Challenges and prospects for long-term peacekeeping in the Anthropocene

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In recent years, the concept of the 'Anthropocene' has increasingly become a central analytical scheme for current social and ecological crises. Based on the thesis that the structural problems of the present arise from unresolved injustices between past generations, which reproduce a life-threatening danger towards future generations, this essay calls central assumptions underlying modernity into question. This essay illuminates the relationship between ecological crises, colonialism, and the classical humanist historiography of modernity. Ultimately, this essay concludes that the possibility of securing long-term peace is only feasible with radical social, economic, and political transformations, without which our idea of peace will remain deficient in the future.

Keywords: *Anthropocene; humanity; global justice; postcolonial peace; climate risks*

Introduction

For some time now, there has been growing recognition that climate change poses a massive threat to people's everyday lives on a global scale and is therefore a key driver of armed conflict. While the short- and medium-term connection between climate change and poverty, and between the potential for violence and scarce resources, has been acknowledged, the significance of these connections for a long-term perspective on peacekeeping is yet to be recognised. A long-term perspective is slowly seeping into theories of peace with the Anthropocene discourse, but so far remains underrepresented and barely elaborated.

The term 'Anthropocene' marks the proposal for a new geological era following the Holocene, in which humans have become a force of geological proportions through their collective action.[2] This is the case because humans are interfering with Earth system processes through nuclear fallout, plastic pollution, greenhouse gas emissions, biodiversity loss by means of industrial agriculture, and many other factors. This threatens to endanger the foundations of life not only for human civilisation but for all life on the planet (Crutzen / Stoermer 2021). Some authors therefore argue that the recognition of certain epistemological and ontological shifts caused by the Anthropocene is a condition without which peace will no longer be possible in the future (Lakitsch 2023). Current international environmental law is not equipped to respond to the intergenerational challenges posed by the Anthropocene (Dijk 2021). The structures of the current political systems also fail to meet the requirements of intergenerational justice and the pressing challenges of the Anthropocene because they are based on short-term modes of action and neglect the interests of future generations (Kotzé / Knappe 2023).

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At the same time, the Anthropocene discourse also goes beyond the usual practices of peacekeeping, which are based on development aid, economic cooperation, education, and humanitarian military interventions. The profound impact of humanity's collective influence on the Earth system raises the question of how to deal with resource scarcity and minimise the likelihood of war caused by ecological disasters. On top of this, it raises the question whether contemporary human lifestyles and societies are compatible with planetary boundaries and the habitability of the planet in the long term. Against this backdrop, this article analyses the challenges facing our perspective on peace in times of dwindling resources due to the climate crisis. This essay proposes the thesis that the structural problems of the present arise from unresolved injustices between past generations and now reproduce a life-threatening danger towards future generations. We must ask how the relationship between the historical responsibility for the emergence of the current ecological crises and the possibility of securing long-term peace in the present can be reconciled. For the problems in the Anthropocene highlight that the prospect of long-term peace is only possible with a radical social, economic and political transformation, without which our idea of peace will remain deficient in the future. This article contributes to clarifying the conditions for long-term peacekeeping by showing how the Anthropocene is connected to global and historical (in)justice and by challenging certain theoretical foundations of peace.

Theorising the Anthropocene in peace studies

The term 'Anthropocene' has now become an important analytical scheme, particularly in the humanities and social sciences. In the Anthropocene debate, nature is no longer just the object of scientific investigation, as humans and their collective actions have become a geological force that hybridises nature. Classical dichotomies between nature and culture or nature and technology have thus become dubious (Höfele / Müller / Hühn 2022: 130).

The term 'Anthropocene' is not officially accepted as an epoch designation, nor is it uncontroversial. As a term, the Anthropocene does not have a fixed meaning and since its introduction there have been contradictory interpretations. However, the common core of these interpretations lies in the scientific hypothesis that humanity currently exerts a dominant geophysical influence on the Earth system. The relationship between this concept and the geological facts gives rise to different interpretations. The Anthropocene is understood variably as a new geophysical epoch (Renn 2020), as a methodological problem (Mathews 2020), a master or meta-narrative (Dürbeck 2015) and much more. It is also understood and criticised as an ideological anchoring of anthropocentric dominance in the form of planetary management or geoengineering (Baskin 2015). Recently, the Anthropocene discourse has also stimulated debates on the self-understanding and future of international relations and peace and conflict

studies, which point to new research perspectives and disciplinary transformation (Ide / Johnson / Barnett et al. 2023; Hardt 2021). In this essay, I use Dipesh Chakrabarty's research as a foundation for developing a possible conceptualisation of the Anthropocene that focuses on the relationship of the planetary to the classical humanist historiography of modernity.

The Anthropocene discourse combines various strands of global history, capitalism and social theory with the scientific analysis of ecosystems and planetary boundaries. Dipesh Chakrabarty's reflections on the Anthropocene (2021; 2018) offer an important starting point for analysing this complex intersection, particularly with a view to securing long-term peace. He argues that anthropogenic explanations of climate change render the humanist distinction between natural or planetary history and human or global history obsolete (Chakrabarty 2021: 26). By contrasting global history and planetary history, he describes three interwoven but analytically distinguishable categories of humanity: First, humans in their internally differentiated plurality; second, humans as a species; and third, humans as the makers of the Anthropocene (Chakrabarty 2021: 15). Thinking of humans as a species indicates that, due to their constitution as biological beings, humanity is facing a common existential threat in the Anthropocene. Thinking of humans in their internally differentiated plurality and as the makers of the Anthropocene, on the other hand, questions the unity of humanity from a historical and political perspective. For one thing, humanity is not equally responsible for the historical course of the current global crises. And secondly, postcolonial perspectives on peace studies and international relations in particular point to the violent political relations between the Global North and Global South and thus between large parts of humanity.

In times of climate change, the impending collapse of ecosystems and the sixth mass extinction, it is necessary to critically engage with our inherited narratives about modernity, development, and continuous peacekeeping.

Chakrabarty argues that we are living on the threshold of the age of the planetary. From the perspective of global history, humans are the subject of a modern narrative of progress that has encompassed the history of culture, trade, wars, and nations since the European expansion at the turn of the sixteenth century. Planetary history, on the other hand, encompasses all the geobiological micro and macro processes that make multicellular life on planet Earth possible. The fact that anthropogenic climate change is now taking on planetary dimensions – a global-historical effect of humans – is the stimulus for a central question of our time. That is, how does the climate crisis affect our sense of the unity of humanity, while at the same time calling into question our current historical methods by supplementing global history with the hitherto neglected planetary history (Chakrabarty 2021: 25). In times of climate change, the impending collapse of ecosystems and the sixth mass extinction (Bradshaw / Ehrlich / Beattie 2021), it is necessary to critically engage with our inherited narratives about modernity, development, and continuous peacekeeping.

Questioning the link between development and peacebuilding

An essential assumption of modernity is that civilisational progress and economic development make a constant contribution to securing peace. This connection is being challenged in the Anthropocene. A global trend is now emerging in which violent conflicts increasingly develop in tandem with progress in human development. The discrepancy between development and security may be a by-product of the way development has been conceived and pursued to date and is therefore exacerbated by the legacy of historical injustices, most notably by colonial rule (Tapia / Conceição 2022: 80). From the perspective of global history, human development and ecological compatibility with planetary boundaries are in a contradictory relationship. For example, correlating the UN's human development index with the UN's sustainable development goals index results in the long-term target range of a global sustainable development criterion, namely high human development, within resource requirements that are globally replicable. No country in the world currently achieves this goal. The countries of the Global North exceed the ecological target value many times over.[3] If one were to replicate their way of life the world over, it would require the ecological capacity of more than three Earths to provide materially for all humanity. In contrast, countries in the Global South fall well short of the human development target (Wackernagel / Hanscom / Lin 2017). The discrepancy between the Global North and the Global South is no coincidence. It is the historical result of a developmental path that has not benefited all people. Development approaches that have focused almost exclusively on economic growth and paid much less attention to equitable human development have led to growing and vast inequalities and an increasing burden on the planet. These inequalities can increase the risks of armed conflict (Raleigh / Urdal 2007; Adger / Barnett 2007). In the Anthropocene, it is even more evident that conflict is closely linked to horizontal inequalities and the accumulation of political and economic power.

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We are now at a point where climate scientists argue that various planetary boundaries are already being exceeded, with dramatic and damaging consequences for the planet (Rockström / Gupta / Qin et al. 2023). The dangers posed by these scenarios are existential threats to basic life-sustaining community resources such as water, air, land, and forests. In the Anthropocene, human dependence on terrestrial and marine ecosystems intensifies due to anthropogenic climate change, which undermines biodiversity and ecosystem resilience and negatively impacts human health, livelihoods, and well-being. This interaction shows a close link between the climate crisis, poverty, and the resulting conflicts, which in turn illustrates how the Anthropocene generates conflict dynamics (Hallegatte / Rozenberg 2015; Hallegatte / Bangalore / Bonzanigo et al. 2014). The possible links between competition over natural resources, environmental change and violence are complex. At their core, they are rooted in the fact that humans need resources to survive and pursue self-development. This existential basis is challenged in various ways by the Anthropocene (Dalby 2013: 565). The unpredictability of intensifying natural disasters, such as the scarcity of land due to droughts or floods can intensify the scarcity of resources. This can thus motivate actors to appropriate resources by means of individual or collective violence. Resource scarcity and natural disasters can also undermine government capacities and lead to a loss of public order and infrastructure. Furthermore, the concentrated wealth of valuable natural resources can provide an incentive to appropriate these resources by force. It is often the unrestrained demand for resources by wealthy communities in the Global North that reproduces this

link between natural resources and violent behaviour (Scheffran / Ide / Schilling 2014: 375). Therefore, any reference to the unity of humanity is controversial.

The contested unity of humanity

The volatility of nature in the Anthropocene requires a broader conceptualisation of acute human-ecological uncertainty. This includes a shift to a long-term perspective on security. Human and ecological conflicts are mutually dependent. Climate change has a disproportionate impact on countries that are already affected by armed conflict (Exenberger / Pondorfer 2014: 359). At the end of 2020, almost half of ongoing UN peacekeeping operations were located in countries of the Global South, which are most exposed to climate change. Although this is mainly due to geographical location, armed conflicts make it more difficult to cope with and adapt to climate change and can even exacerbate environmental degradation. Conflicts weaken state institutions and divert attention from sustainable development to military concerns (Tapia / Conceição 2022: 84).

Consequently, the reality of anthropogenic climate change has hardened disagreement on the question of the unity of humanity. Earth system sciences use the concept of humanity as a collective unitary concept, and ecological approaches emphasise the biogeological oneness of planet Earth as well as the biological nature of the human species for coping with climate change. On the other hand, in the humanities and particularly in the context of postcolonial theory, the assertion of a unity of humanity seems "ideologically suspect and [has] always appeared to have been made in the interests of power" (Chakrabarty 2021: 17). When we talk about human development and growth within planetary boundaries, we must ask ourselves whose growth and whose boundaries we are talking about or ignoring (Sultana 2023). The assertion of a unity of humanity is thus countered by the reality of a division and fragmentation of humanity, particularly due to colonial-imperial practices of domination (Hartnett 2021: 140). Under the current conditions, we must question to what extent the liberal international order is compatible with the structural conditions of survival on the planet that have become evident in the Anthropocene (Simangan 2022: 40). This also necessitates a critique of the methodological approaches of peace research.

As Buckley-Zistel and Koloma Beck (2022: 142) point out, peace and conflict research at a theoretical level is significantly influenced by ideas of violence, conflict, and war that are by no means universal, but are shaped by the historical experience of Western Europe and North America. Nevertheless, they form the foundations of approaches to promoting peace and justice that are exported throughout the world, for example during peace missions and projects. Critical peace and conflict research has been discussing this issue intensively for some time, but the social and ecological conditions of the Anthropocene make it all the more relevant. Postcolonial perspectives in particular lament a blindness towards the contexts of coloniality in the discourses on climate and peace (Sultana 2022; Azarmandi 2018).[4] Together with the Anthropocene discourse, these approaches indicate that the notion of negative peace, which focuses on acts of conflict and their absence, is deficient. The distinction between negative and positive peace (Galtung 1996: 61) must be emphasised more clearly through an ecological and postcolonial perspective. Positive peace refers to a social relationship in which exploitation and structural violence are minimised. Therefore, it denotes the existence of a just social order and "ecological harmony" (Barash / Webel 2002: 7). The achievement of this ecological harmony and social order is challenged by the fact of global difference.

Anthropocene, equity, and global difference

Historically unequal responsibility for and current unequal exposure to ecological crises continue to pose a challenge to the justice and effectiveness of global environmental policy. The Intergovernmental Panel on Climate Change (IPCC) report confirms that the causes of climate change and the associated ecological and social crises lie in the "historical and ongoing patterns of inequity such as colonialism" (2023: 31). These ecological and social crises range from conflicts over livelihoods and dealing with the threat of natural disasters to the challenges they pose in terms of climate migration, the destabilisation of communities, and the shaking of democratic principles, educational security and the like. With its history of industrialisation, high resource consumption and high emissions, the Global North has contributed significantly to the transgression of several planetary boundaries. However, the consequences are disproportionately borne by the Global South, which has contributed less to these problems but is already more vulnerable to the effects of environmental change (IPCC 2023: 16). The impending collapse of the climate and ecosystems in the Anthropocene is the result of a violent history of colonialist-capitalist resource extraction and overconsumption, which are highly unequal and unfairly distributed around the world (Sultana 2023; Newell / Srivastava / Naess et al. 2021). Against this backdrop, we need to take a critical look at our narratives of modern history, capital and civilisational progress. The Anthropocene relativises the classical humanist historiography of modernity in a significant way. We must ask ourselves: were we on the right track with our previous model of history, development, and peacekeeping?

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The Anthropocene forces us to take a step back from currently dominant liberal theories of peace and question their theoretical foundation (Bliesemann de Guevara / Budny / Kostić 2023). Influenced by Chakrabarty, we can argue that our notion of peace is deficient because it has been shown by the Anthropocene to be based on a false assumption: the notion that 'civilisational' progress, based upon economic development and the adoption of reason as a universal goal, brings peace. Chakrabarty describes our current model of history and development, and thereby peacekeeping, as a historical mode of consciousness that relies heavily on the notion of historicism. Historicism refers to a historiography mostly practiced by philosophers, such as Kant's philosophical draft on *Perpetual Peace*, which was influential for the United Nations Charter. It was philosophers "who have read into European history an entelechy of universal reason" (Chakrabarty 2007: 29). The self-development of reason as a historical process became the theoretical and practical basis of the self-esteem of the social sciences and humanities as well as of humanitarian practice, which mostly produce statements about the totality of humanity from a particular European perspective.

This hegemonic idea is continued in the notions of transitional justice. We must constantly remind ourselves that "international law and the assumption of its universality were developed as a consequence of colonial thinking and practice, and thus in the

interaction between the Global North and the Global South" (Jones / Lühe 2021: 5). The fact that peace is negotiated almost exclusively from the Global North where international bureaucratic infrastructures are situated, all too quickly overlooks the underlying problem that today's Western liberal democracies were explicitly interwoven into colonial patterns of domination until very recently. These patterns still defend a global hegemonic order today. In the discourse on equity and ecological tipping points, it is necessary for the Global North to come to the uncomfortable realisation that the radical change in the structural causes of the Anthropocene "requires the current system to fade (creating losers) and be replaced (creating winners)" (Pereira / Gianelli / Achieng et al. 2024: 344).

A closer look at the crises of the Anthropocene shows the existential unity of humanity today is a product of its historical inequality. As the history of colonialism, globalisation, and capitalism shows, humanity is not equally responsible for causing the Anthropocene. The colonial system and the production of capital has produced a contradiction between historical global injustice, which challenges our understanding of humanity as a unified group, and planetary unity in the face of existential crises. We must consider two levels of global inequality, one epistemic and one material.

First, epistemic inequality is based on the process of human differentiation: "Cultural and historical differences were often used by European colonisers to make subordinated peoples look like inferior and deprived versions of humanity" (Chakrabarty 2009: 24). Even today's peace research has not shed its colonial perspective. It tends to assume an over-complex concept of peace and an under-complex concept of violence based solely on social practices (Brunner 2016: 41). Indirect forms of violence, such as economic manipulation are often disregarded. As a result, there is little questioning of the extent to which certain epistemic assumptions regarding peace and peacekeeping practices may themselves reproduce violence, or whether the concepts of peace and war are being destabilised in the political reality of modernity (Neocleous 2014: 2).

Second, material inequality around the world is self-perpetuated by the environmental crises posed by the Anthropocene. The places of colonial exploitation and crime today are precisely those that are most affected by the consequences of climate change, without having sufficient epistemic, legal, and economic means at their disposal to articulate and break up this structural injustice. On the contrary, they are confronted with a continuation of the colonial history of violence, insofar as the climate crisis dramatically increases the local probability of genocidal violence due to the asymmetrical scarcity of resources between the Global North and Global South (Zimmerer 2014). The humanist idea that all people have the same right to life by means of natural law, which became constitutive of political modernity, thus remains unrealised in both material and epistemic terms. This notion has not been updated to this day because the dependency of humans on their environment is not taken seriously in humanist political theory, besides an assumption about nature's inexhaustible resources and support of human life (Lakitsch 2022: 122).

An echo of such colonial philosophy can still be heard today, which finds one of its historical origins in the natural law of the humanist Hugo Grotius. As an exemplary representative of a modern debate on natural law, he articulated not only the idea of the boundlessness and inexhaustibility of the sea, but also the distinction between a common possession of nature and a possession through diligence and labour. He argued that those who exploit the common property of nature through diligence and labour make themselves its rightful owners (Elberfeld 2021: 56). This entanglement of law, philosophy, and capital production preserves the modern idea of a natural world created for humans and forms the justification for capitalist extractivism, which continues to this day (Chakrabarty 2021: 273).

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In the Anthropocene, it is crucial that we recognise the consequences of this tradition of thought, and in doing so acknowledge the close connection between capitalism and the climate crisis (Di Muzio 2015; Koch 2012). We must examine the fundamental assumptions underlying our modern systems and peacekeeping operations.

Questioning peacekeeping in the Anthropocene

The geological hypothesis of the Anthropocene requires us to link the global historical development of capital and political systems with the generic history of humanity and its relationship to nature. Influenced by Chakrabarty, we must question which developments of the twentieth century can provide us with the resources to deal with the challenges of our future (Chakrabarty 2009: 23). His analysis revolves around the observation that two contradictory views of human beings emerges when we view the species from the perspective of the historical development of capital systems versus from the perspective of global warming and climate change. The former views humans from the perspective of cultural plurality and historical specificity. For this reason, globalisation analyses have always revolved around the question of how the differences between human beings are to be understood. In accordance with the goals of cosmopolitan peacekeeping, such analyses are committed to intercultural approaches to tolerance that emphasise the human condition in its difference and plurality. In contrast, in the discourse on global warming, humans as members of a species have always been understood as an entity that has affected its own biosphere and environment through its diverse but simultaneous coexistence on the planet (Chakrabarty 2009: 25).

The tension between these two perspectives is preceded by a fundamental assumption about the human relationship with nature. That is, the nature of humans as a species or their "animal life" is given, remains the same, and is guaranteed by the biosphere of the planet (Chakrabarty 2021: 146). Under this assumption, the civilising project of humanity is played out as a constant moral effort to create increasingly just relations among humans. In contrast, non-human animals and the natural world are only linked to these relations insofar as they sustain human development. According to Chakrabarty, the assumption that the planet's biosphere should provide the natural foundations of life for humans indefinitely has become the hidden assumption underlying the social sciences and humanities, as well as the strict separation

drawn between anthropogenic norms and naturalised facts since the Enlightenment. Modern political life is based on the idea of safeguarding human life and property (Chakrabarty 2021: 90). In modern moral and political categories, the right to life is classically humanistic, i.e. anthropocentric, essentialist and individualised. Following Chakrabarty, we can argue that the idea of rights and the safeguarding of individual human life developed with an indifference to the total number of humans, which translated into an indifference to the biosphere as planetary boundaries have been pushed. The Anthropocene is therefore to be understood as the consequence of a scaling of the individual right to life towards the collectivist exploitation of nature, to secure the life of the autonomous individual in the course of modern capitalist societies.
As Maximilian Lakitsch points out, human claims to individual autonomy and extensive use of fossil fuels – both conditions which sustain modern society in material and epistemic ways – has led to the erosion of the very preconditions underlying modernity. The confrontation with the Anthropocene reveals that human sovereignty is a "presumptuous modernist delusion" by which humans, in their striving to create just and peaceful conditions, act against the natural world which is supposed to guarantee their own survival and flourishing (Lakitsch 2023).

As Maximilian Lakitsch points out, human claims to individual autonomy and extensive use of fossil fuels – both conditions which sustain modern society – has led to the erosion of the very preconditions underlying modernity. In striving to create just and peaceful conditions, humans act against the natural world which is supposed to guarantee their own survival and flourishing.

It is those origins of becoming modern that have led us to the current crisis of the Anthropocene. This crisis is exemplified by the fact that human civilisation has taken ecological deep time and natural resources (such as fossil fuels) for granted. In the last 200 years in particular, such resources have been considered to be at the free disposal of humanity. The assumption that the world exists for us is an epistemic perspective that has become ingrained in European and, over the last few centuries, global knowledge systems and theories of peace (Dresse / Fischhendler / Nielsen et al. 2019: 102). An analysis of the anthropological patterns of modernity, starting from the sixteenth century, is therefore the starting point for a new philosophical anthropology that consistently deconstructs how human dominion over the planet is deeply rooted in the modern self-image of humans and the separation of nature and culture. This reveals a fundamental challenge to our modern identity through which we must integrate the category of the planetary, which has been neglected since the eighteenth century, into our image of humanity. Integrating the planetary would mean decentring human beings, understanding them as just one actor among many in the network of life. Essentially, this calls for a lasting transformation of our social institutions and thus also of our idea of peace within a planetary system.

Long-term peacekeeping as ensuring planetary habitability

With the concept of the Anthropocene, Chakrabarty emphasises the geological time and the processes that make multicellular life on the planet possible, which has so far remained largely overlooked in European intellectual history (Chakrabarty 2018). His historical analysis and juxtaposition of global and planetary history introduces an aspect into the realm of the political that has been largely neglected until recently, namely long-term temporality. The Anthropocene discourse forces us to develop a new attention to the future and future people by radically questioning our past practices and current ways of life. The static thinking of theories of modernity, which have always taken the enabling conditions of life on the planet for granted, must be radically changed to allow for hope and visions of the future (Bryant / Knight 2019: 193). In the Anthropocene, it is more necessary than ever to cultivate political foresight for the prospect of long-term peacekeeping (Galaz 2019).
The far-reaching changes associated with the Anthropocene create a connection between past, present, and future people that has never been seen before. In order to adequately meet the challenges posed by the Anthropocene, it is necessary to question political practice with regard to its long-term consequences for future generations. The historical responsibility for the emergence of current crises must therefore be understood and translated by political institutions into measures that guarantee the long-term habitability of the planet for humans and nonhuman beings alike (Kotzé / Knappe 2023).

The far-reaching changes associated with the Anthropocene create a connection between past, present, and future people that has never been seen before. In order to adequately meet the challenges posed by the Anthropocene, it is necessary to question political practice with regard to its long-term consequences for future generations.

The climate crisis, biodiversity loss, and other planetary boundaries focus our attention on the question of how to maintain the habitability of the Earth. Habitability, both in a societal and planetary sense, is based on the principle that our ability to live as a biological species necessarily depends on our relationship with other non-human actors and the shared use of limited resources. Classically, this relationship has been studied only under a paradigm of distributive justice and utility maximisation that has reproduced the vices – speaking from a planetary perspective – of the contract-theoretic natural law tradition. This tradition is based on the idea that humans must find their self-conception against the background of an opposition between nature and non-nature. Nature is understood as the independent and indestructible backdrop against which human beings unfold world history. However, the Anthropocene reveals the acute problem that the primary focus on human welfare and justice between human beings seems increasingly inappropriate today (Chakrabarty 2021: 212). Rather, the geological and environmental conditions of the Anthropocene threaten to fundamentally jeopardise the possibility of peaceful conditions, as large parts of humanity will have to live permanently under the existential threat of ecological catastrophes and the associated social conflicts.[5] This calls for a fundamental redefinition of central political practices, including the scope of humanitarian practice as we have known it up to now. Accordingly, Chakrabarty demands a theoretical shift from the humanities and human sciences, which have so far made a moral distinction between human beings and biological life. He argues that these disciplines must overcome their anthropomorphism, which conveys the illusion that human beings, although they are a biological species, are somehow outside the natural context.
Despite all theoretical considerations, we must not lose sight of the fact that the abstract ideas of global and intergenerational justice, long-term peacekeeping, and the habitability of the planet must

always correspond to the concrete, social, political, and economic world of the present in the Anthropocene discourse. Ultimately, the political commitment to emancipatory social conditions, which can and must be named in concrete terms, determines the prospects for securing long-term peace in the Anthropocene. To give just one example, Hans Lenk refers to a utopian proposal of a treaty for a different globalisation that includes, among other things, questioning the basic principles and priorities of prevailing economic practices, reorienting the influence of science and technology towards the common good, reorganising and redistributing wealth, and limiting the influence of capital markets for the benefit of the entire world population (Lenk 2023: 10).

The geological and environmental conditions of the Anthropocene threaten to fundamentally jeopardise the possibility of peaceful conditions, as large parts of humanity will have to live permanently under the existential threat of ecological catastrophes and the associated social conflicts.

Regarding the cumulative emissions gap between the Global North and the Global South, Andrew Fanning and Jason Hickel (2023) propose the policy recommendation of a compensation for atmospheric appropriation, or in other words reparations for the historical and ongoing colonisation of the atmosphere. The commitment to emancipatory social relations in the Anthropocene is, as argued in this article, directly linked to the commitment to just relations between the Global North and the Global South. In the postcolonial era, these relations remain dominated by neocolonial practices that prevent the self-determination of all people (Bhambra 2021; Ziai 2020). In this sense, postcolonial theory has a material core far removed from the question of identity. What would it mean for the hegemonic system of global order if the Global South could speak for itself? The postcolonial and decolonial discourse must not remain a metaphor for justice, recognition, and self-determination in peace and conflict research either, but must be translated into concrete material conditions (Tuck / Yang 2012: 21). We must translate our state of "planetary interdependence" (Antweiler 2011: 79) into a concrete demand for a focus on the planetary, instead of clinging to models of globalisation which emphasise national identity and difference. In the Global North in particular, this requires cultivating the insight into a twofold responsibility in educational and political institutions; namely the historical responsibility for the colonial and ecological crimes that continue to have an impact today and a responsibility towards future generations and the preservation of the planet's habitability.

Conclusion

This article has been based on the thesis that the structural problems of the present arise from unresolved injustices between past generations and now reproduce a life-threatening danger towards future generations. I have contributed to a clarification of the conditions for long-term peacekeeping. On the question of which theoretical foundations for peace are challenged by the Anthropocene, I have used Chakrabarty's writings to argue that the origins of becoming-modern have led us to many of our current ecological and social crises. Becoming modern is closely linked to colonialism and capitalist extractivism, as well as certain theoretical assumptions about the relationship of humans to nature. As shown, these assumptions can be summarised in the observation that the development of human civilisation since the Enlightenment has taken planetary deep time and associated natural resources as a given that exists at the free disposal for humans. Against the backdrop of an assumed inexhaustible natural world, the moral effort of human beings to establish fairer relations among themselves unfolds. This model of political theory, together with its idea of peace, threatens to be rendered obsolete in the Anthropocene, as the conditions for modern life can no longer be guaranteed. Climate catastrophes and climate migration call into question our current notion of fixed nation-states, political borders, and the scope of humanitarian responsibility and demand new theoretical approaches. The self-understanding of human dominance over the planet, which is deeply rooted in the self-image of modern humans and the separation of nature and culture, demands radical ways of rethinking institutions of education and politics. Since Anthropocene research has to do with global and historical justice, the relationship between the historical responsibility for the emergence of the current ecological crises and the possibility of securing long-term peace can only be considered from a postcolonial perspective. The Anthropocene illustrates that the possibility of securing long-term peace is only feasible with radical social, economic, and political transformations, without which our idea of peace will remain deficient in the future.

Climate catastrophes and climate migration call into question our current notion of fixed nation-states, political borders, and the scope of humanitarian responsibility and demand new theoretical approaches. The self-understanding of human dominance over the planet, which is deeply rooted in the self-image of modern humans and the separation of nature and culture, demands radical ways of rethinking institutions of education and politics.

In the context of the topic of this work, further studies are required. The perspective of the Anthropocene must be elaborated more precisely regarding its relevance for the idea and practice of long-term peacekeeping and the structures of political systems on a global scale. Moreover, this perspective can be used more strongly as an analytical framework for the epistemic and ontological foundations in political, legal, social and other discourses, as is already increasingly practiced in many cases. The theoretical clarification in this work leaves the question of concrete measures for political implementation untouched. Here, therefore, lies a further field of research that relates the analytical scheme of the Anthropocene to concrete measures of humanitarian practice, transitional justice, educational and development aid measures and has a complementary effect on the theorisation of the Anthropocene.

Endnotes

1 The author thanks Grace Clover and the three anonymous reviewers for their contribution to the peer review of this work.

2 Whether the Anthropocene is officially recognised as a geological epoch initially plays a subordinate role in the effectiveness and usefulness of the concept to this essay (Della-Sala / Goldstein / Elias et al. 2018). The concept makes it possible to take a critical look at the relationship between humans and the Earth as a planetary system and the processes that make life possible in general. In view of the geological facts underlying the term, it is also crucial to take a critical

perspective on its various interpretations and uses in the humanities, cultural studies, and social sciences.

3 While it is undoubtedly true that this applies to industrialised nations in general and, in recent decades, to China in particular, in terms of annual greenhouse gas emissions and resource extraction, the following argument must be considered. When we reflect on responsibility for climate change and other ecological crises that become apparent in the Anthropocene for the international community, historical contributions must be considered relative to the planetary boundaries that apply to all. For example, Jason Hickel (2020) argues in favour of an equity-based, scale-based, and population-adjusted attribution approach for exceeding the planetary boundary set at 350 ppm atmospheric CO_2. Assuming that the atmosphere is a limited shared commons resource with the relevant criterion being "stocks of CO_2 in the atmosphere, not annual flows" (2020: e399), Hickel then calculates "the extent to which nations have exceeded or overshot their fair share of a given safe global emissions budget" (2020: e400). His analysis indicates that the formerly colonising nations of the Global North are responsible for over 90 % of excess emissions. According to an analogous analysis of the fair-shares assessment of resource use (1970-2017), the USA and the EU-28 together are responsible for 52 %, China for 15 % and the Global South for only eight percent of global excess material use (Hickel / O'Neill / Fanning et al. 2022). More recent data supports this finding and shows that all countries of the Global North, relative to fair shares of the 1.5 °C limit, "collectively hold responsibility for the majority (91 %) of cumulative overshoot between 1960 and 2019" (Fanning / Hickel 2023: 1079). Nevertheless, the drastic rise in emissions from countries such as China and India also raises acute questions of climate responsibility that cannot be overlooked.

4 Rejections of the claim of historical responsibility for causing the climate crisis towards industrialised nations based on the argument of ignorance or the assertion that, as Alexander Zahar claims, "emitting greenhouse gases was a byproduct of a technological breakthrough that benefited humanity as nothing else has before or since" (2022: 228), massively underestimate the relation between the climate crisis and coloniality. Instead, they follow a typical narrative of modernity that ignores the systematic exploitation and underdevelopment of large parts of the world by the Global North. In general, there are weighty objections to be made against the denial of historical responsibility and reparative justice (Thompson 2017). As argued in this article in particular, the relationship between the causation of the ecological crises of the Anthropocene and traditional notions of political order and peacekeeping must also be critically reflected upon.

5 The Anthropocene, inscribed in an epochal concept, poses the threat of the collapse of the liberal international order's promise of freedom and social cohesion. The social conflicts associated with the existential threat of ecological catastrophes are struggles that are increasingly inseparable from dealing with the conditions of habitability. These new forms of social conflicts "are conflicts and struggles over a wide array of earthly, material conditions of subsistence (e.g. air, water, food, land, soil, climate) that allow individuals or collectives to subsist, to survive, or to reproduce at a moment in history where such means can no longer be taken for granted" (Carleheden / Schultz 2022: 109). The 'brutalisation of geo-social conflicts' is an intrinsically intergenerational crisis that involves the destabilisation of communities and entire regions of the world, climate migration, disputes over land use, and much more. These are social conflicts, not about emancipation and freedom, but about access to livelihoods, which poses profound challenges to the traditional policies of peacekeeping, democratic institutions, and international relations.

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