethical challenges*. 2nd ed. Cambridge, UK: Cambridge University Press; 2021. p. 281–292. <https://doi.org/10.1017/9781108692137.023>
12. Xu C, Kohler TA, Lenton TM, Svenning JC, Scheffer M. Future of the human climate niche. *Proc Natl Acad Sci USA*. 2020;117(21):11350–11355. <https://doi.org/10.1073/pnas.1910114117>
13. Xu R, Yu P, Abramson MJ, Johnston FH, Samet JM, Bell ML, et al. Wildfires, global climate change, and human health. *N Engl J Med*. 2020;383(22):2173–2181. <https://doi.org/10.1056/NEJMsr2028985>
14. Gore A. *Earth in the balance*. New York: Houghton Mifflin; 1992.
15. Merle R. A guide to the financial crisis – 10 years later. *The Washington Post*. 10 September 2018. Available from: https://www.washingtonpost.com/business/economy/a-guide-to-the-financial-crisis--10-years-later/2018/09/10/114b76ba-af10-11e8-a20b-5f4f84429666_story.html
16. Witnessing a crime against humanity. *The Guardian*. 28 April 2021. Available from: https://www.theguardian.com/news/2021/apr/28/crime-against-humanity-arundhati-roy-india-covid-catastrophe?CMP=oth_b-aplnews_d-1
17. Harvey D. *A brief history of neoliberalism*. Oxford: Oxford University Press; 2005. <https://doi.org/10.1093/oso/9780199283262.003.0010>
18. MacMillan M. Which past is prologue? Heeding the right warnings from history. *Foreign Affairs*. Sept/Oct 2020. Available from: <https://www.foreignaffairs.com/articles/united-states/2020-08-11/history-which-past-prologue>
19. Rogers P. The crucial century, 1945-2045: Transforming food systems in a global context [Food Systems Academy – Transcript]. Available from: <http://www.foodsystemsacademy.org.uk/videos/docs/Paul-Rogers-Transcript.pdf>
20. Gray J. *False dawn: The delusions of global capitalism*. London: Granta; 1998.
21. Gill S, Bakker I, Wamsley D. Morbid symptoms, organic crises and enclosures of the commons. In: Benatar S, Brock G, editors. *Global health: Ethical challenges*. 2nd ed. Cambridge, UK: Cambridge University Press; 2021. p. 242–255 <https://doi.org/10.1017/9781108692137.019>
22. Homer-Dixon T. The American polity is cracked, and might collapse. *Canada must prepare*. *The Globe and Mail*. 31 December 2021 [updated 2022 Jan 02]. Available from: <https://www.theglobeandmail.com/opinion/article-the-american-polity-is-cracked-and-might-collapse-canada-must-prepare/>
23. Robinson WI. *Global capitalism and the crisis of humanity*. New York: Cambridge University Press; 2014. <https://doi.org/10.1017/CBO9781107590250>
24. Pearce F. As climate change worsens, a cascade of tipping points looms. *Yale Environment 360*. 05 December 2019. Available from: <https://e360.yale.edu/features/as-climate-changes-worsens-a-cascade-of-tipping-points-looms>
25. Lenton TM, Held M, Kriegler E, Hall W, Lucht W, Rahmstorf S, et al. Tipping elements in the Earth's climate system. *Proc Natl Acad Sci USA*. 2008;105(6):1786–1793. <https://doi.org/10.1073/pnas.0705414105>
26. Benatar SR. Global justice and health: Re-examining our values. *Bioethics*. 2013;27(6):297–304. <https://doi.org/10.1111/bioe.12033>
27. Benatar S. A divided world in entropy. *Society*. 2018;55:200–206. <https://doi.org/10.1007/s12115-018-0233-2>
28. Greenblatt S. *The swerve: How the world became modern*. London: W. W. Norton & Co Ltd; 2001.
29. Baudot J, editor. *Building a world community: Globalisation and the common good*. Copenhagen: Royal Danish Ministry of Foreign Affairs; 2000.
30. Benatar SR, Upshur R. Virtue and values in medicine revisited: Individual health & global health. *Clinical Med (Lond)*. 2014;14(5):495–499. <https://doi.org/10.7861/clinmedicine.14-5-495>
31. Benatar SR, Ashcroft R. International perspectives on resource allocation. In: Quah SR, Cockerham WC, editors. *The international encyclopedia of public health*. 2nd ed. Oxford: Academic Press; 2017. p. 316–321. <https://doi.org/10.1016/B978-0-12-803678-5.00380-5>
32. Ham C, Silva D. Integrating care and transforming community services: What works? Where next? [document on the Internet]. c2009 [cited 2022 Jan 30]. Available from: <https://www.birmingham.ac.uk/Documents/college-social-sciences/social-policy/HSMC/publications/PolicyPapers/Policy-paper-5.pdf>
33. Fairall LR, Bateman E, Cornick R, Faris G, Timmerman V, Folb N, et al. Innovating to improve primary care in less developed countries: Towards a global model. *BMJ Innov*. 2015;1:196–203. <https://doi.org/10.1136/bmjinnov-2015-000045>
34. McKee M. Health systems and health and healthcare reform. In: Benatar S, Brock G, editors. *Global health: Ethical challenges*. 2nd ed. Cambridge, UK: Cambridge University Press; 2021. p. 86–98. <https://doi.org/10.1017/9781108692137.006>
35. MccGwire M. The paradigm that lost its way. *Int Affairs*. 2001;77(4):777–803 <https://doi.org/10.1111/1468-2346.00219>
36. MccGwire M. Shifting the paradigm. *Int Affairs*. 2001;77(1):1–28. <https://doi.org/10.1111/1468-2346.00236>
37. Söder R, Mobjörk M, Lövebrand E. The Anthropocene and global politics: Rewriting the Earth as political space. *Stockholm International Peace Research Institute WritePeace blog*. 2020 September 02. Available from: <https://www.sipri.org/commentary/blog/2020/anthropocene-and-global-politics-rewriting-earth-political-space>
38. Westley F, Olsson P, Folke C, Homer-Dixon T, Vredenburg H, Looibach D, et al. Tipping toward sustainability: Emerging pathways of transformation. *Ambio*. 2011;40(7):762–780. <https://doi.org/10.1007/s13280-011-0186-9>
39. Gill SR, Benatar SR. Reflections on the political economy of planetary health. *Rev Int Political Econ*. 2020;27(1):167–190. <https://doi.org/10.1080/09692290.2019.1607769>
40. Ottersen OP, Dasgupta J, Blouin C, Buss P, Chongsuvivatwong V, Frenk J, et al. The Lancet–University of Oslo commission on global governance for health. The political origins of health inequity: Prospects for change. *Lancet*. 2014;383(9917):630–667. [https://doi.org/10.1016/S0140-6736\(13\)62407-1](https://doi.org/10.1016/S0140-6736(13)62407-1)
41. Buchanan A, DeCamp M. Responsibility for global health. In: Benatar S, Brock G, editors. *Global health: Ethical challenges*. 2nd ed. Cambridge, UK: Cambridge University Press; 2021. p. 136–145. <https://doi.org/10.1017/9781108692137.010>
42. Gill S, Benatar SR. Global health governance and global power: A critical commentary on The Lancet University of Oslo Commission Report. *Int J Health Serv*. 2016;46(2):346–365. <https://doi.org/10.1177/0020731416631734>
43. Benatar SR, Lister G, Thacker SC. Values in global health governance. *Glob Public Health*. 2010;5(2):1–11. <https://doi.org/10.1080/17441690903419009>
44. Di Rugiero E. Global health governance for developing sustainability. In: Benatar S, Brock G, editors. *Global health: Ethical challenges*. 2nd ed. Cambridge, UK: Cambridge University Press; 2021. p. 440–449. <https://doi.org/10.1017/9781108692137.037>
45. Benatar S, Upshur R, Gill S. Understanding the relationship between ethics, neoliberalism and power as a step towards improving the health of people and our planet. *Anthr Rev*. 2018;5(2):155–176. <https://doi.org/10.1177/2053019618760934>
46. Galbraith JK. *The affluent society*. London: Penguin; 1958.
47. Galbraith JK. *The good society: The humane agenda*. London: Sinclair Stevenson; 1996.
48. Heilbroner R. *Vision of the future: Distant past, yesterday, today, tomorrow*. New York: Oxford University Press; 1995. <https://doi.org/10.1093/acprof:oso/9780195102864.003.0002>
49. Heilbroner R, Milberg W. *The crisis of vision in modern economic thought*. New York: Cambridge University Press; 1995. <https://doi.org/10.1017/CBO9780511605574>
50. Oreskes N, Conway EK. *The collapse of Western civilization: A view from the future*. New York: Columbia University Press; 2014. <https://doi.org/10.7312/columbia/9780231169547.001.0001>
51. Slaughter A-M, Laforce G. Opening up the order: A more inclusive international system. *Foreign Affairs*. March/April 2021.
52. Chagla Z, Pai M. COVID-19 boosters in rich nations will delay vaccines for all. *Nature Med*. 2021;27:1659–1660. <https://doi.org/10.1038/s41591-021-01494-4>
53. Mullard A. How COVID vaccines are being divvied up around the world. *Nature News*. 30 November 2020. <https://doi.org/10.1038/d41586-020-03370-6>



54. World Health Organization (WHO). Commission on the social determinants of health – Final report. Geneva: WHO; 2008. http://www.who.int/social_determinants/thecommission/finalreport/en/
55. Bakker I, Gill S, Wamsley D. Towards a new common sense: The need for new paradigms for global health beyond the COVID-19 emergency. In: Benatar S, Brock G, editors. *Global health: Ethical challenges*. 2nd ed. Cambridge, UK: Cambridge University Press; 2021. p. 470–477. <https://doi.org/10.1017/9781108692137.040>
56. Del Ponte A, DeScioli P. Pay your debts: Moral dilemmas of international debt. *Polit Behav*. 2021. <https://doi.org/10.1007/s11109-020-09675-6>
57. Ganesan A, Vines A. Engine of war: Resources, greed, and the predatory state [document on the Internet]. c2004 [cited 2022 Jan 30]. Available from: <http://www.hrw.org/legacy/wr2k4/14.htm>
58. Hinton J, Maclurcan D. A not-for-profit world beyond capitalism and economic growth. *Ephemera: Theory & Politics in Organization*. 2017;17(1):147–166.
59. The Blue Dot 1: Exploring new ideas for a shared future. New Delhi: UNESCO MGIEP; 2015. <https://mgiep.unesco.org/the-blue-dot-issue-1>
60. Brecher J, Costello T, Smith B. *Globalization from below: The power of solidarity*. Cambridge, MA: South End Press; 2000.
61. Albrecht G. Exiting the Anthropocene and entering the Symbiocene. *Minding Nature*. 2016;9(2):12–16. Available from: https://www.humansandnature.org/filebin/pdf/minding_nature/may_2016/Albrecht_May2016.pdf
62. Castles S, Davidson A. *Citizenship and migration: Globalisation and the politics of belonging*. London: MacMillan Press Ltd; 2000.
63. Potter VR. *Bioethics: Bridge to the future*. Hoboken, NJ: Prentice-Hall Inc.; 1971.
64. Kung H. *Global responsibility: In search of a new world ethic*. New York: Continuum; 1995.
65. Benatar S, Daibes I, Tomsons S. Inter-philosophies dialogue: Creating a paradigm for global health ethics. *Kennedy Inst Ethics J*. 2016;26(3):323–346. <https://doi.org/10.1353/ken.2016.0027>
66. Bloomberg Editorial Board. The U.S. doesn't need new missiles in the ground. Bloomberg. 22 February 2021. Available from: <https://www.bloomberg.com/opinion/articles/2021-02-22/the-u-s-doesn-t-need-new-missiles-in-the-ground>
67. Alstrop T, Fishel S. Horror, apocalypse and world politics. *Int Affairs*. 2020;96(3):631–648. <https://doi.org/10.1093/ia/iaa008>
68. Garrett L. *Betrayal of trust: The collapse of public health*. New York: Hyperion; 2000.
69. Zywert K, Quilley S, editors. *Health in the Anthropocene: Living well on a finite planet*. Toronto: Toronto University Press; 2020. <https://doi.org/10.3138/9781487533410>
70. Rischard JF. *High noon: 20 Global problems, 20 years to solve them*. New York: Basic Books; 2020.
71. Milman O. Global dismay as supreme court ruling leaves Biden's climate policy in tatters. *The Guardian*. 06 July 2022. Available from: <https://www.theguardian.com/environment/2022/jul/06/supreme-court-epa-ruling-biden-climate-policy-global-reaction>
72. Barbour IG, editor. *Western man & environmental ethics*. Reading, MA: Addison-Wesley Pub. Co.; 1973.
73. Oreskes N, Conway EM. *Merchants of doubt*. New York: Bloomsbury Press; 2010.
74. Speth JG. *They knew: The US Federal Government's fifty-year role in causing the climate crisis*. Cambridge, MA: MIT Press; 2021. <https://doi.org/10.7551/mitpress/14083.001.0001>
75. U.S. Energy Information Administration. *Monthly Energy Review*. October 2020. DOE/EIA-0035(2020/10). Available from: <https://www.eia.gov/totalenergy/data/monthly/pdf/mer.pdf>
76. Carbon Tracker. *The sky's the limit: Solar and wind energy potential is 100 times as much as global energy demand*. London/New York: Carbon Tracker; 2021. Available from: <https://carbontracker.org/reports/the-skys-the-limit-solar-wind>
77. Gill S, editor. *Global crisis and the crisis of global leadership*. Cambridge, UK: Cambridge University Press; 2012. <https://doi.org/10.1017/CBO9781139046596>
78. Mills CW. *The sociological imagination (40th Anniversary ed.)*. New York: Oxford University Press; 1999.
79. Glover J. *Humanity: A moral history of the twentieth century*. New Haven, CT: Yale Nota Bene; 2001.
80. Fukuyama F. The pandemic and political order. It takes a State. *Foreign Affairs*. July/August 2000. Available from: <https://www.foreignaffairs.com/print/node/1126047>
81. "The American way of life is not up for negotiation. Period." — George H. W. Bush. QuotePark. Available from: <https://quotepark.com/quotes/2033297-george-h-w-bush-the-american-way-of-life-is-not-up-for-negotiation/>
82. Smil V. *How the world really works. The science behind how we got here and where we are going*. London: Viking; 2022.
83. Kahneman D. Sixty four inspirational Daniel Kahneman quotes on success in life. Available from: <https://www.overallmotivation.com/quotes/daniel-kahneman-quotes/>
84. Benatar SR. Annual Human Rights Lecture University of Alberta. *Global health & human rights: Working with the 20th century legacy*. Available from: <https://www.ualberta.ca/global-education/visiting-lectureship-human-rights/past-lecturers>
85. Perkins J. *Hoodwinked*. New York: Broadway Books; 2009.
86. The 1619 project. *New York Times Magazine*. 20 April 2000.
87. Yearby R. Structural racism and health disparities: Reconfiguring the social determinants of health framework to include the root cause. *J Law Med Ethics*. 2020;48:518–526. <https://doi.org/10.1177/1073110520958876>
88. Bailey ZD, Feldman JM, Bassett MT. How structural racism works - racist policies as a root cause of U.S. racial health inequities. *N Engl J Med*. 2021;384:768–773. <https://doi.org/10.1056/NEJMrms2025396>
89. Hosle V. The third world as a philosophical problem. *Social Research*. 1992;52:227–262.
90. Wallerstein I. Globalization or the Age of Transition?: A long-term view of the trajectory of the world-system. *Int Sociol*. 2000;15(2):249–265. <https://doi.org/10.1177/0268580900015002007>
91. Van Rensburg HCJ, Benatar S. The legacy of apartheid in health & health care. *S Afr J Sociol*. 1993;24(4):99–111. <https://doi.org/10.1080/02580144.1993.10431680>
92. Tomsons S, Mayer L. *Philosophy and Aboriginal rights*. Oxford: Oxford University Press; 2013.
93. Benatar S, Brock G, editors. *Global health: Ethical challenges*. 2nd ed. Cambridge, UK: Cambridge University Press; 2021. p. 326–369. <https://doi.org/10.1017/9781108692137>
94. Bierman F. The future of 'environmental' policy in the Anthropocene: Time for a paradigm shift. *Environ Politics*. 2021;30(1–2):61–68. <https://doi.org/10.1080/09644016.2020.1846958>
95. Bakker I, Gill S, editors. *Power, production & social reproduction*. Toronto: Palgrave MacMillan; 2003. <https://doi.org/10.1057/9780230522404>
96. Galtung J. *The true worlds*. New York: The Free Press; 1980.
97. Packer G. Making America again. *The Atlantic*. 11 September 2020. Available from: <https://www.theatlantic.com/projects/making-america-again/>
98. Sachs JD. Blood in the sand. *Project Syndicate*. 17 August 2021. Available from: https://www.project-syndicate.org/commentary/afghanistan-latest-debacle-of-us-foreign-policy-by-jeffrey-d-sachs-2021-08?utm_source=Project+Syndicate+Newsletter&utm_campaign=8aaa27b08b-sunday_newsletter_22_08_2021&utm_medium=email&utm_term=0_73bad5b7d8-8aaa27b08b-104754877&mc_cid=8aaa27b08b&mc_eid=40cbc00f41
99. Sachs JD. America's confrontational foreign policy failed. It should pursue a cooperative global policy. *Boston Globe*. 3 September 2021. Available from: <https://www.bostonglobe.com/2021/09/03/opinion/americas-confrontational-foreign-policy-failed-it-should-pursue-cooperative-global-policy/>
100. JM Keynes quotes [webpage on the Internet]. No date [cited 2022 Jan 30]. Available from: https://www.brainyquote.com/quotes/john_maynard_keynes_385471
101. Hegel GWF. *Lectures on the philosophy of history* [webpage on the Internet]. No date [cited 2022 Jan 30]. Available from: <https://quotepark.com/works/lectures-on-the-philosophy-of-history-7557/>



102. Whyte D, Wiegatz J. Neoliberalism and the moral economy of fraud. New York: Routledge; 2017. <https://doi.org/10.4324/9781315680545>
103. McCarthy J. Fossil fuel subsidies exceed \$5 trillion annually. Here's why. Global Citizen. 08 December 2017. Available from: <https://www.globalcitizen.org/en/content/fossil-fuel-subsidies-trillions-climate-change/?gclid=EAlaIqobChMlIc3txv699AIVEQGLCh1TgwTIEAAYAAEgI>
104. Bednarz D, Beavis A. Neoliberalism, degrowth and the fate of health systems. Resilience. 14 September 2012. Available from: <https://www.resilience.org/stories/2012-09-14/neoliberalism-degrowth-and-fate-health-systems/>
105. Kapuściński R. The other. London: Verso; 2018.
106. Jansen J. As by fire: The end of the South African university. Cape Town: Tafelberg; 2017.
107. Tomaselli KG. Contemporary campus life. Cape Town: Best Red; 2021.
108. Ansloos JP. The medicine of peace: Indigenous youth decolonizing healing and resisting violence. Halifax & Winnipeg: Fairwood Publishing; 2017.
109. Diamond J. Upheaval: How nations cope with crisis and change. London: Penguin; 2019.
110. Gates B. How to avoid a climate disaster. New York: Random House; 2021.
111. Rees M. On the future prospects for humanity. Princeton, NJ: Princeton University Press; 2018.
112. Ferguson N. Doom: The politics of catastrophe. New York: Penguin; 2021.
113. Graeber D, Wengrow D. The dawn of everything: A new history of humanity. Toronto: Signal; 2021.
114. Kolbert E. Under a white sky: The nature of the future. New York: Crown; 2021.
115. Mbeki M. Architects of poverty: Why African capitalism needs changing. Johannesburg: Picador; 2009.
116. Johnson RW. Fighting for the dream. Cape Town: Jonathan Ball; 2019.
117. Judicial Commission of Inquiry into Allegations of State Capture, Corruption and Fraud in the Public Sector Including Organs of State Report: Part VI Vol. 4: Summary of Recommendations, Chairperson: Justice R.M.M Zondo Chief Justice of the Republic of South Africa. Available from: [https://www.gcis.gov.za/sites/default/files/\[Electronic\]%20State%20Capture%20Commission%20Report%20Part%20VI%20Vol%20IV.pdf](https://www.gcis.gov.za/sites/default/files/[Electronic]%20State%20Capture%20Commission%20Report%20Part%20VI%20Vol%20IV.pdf)
118. Emmott B. The fate of the West: The battle to save the world's most successful political idea. London: Profile Books Ltd; 2017.
119. Lakoff G, Johnson M. The metaphors we live by. Chicago, IL: University of Chicago Press; 1980.
120. Smart N. World views: Cross-cultural explorations of human beliefs. Princeton, NJ: Prentice-Hall; 1995.

Note: A list of additional readings is provided in the Supplementary material.