



## Abstracts

### Education as Protecting Humankind from Self-Destruction

**Herner Saeverot**

The introduction provides a general introduction to the conversation, setting out its main ambition and themes, and introducing an overview of the argument in the presentations to follow. Based on empirical material, I argue that education has, globally, been too concerned with achievement and attainment of pre-determined outcomes. I also argue that education in a global perspective is too limited, on which it omits important issues. That is why this conversation seeks to expand the functions of education, with a particular focus on existential threats (a term which will be carefully defined in the introduction). In the introduction I explain why such a focus is important, particularly in order to protect humankind from self-inflicted and existential threats – which has the potential to cause damage of different degrees to the well-being of humankind. I also argue that existential threats cannot solely be solved politically. They should also be solved educationally, as education can reach out to millions of pupils and students – whom can be enlightened of the existential threats that humankind is facing and how these threats can be addressed in the best possible way. In addition, I provide a brief overview of the structure of the conversation and the key themes of each of the presentations, with a particular eye on educational issues.

### Addressing the Existential Threats of Climate Change

**Jennifer Joy West, Helene Amundsen, Nathalie Schaller & Marianne Aasen**

Despite overwhelming scientific evidence about the harmful consequences of climate change for current and future generations, concerted societal actions to address this global challenge remain elusive. Research suggests that devising effective societal solutions and actions to deal with the urgent existential threat that climate change represents will require connecting and mobilizing knowledge and expertise from many areas of the natural, social and human sciences, and



bridging traditional divides between science and society. This chapter will provide an overview of the issues at stake and some of the key barriers that need to be overcome in theory, policy and practice in order to progress a learning agenda that can support inclusive, democratic and effective societal transformations in the face of climate change. Three foundations for such a “learning agenda” are discussed. The first is the need to unsettle the historical view of climate change as an external, environmental threat whose meanings, causes and effects can be separated from culture, and disentangled from processes of coupled socio-ecological change. The second is the need to move beyond only generating expert knowledge about the climate problem and towards engaging with societal stakeholders to understand their motivations, values, hopes and desires, and to garner support for individual and collective behavioural and policy changes. The third is the need to deal with the distributional aspects of climate change and climate action, and to address conflicts of interest bound up in climate solutions, in order to ensure that societal transformation processes progress in inclusive and equitable ways. We contend that interdisciplinary and transdisciplinary thinking can help to push beyond existing knowledge boundaries and support a transformative learning agenda that can help society to prevent, prepare for, and deal with the existential threats of human-induced climate change.

## Decline of the Natural World

**Louise McRae & Monika Böhm**

In the last 50 years, a period in which the human population doubled, there is compelling evidence that biodiversity has declined globally. Human activities such as land conversion for agriculture and overexploitation of the oceans have placed pressure on ecosystems, species and on the genetic diversity of many plants and animals. Between 1970 and 2014 an average decline of 60% decline was measured in populations of vertebrate species and currently an estimated one million species are at risk of extinction. Although the drivers of decline in the natural world are well known and activities to conserve biodiversity have increased, this has not been sufficient to slow the rate of change. Whilst the statistics are stark and the problem a global one, there are many ways to tackle this issue and a need for action from governments, industry and society as a whole. Education to aid biodiversity conservation can take many forms, from formal education in classrooms to public outreach and capacity building. Given the picture of catastrophic biodiversity loss, it is vital to provide people with effective tools to address this issue in their own everyday life, e.g. reduce use of plastics, recycling, sustainable consumer choices, as well as to provide the facts to civil movements calling for wide-ranging policy change, such as Extinction Rebellion. In an increasingly urbanised world, connecting people to nature greatly depends on engaging individuals to evaluate their role in our ecosystems.



## Overpopulation

### Colin Butler

A recent survey of fifty Nobel Prize winners identified the greatest threat to humanity as “population rise and environmental degradation”. These issues are often linked, but isolating single threats as most important is artificial. All causes have causes. The risks

faced by civilization, and perhaps our species, emerge from a milieu of contributory factors, of which population is only one. However, while it is possible that global civilization could have ended with a far smaller human population than today (approaching 8 billion), the enormous scale of the human enterprise is an undeniably vital risk, on a habitat with “only” the resources of an Earth-sized planet. Furthermore, and

often overlooked, the rate of expansion of human numbers can, if too high, help “trap” hundreds of millions in cycles of poverty and underdevelopment, often worsened by disease and violent conflict. Slower population growth helps improve the living conditions for impoverished populations. Relative “underpopulation” in some areas leads to worries about labour supply and the influx of culturally different immigrants from areas with surplus people. Solutions for our dilemma include recognition by political and academic leaders of limits to growth. To survive we may even need an evolutionary leap, a collective realisation that in our new age, the Anthropocene, the rules that steered our species’ trajectory to its current dominance and affluence threaten catastrophe, and thus warrant revision. We need to evolve global scaled co-operation, characterised by greater equity, including guaranteed rights for minorities, to accelerate the global demographic transition and provide hope.

## Infectious Disease

### Birgitte Freiesleben de Blasio

Throughout the history of humanity, infectious diseases have been the biggest killer. They give rise to major epidemics, such as the Black Death that wiped out a third of Europe in the 14th century and the Spanish flu pandemic in 1918 that killed 5% of the world. Infectious diseases are caused by pathogens, small organisms that invade humans and other living hosts. This understanding—the so-called ‘germ theory’ of disease—from the late 19th century forms the basis of modern medicine. Our increasing life expectancy in recent times is almost entirely attributable to our ability to control infectious diseases through better sanitation, vaccination and antimicrobial treatment. Despite this, contagious diseases are still responsible for a large proportion of deaths and illnesses

worldwide, in particular in low-income regions. And the looming threat of a new infection that could turn into a devastating pandemic without warning remains. We live in an increasingly populated, urban and globalized world. It took several years for the Black Death to spread from China to other continents. Today, due to modern transport, an infection can reach all major cities within days. In our booming need for food and resources, we are inducing rapid and large-scale changes to the environment. However, the microbes too, have evolved. Misuse of antibiotics has led to the selection of antibiotic-resistant bacteria. These bugs are now effectively circulating the world. In a not distant future, common infections may become untreatable and deadly. With the erosion of effective antimicrobial treatments, many surgical procedures, cancer chemotherapy, and organ transplants will be impossible. In this chapter, I will discuss what are in my opinion the most significant infectious disease challenges we face today: antimicrobial resistance and zoonotic pandemics that originate when a pathogen jumps from an animal host to humans. I will also address questions concerning an education that can meet these threats in the best possible way.

## Nuclear, Biological and Chemical Threats

### **Halvor Kippe, Marius Dybwad & Stig Rune Sellevåg**

The perceived existentialist risk posed by chemical, biological and nuclear weapons ended with the Cold War. With the entering of the new millennium we have, however, seen several breaches of the norm against the use of biological and chemical agents in the United States, Syria, Kuala Lumpur and the United Kingdom. Despite the fact that the global stocks of nuclear weapons are only about a fourth of what they were at the peak of the Cold War, the breakdown of bilateral nuclear arms control between the two nuclear superpowers, Russia and the United States, may point to a second era of nuclear arms racing. This is accompanied with destabilizing attempts to develop and deploy missile defence systems in the sea, land and space domains. The consolidation of North Korea as a *de facto* nuclear weapons state only adds to this picture. With the decline of the liberal world order, and the simultaneous rise of authoritarianism in several world corners, the bulwarks of international law preventing the proliferation and use of biological, chemical, and nuclear weapons are under pressure.

Technological advancements and the unprecedented availability of know how online may incite the nascence of novel ways for state and non-state actors to acquire and utilize the world's most dreaded weapons. To prepare the society for these developments, it is important to have a science-based understanding of the risks. This may entail abandoning Cold War notions of technological bottlenecks, damage potential, likely usage *et cetera*. Only then are we able to prioritize and adopt the most cost-effective preventive and responsive measures tailored for a new future.



## Egoism

### Gert Biesta

It is no news that all human beings carry a degree of egoism within them. Such egoism is partly functional, as it helps with the survival of the individual, to put it mildly. But establishing an ego, becoming a self, is not just a matter of survival but also key to what makes human existence human, that is, that we exist as selves, have an awareness of this, and are able to actively engage with our being-self. One point where egoism becomes problematic – and this has probably given egoism a bad name – is when the interest in the self threatens the existence of other selves and, on a grander scale, threatens the ecological conditions under which human beings can exist in the first place. Should we blame individuals and their egoism for this? Not entirely. In his book *The Impulse Society*, the American author Paul Roberts makes the interesting claim that egoism – trying to get what we want without asking whether what we want is what we should be wanting – has become the organising principle of modern societies, first and foremost through the way in which modern economies has developed. In my contribution I will focus on this analysis showing on the one hand what this does to the possibilities for the self to exist well, with others, on a vulnerable planet and, showing on the other hand how contemporary education has been affected by the logic of the impulse society as well. The latter raises the important question whether, to what extent and under which kind of conditions education can still protect human beings from their egoism or not – a question, as I will suggest, that is also central to the argument put forward in Rousseau's *Émile*.

## The Threats of Ideologies

### Herner Saeverot and Glenn-Egil Torgersen

Everyone, both States and various ideological and religious groups, undergo training as a means for something. The purpose of such training is to form individuals in accordance with the group's ideology and guidelines. Furthermore, the purpose is to carry on established ideas and ideological goals, i.e., a form of systematic and political formation; or, indeed indoctrination of different degrees. Education systems, too, can be a means of cultivating specific political and ideological beliefs, either generated from an oppositional teaching staff; or, initiated and organized by the State, by way of curricula and as part of consolidating power through political standpoints. Similarly, the school system can be a place for the development of the idea of cosmopolitanism (the global citizen) and globalized democracy (cf. Habermas, 1998; Biesta, 2006; Kemp, 2005; Beck, 2005; Bauman, 2006; Løvlie, 2006; Roth & Burbules, 2011). However, such practice represents only small parts of the education and training that takes place in modern public schools and education systems. Instead, the general school and education system can be a tool or a power (Torres, 1998, p.



iff) for political and ideological implementation. Carlos Alberto Torres underlines that «Educational, as part of the state, is fundamentally a process of

formation of ‘social conformism’. Educational systems, and schools in particular, appear as privileged instruments for the socialization of a hegemonic culture» (Torres, *ibid.*, p. 13). And, as Paulo Freire has consistently claimed in his works, «there is an inherent ‘politicity’ of education» (cited by Torres, *ibid.*, p. 15). In most countries, the military system, alongside with foreign affairs policy, also has great ideological power in a nation, which in turn affects the public school system. The military organization «... have strongly and persistently affected other social and economic institutions, a larger reality often ignored by modern scholars of whatever political persuasion» (Falk, 2005, p. 211). Of course, in authoritatively-ruled states and groups, this relationship is even more prominent and robust than in Western democracies.

Furthermore, changes in social structures cause demands for changes in the educational system. This is supported by Falk (2005, p. 212f.): «The manifestations of Cold War military spending included the expansion of educational systems and the development of new knowledges to the point where education and knowledge production was restructured in every industrial nation...The ‘Sputnik scare’ benefitted education immensely...the post-World War II expansion of the educational system and knowledge production was more a function of war than of general cultural and economic development” (cf. Chomsky, 1997; Loewen, 1997). This means that educational and political measures whose purpose is to transform ideological directions in States and groups are developed and executed both directly and indirectly by a number of actors in society, both in totalitarian and democratic societies. Ultimately, this may cause unmanageable imbalance between States and alliances, and between different ideological groups, with the danger of war and terror.

The question is why all this still exist among humankind, in the 21st century; hence, the chapter seeks to investigate the very content of various ideologies, by using methodology developed through pedagogical research on such themes as ‘The Unforeseen’ (Torgersen, 2015) and ‘Interaction - Under Risk’. The purpose is to identify the pedagogical power structures of ideologies and possible causes of the existence of fundamentalism, in which violent acts can be used as means. If such structures are identified, they can be used as educational measures to reduce, and perhaps neutralize, the threats of ideologies in the world.

## Truth, Truthfulness, and Truth-Telling

### Michael A. Peters

This chapter explores the concept and the history of truth as central to Western institutions. A historical and philosophical analysis reveals a narrative and



ontological notion that originates with the pre-Socratics and depends upon the full disclosure of the truthfulness of reporting an event. This idea of truthfulness and truth-telling is fundamental to the institutions of democracy, law and education. It is now under threat in the era of post-truth by the spread of fake news symbolized most graphically by Donald Trump and the Office of the White House.

## Artificial Intelligence

**Marija Slavkovic**

Humanity has always relied on tools to further its existence. In the last century we learned how to build sophisticated machines that have done away with a lot of physical drudgery in manufacturing. The industrial robot revolution has had a great impact on our economy, but a far less obvious impact on our personal lives. Automation of physical movement has a low social cost - we replace human physical action that we fully understand with machine action. We now stand at the precipice of a new societal transformation: Artificial intelligence (AI) gives us tools that replace, support and extend human cognitive abilities. With this advance we are now automating processes that we do not fully understand such as image recognition, behaviour prediction, empathy. Without fully comprehending what we are automating we cannot be certain whether what we end up with is mimicking enough of the original process and goals or too much of it, creating something new, yet alien. We also need to identify what areas of a cognitive process should be off-limits for automation. We always mould our behaviour to our tools, and this is usually to our benefit. Eg., the clothes of today are not reusable without a washing machine, but laundering clothes is not a skill we sorely miss. In what ways will AI outperform us as a tool and with which consequences? Where are the areas where mankind will still reign supreme intelligence-wise? And when these questions are unknown, what risks are we willing to live with?

## Inequality

**Ron Thompson**

Education occupies a unique position in relation to social inequality. It is not merely one aspect of the unequal distribution of material and cultural goods: education is also a critical factor in an individual's life chances, so that educational inequality is inextricably associated with the intergenerational persistence of inequality in general. For this reason, equalisation of educational opportunity is seen as a necessary condition for achieving a more equal society. However, the association between educational and material advantage has proved remarkably durable, in spite of decades of educational expansion. This chapter argues that, whilst concerns about educational inequality are justified, far-reaching reforms are required – including action to reduce material



inequality directly – if education is to be effective in achieving social justice. The chapter begins by outlining the evidence for persistent educational inequality, acknowledging the progress that has been made but indicating the limits of this progress and the ways in which broader social inequalities affect educational

opportunity. It also briefly discusses the complex relationships between education and social mobility. The chapter goes on to argue that educational expansion pursued in isolation from other policies to reduce inequality and social opportunity poses a twofold existential threat to the future of education in social democracies. First, by increasing social congestion it intensifies the decoupling of educational achievement from individual life chances, thereby increasing the direct effects of social background on social mobility. Second, this may exacerbate a state of legitimation crisis, in which disillusionment with the ability of education to underpin social progress becomes more widespread. Such trends are particularly serious in a time when some commentators predict pressures within capitalist production for the marginalisation or elimination of a liberally-educated workforce. The chapter concludes by identifying specific areas of educational and social reform that are necessary to reduce these threats.

## Epilogue: Education's Most Urgent Question

### **Herner Saeverot**

The epilogue will aggregate key findings from the other chapters of the volume. I will make use of an educational theory construction model to identify key concepts and main ideas of the chapters with regard to educational aspects (Saeverot & Kvam, 2019). In other words, I will conduct a meta study based on both empirical and theoretical sources from the different chapters. The findings will be organized into interwoven categories and visualized in a model. This model is nothing but a simplification or approximation of an existential education for the good of humankind, i.e., the model is an attempt to highlight what it takes, educationally, to address different kinds of existential threats and protect humankind from self-destruction. Above all, the goal is to stimulate to further research on an existential education in which each individual can live well in a world worth living in.