Don't waste the crisis: The **COVID-19** Anthropause as an experiment for rethinking human-environment relations

FPF: Nature and Space 2024. Vol. 7(3) 1222-1244 © The Author(s) 2024



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Abstract

The COVID-19 pandemic sparked radical changes in the way life was lived around the globe. With the rapid reduction in human mobility, short-term environmental improvements were seen across the world. Work and social routines were altered, and political action to reduce case numbers seemed to open a window of opportunity for socio-environmental change in a post-pandemic world. Inspired by conversations around the "COVID-19 Anthropause," this paper probes the lived experiences and reflections that emerged in the pandemic pause. Three years after the onset of the pandemic, many initial environmental gains have been limited. Nonetheless, the COVID-19 Anthropause has brought human-environment relations into new light, sparking introspection and forms of broader social critique surrounding what kinds of socio-political courage and structural change is necessary to achieve new post-pandemic realities. Our research shows the heterogeneity of experiences of the Anthropause, highlighting the ways that uncritical engagement with the concept can obscure overlapping structural inequalities, and reinforce harmful binaries around the presence and absence of humans in nature. Drawing on longitudinal, qualitative data from Latin America and Europe, we enrich debates over the implications of the pandemic for human-environment relations and underscore the need to attend to radical forms of difference amid any global environmental concept.

Keywords

Environment, socio-political change, climate change, crisis, COVID-19 anthropause, pandemic, Europe, Latin America

Introduction

In early 2020, life as usual was brought to a halt by the COVID-19 pandemic. With the rapid reduction in human mobility and accompanying drops in fossil fuel consumption and noise pollution, short-term environmental improvements were seen across the world (Searle et al., 2021). The cessation or reduction of many human endeavors was met by a range of visible environmental responses. Some natural scientists referred to this as the "COVID-19 Anthropause" to capture the unusual, temporary global reduction of human mobility (Rutz et al., 2020). Three years later, short-term reductions in emissions and energy use, as well as many other initial environmental gains of the pandemic have tapered off. Despite some initial optimism for a moment of recovery for the planet, it is now clear that the pandemic amplified the environmental crisis and accompanying forms of structural inequality (Fiske et al., 2022). As the pandemic moved from a moment of exception to a form of normality, the entangled nature of the COVID-19 crisis with other, long-standing, attritional crises such as climate and inequality became increasingly evident. The COVID-19 pandemic was a global disaster fitting for life in the Anthropocene (Searle et al., 2021).

While the marked moment of disruption to everyday life during the pandemic is over, the COVID-19 Anthropause retains saliency as a cultural event, prompting changes, hopes, and reflections on how the pandemic could have, or should have, triggered meaningful re-assessments of life in the present (Young et al., 2021). For some, the COVID-19 Anthropause has brought human–environment relations into new light (e.g., public discussions of the human-made roots of the pandemic such as the destruction of animal habitats), or sparked introspection and forms of broader social critique surrounding what kinds of structural change is necessary to achieve new post-pandemic realities (Wagenaar and Prainsack, 2021). By contrast, for others, the COVID-19 Anthropause was a justification to intensify extractive practices in order to recover economic losses resulting from the pandemic. On the whole, the continuation of enduring socio-environmental inequalities through COVID-19 foreclosed possibilities for imagining post-pandemic life otherwise

(Grove et al., 2022), in particular because the voices of those most affected by the pandemic were excluded from debates on the social, environmental, and economic repercussions of the pandemic.

The aim of this paper is to qualitatively explore what is obscured and revealed when the analytic of the Anthropause is utilized as a global environmental concept to elucidate the implications of the pandemic moment for human-environment relations. Drawing on longitudinal, qualitative data from Latin America and Europe as part of the "Solidarity in times of a pandemic" Consortium (Hangel et al., 2022; Wagenaar et al., 2022; Zimmermann et al., 2022), we ask, how did people experience the Anthropause across different socio-environmental positionalities? The paper presents the perspectives of hundreds of people living across Latin America and Europe during the lockdown phase of the Anthropause, and the following year. Our analysis offers a glimpse into the heterogeneity of lived experiences of the COVID-19 Anthropause: participant responses both reiterate idealized notions of planetary recovery, and point to moments of loss and overlapping forms of crisis. Those participants with experiences living or working in places of environmental precarity offered insights into the complex relationships between a "pause" and the refiguring of planetary life. The paper illustrates that uncritical engagement with the Anthropause concept for understanding the repercussions of COVID-19 can obscure overlapping structural inequalities, and reinforce harmful binaries around the presence and absence of humans in nature. Presuming a universal quality to pandemic experiences glosses over the specific ways that COVID-19 intersected with and exacerbated existing socio-environmental inequalities.

The Anthropause and environmental changes during COVID-19 pandemic

During the lockdowns of March and April of 2020, news of environmental gains came as a welcome contrast to accounts of the human plight caused by the pandemic. Improvements in air and water quality were reported around the world, along with the return of animals to reclaim former habitats, or the presence of bird songs in urban areas (Stokstad, 2020). Responding to the changes in wildlife habits, animal biologist Christian Rutz coined the term "Anthropause" to capture the substantial reduction in human activity forced by the pandemic, and proposed leveraging the COVID-19 moment to better understand the impact of humans on the environment (Rutz, 2022; Rutz et al., 2020). For Rutz and other field researchers, these extraordinary circumstances presented an opportune moment for scientists to learn more about how people affect the natural world (Anthes, 2022). Rutz defined an Anthropause as "an unusual, substantial, temporary, continental- to global-scale reduction in human mobility," which results in a range of environmental responses, including the possibility for a subsequent "anthropulse" in which pre-pandemic baseline levels of human activities are exceeded following the end of COVID-19 restrictions (Rutz, 2022).

Environmental changes were widespread. For example, daily global Carbon Dioxide emissions dropped by 17% by early April 2020 compared to the prior year (Le Quéré et al., 2020). Overall, Carbon Dioxide emissions dropped by 8.8% in the first half of 2020, a decline that exceeded any international climate policy achievement and greater than that of World War II (Liu et al., 2020; Carstens, 2020). In Portugal alone, greenhouse gas emissions were reduced by 8.5% in comparison to 2019, with a concurrent increase in the number of days with "very good" air quality (INE, 2021). The lockdown period in early 2020 saw an overall 60% reduction in pollution in La Paz, Bolivia, compared to the prior year, with reductions in sound pressure by 44% and particulate matter-10 concentrations by 72% (Cuevas, 2020). Across Latin American cities, these trends were mirrored with decreases in N02 and S02 during quarantines (Economic Commission for Latin America and the Caribbean, 2020). In Ecuador, air contamination improved across major cities, for example, in Quito levels dropped from 25-50 μ g/m3 to 4-7 μ g/m3 by the end of March 2020 (López-Feldman et al., 2020). With cautious optimism, for some it seemed that the pandemic was affording the environment a welcome moment of recovery.

Social media and public commentary responding to these seemingly redemptive aspects of the pandemic lockdowns revived romantic ideas about nature "recovering" or returning to a pre-human state (Bosworth, 2021). Memes circulated of animals retaking city spaces, many of which were subsequently revealed to be fake or misleading (Mathur, 2020; Royle, 2020). As Mathur (2020) notes, a particular genre of these pandemic stories included celebrating the return of birdsong or images of far-off mountains without the usual smog brought by commuters. Such pandemic narratives often engaged in traditional dichotomies between economic growth versus environmental protection, and development versus conservation, conflating individual actions with structural changes while obstructing any substantively new form of environmental politics (Mathur, 2020). Some went so far as to suggest that "humanity is the virus," a refrain which reiterated racialized tropes of selective human survival and the implicit worth of some human lives over others (Royle, 2020, Searle and Turnbull, 2020). In their celebration of (short-lived) environmental change, such pandemic reflections enacted problematic binaries around the role of humans in nature (Searle and Turnbull, 2020).

The relatively quick action of governmental bodies in changing policy to protect public health also raised the issue of how life might be organized after the pandemic as a political-economic question. Supranational institutions revived the "build back better" motto from prior disasters, a call to action which conjures a similar sense of possibility within the forced pause of crisis. The World Bank emphasized how commitments to build back better have "...come to mean the pursuit of a greener, more inclusive and resilient recovery from the COVID-19 crisis" (Harley and Acheampong, 2021). The United Nations emphasized the need for "climate-smart" recovery plans that address new risks brought by COVID-19 and existing socio-economic vulnerabilities (Hanif, 2020). The Organization for Economic Cooperation and Development (OECD) underscored that dual vulnerabilities were made evident by the pandemic, in which environmental degradation is driven by the global economic system (Secretary-General of the OECD, 2020). Similar goals were also touted by leaders of the US, Germany, France, Canada, and other nations. In this way, as leaders around the world began to contemplate emerging from the pandemic, many noted the opportunity to explicitly link economic recovery and environmental crisis. The COVID-19 Anthropause created an opening for discussing how socioenvironmental problems might be better addressed through the crisis (Young et al., 2021; Dandy, 2020), yet many such proposals failed to contemplate what "better" means for different groups along local axes of inequality and justice (Sultana, 2021).

As Young et al. note, "the symbolic undertones of the Anthropause – that humans have taken too much from nature and set the relationship out of balance – is a powerful cross-cultural idea that resonates with a diversity of people" (Young et al., 2021: 275). Yet, figurations of the pandemic as a moment of planetary reset overlooked existing structural inequalities within which the pandemic unfolded: the possibility for crafting new environmental futures out of the pause of the lockdown was not available to all. This is what Grove and colleagues call the "uneven distribution of futurity" – an anticipatory stance towards a future that holds the potential for change or improvement that is only afforded to some, and denied to others (Grove et al., 2022). Employing the Anthropause concept to explore human–environment relations requires recognizing, on the one hand, the emergence of the Anthropause as a lived experience of different socio-environmental changes brought by the pandemic, and situating those experiences within the intersecting histories of industrial capitalism, colonialism, and globalisation that led to the emergence of the pandemic (Turnbull et al., 2023). In this light, the Anthropause emerges within an highly contested terrain, contingent on socio-economic position and geopolitical possibility.

Within our research, the pandemic was figured as a largely un-realized window of opportunity for socio-environmental change by participants in Europe and Latin America. While the call for a "reset" across many aspects of life was evident in our data, the COVID-19 Anthropause was experienced by people across different socio-economic gradients and political positionings differently. While desires for less extractivist² ways of life were articulated in all countries, there were great

differences in how participants hoped those changes would occur, and the stakes if those changes did not happen. As analysts have noted (Bambra et al., 2021; Mahler et al., 2022), the COVID-19 pandemic has reinforced and amplified a host of structural inequalities that overlap in important ways with possibilities for change, the contingencies of social and political action, and the making of the "post" in the Anthropause (Fiske et al., 2022; Radhuber et al., 2023). In what follows, this paper offers a large-scale empirical exploration of the lived experiences of people on two continents during the COVID-19 Anthropause. A qualitative exploration of human life during the COVID-19 Anthropause helps to better understand the nuance of the specific forms of hope and ambivalence made visible by the pandemic—not in universal terms but through the textured experiences across a range of socio-economic and environmental gradients—and to contemplate what the reflections from this moment could offer in rethinking the concepts we use to understand human-environmental relations and crises in the future. An assumption of shared experience within the COVID-19 Anthropause risks rendering invisible the perspectives of those people and communities who are suffering the most from environmental degradation, or living in such precarious situations that their voices are not included in conversations or research on the pandemic experience.

Methods

This study is part of the qualitative, longitudinal, and multinational study on "Solidarity in times of a pandemic" SolPan(+) and is made possible by the joint work of the members of the SolPan and SolPan+. As part of SolPan/SolPan+, we analyzed semi-structured interviews with residents from Austria, Bolivia, Ecuador, Germany, Portugal, Switzerland, and the UK. The SolPan consortium, composed of ten European countries, was formed in March 2020 to explore peoples' experiences during the pandemic, with particular attention to practices relating to solidarity. The SolPan+ consortium, comprised of 12 Latin American countries, was formed two months later. Due to the rapidly evolving crisis, both consortia were built ad-hoc and without any overarching funding; the inclusion of participating countries followed a pragmatic approach of available resources (Wagenaar et al., 2022). The study was approved by ethics committees at the following institutions: University of Vienna (Ref. 00544; also covers the UK), Technical University of Munich (no. 208/20 S), University of Basel (no. 101), University of Minho (CEICSH no.061/2021), and Universidad San Francisco de Quito (No. IEE-106-2020-CEISH-USFQ). Bolivia does not have an IRB approval procedure.

Participants were recruited through online advertisement on university websites, social media networks, and through snowball sampling. In Europe, this occurred in April 2020, with follow-up interviews in October 2020 and October 2021.³ In Latin America, this occurred between August and November 2020, with follow-up interviews between August and November 2021. All of those above 18 and living in the respective countries were eligible to participate. The interviews followed a semi-structured interview guide which was used across all countries in the SolPan (2021b) and SolPan+ Consortiums (SolPan+ Consortium, 2021b, 2021d). A full list of participant demographic categories in SolPan+ was published online (SolPan+ Consortium, 2021a). Information on analytical coding for both consortia (SolPan+ Consortium, 2021c, 2021e; SolPan Consortium, 2021a), the research commons process (Zimmermann et al., 2022), and a detailed description of the recruitment process (Wagenaar et al., 2022) is published online. Interviews ranged from 30 to 80 min, were conducted in the official language of the country, and were recorded on a digital recorder. Only audio material was stored. The interviews were transcribed and subsequently pseudonymized.

In total, 539 (152 Austria; 62 Bolivia; 72 Ecuador; 92 Germany; 38 Portugal; 57 Switzerland; 66 UK) interviews were analyzed for this paper. The interviews were coded using an inductively

generated coding scheme following a Constructivist Grounded Theory approach (Charmaz, 2014) which was collaboratively generated and agreed upon within the SolPan/+ consortia. Coding was checked by a second researcher for consistency. The interviews were intentionally designed to elicit open responses to experiences during the pandemic, and as such returned information on a range of topics outside of the specific questions of the interview guides. An inductive analysis revealed the emergence of environmental reflections as an important topic within this large dataset on pandemic experiences, as approximately one quarter (26%) of the participants spontaneously brought up environmental concerns without prompting (n= 141; 54 Austria; 18 Bolivia; 14 Ecuador; 17 Germany; 17 Portugal; 17 Switzerland; 4 UK). The fact that findings emerged in data analysis that were not explicitly asked about indicates the high quality of data analysis within the consortia. We decided to write a paper about the Anthropause because these reflections on the environment were so compelling.

The countries in this paper were chosen pragmatically from the SolPan consortia based on the emergence of interesting environmental concerns following analyses of the interview data. However, we aimed for a range of Western European and Latin American countries to explore a variety of perspectives on human–environment interactions. Given the relatively small sample size of each country group and the scope of environmental concerns raised, our intention is not to engage in a specific country-by-country comparison, but rather to explore and situate the diversity of responses that emerged in the process of data analysis and reflection. Participants within the participating countries were recruited with attention to a range of different demographics, including age, gender, income, household structure, geographic area, ethnicity, education, and employment (Supplemental Tables 1 and 2). Nonetheless, as we aspired for theoretical rather than statistical representativity, we do not claim that views and experiences of minorities and marginalized groups are represented in all country samples.

Results

Our research participants described how the pandemic had refocused their attention on the environment. Our respondents' concerns were focused on the following themes: 1) Participants highlighted the pandemic as a window of opportunity for positive environmental change; 2) Participants described finding themselves caught between hope for environmental changes post-pandemic and resignation that positive pandemic changes would not survive the return to "normality," however the stakes of these changes varied greatly; and 3) Participants highlighted the intersections of the COVID-19 crisis with other structural forms of inequality and systemic crisis such as climate change, but differed in their personal experiences of environmental problems. Following the discussion of the interview data, we situate the analysis within literature on how the pandemic amplified environmental crises, and analyze the findings in relation with other critical social science scholarship on environmentalisms and anthropogenic crisis, such as the Anthropocene.

The pandemic as a window of opportunity

Across all country data we analyzed in this paper, the pandemic emerged as a leitmotif for socioenvironmental change. In Germany, one participant noted that the pandemic prompted widespread reconsideration of time, priorities, and the environmental effects of individual choices—such as commuting, or long-distance travel for work. For some participants in other countries, the pause on everyday activities forced by the pandemic was illustrative, something that created break between what was and what could be. One retired person in Austria noted that "[w]hat was now deadly and bad for people was actually insanely restorative and positive for nature" (AT-LS04). Or, as one unemployed parent living in a small town in Portugal commented,

Look, in the beginning, I honestly thought that this was an eye-opener for everyone, for the planet itself. There were places, cities, where there hadn't been such low levels of pollution in years and years, so the air quality has improved a lot, places that have turned green again. [...] At the planetary level, [...] I thought natural world was very grateful that human beings stayed indoors [...] let's imagine - I don't know, every x years on a planetary level, on a world level, if there was such a cut, nature would be grateful." (PT-CF8)

This sentiment was echoed by others as well, such as one middle-aged, well-off respondent living in a large town in the UK who described the pandemic as "an opportunity for a huge shift in the way we think about these things" (UK-SR04). Participants repeatedly suggested that something positive—for humanity and for nature—might be rescued from the crisis.

One of the most resounding messages of the pandemic was the precarious relationship between humans and the environment. For many participants, this was demonstrated in the origins of the crisis. One self-employed participant living in a rural area of the UK suggested that the onset of the pandemic was due to the poor treatment of animals and that "nature is paying us back. We've interfered with it far too much" (UK-SH03). Similarly, a retired middle-class, urban music teacher in Bolivia who identified as mestizo-Aymara noted that the newfound problems we were facing were because "mankind [sic] has been very arrogant and has thought 'I am going to dominate nature.' And I think what was done by dominating nature is nothing more than destroying it" (BO-AF02).

Although how this sentiment manifested itself across different countries and groups varied, many participants reflected on how the pandemic prompted changes in how they understood and responded to their immediate natural environment. As a retired historian living in a rural area of Germany described,

Yes, so [this is] a very important lesson, I think, this connection between the ecological destruction of habitats for animals and the emergence of pandemics. [...] since we are restricting the habitat of these animals so much, we will be confronted more and more with pandemics. And due to our globalized way of life, they of course also spread more rapidly. [...] For me, this is all the more reason to think more sustainably and ecologically, and to stop destroying habitat, but rather to give it back. (DE-NH02)

Among those whose subsistence was directly tied to nature, some participants reflected on how to take better care of the forest, or of animal and plant species near them. This was evident in Ecuador among participants living in the Amazon Region, such as one participant who noted that some communities are closer or more sensitive to ecological damage, and therefore reflections on the effects of the pandemic had been more prominent than in other places with more distance from "nature." As a college-educated individual living in the Amazon with her young family and running a business, she noted,

Let's see, here we are very close to the forest, in the jungle, and, [the idea] for example, to raise awareness about deforestation, is something that maybe at the beginning [of the pandemic] was a central part of the conversation, that there was a need to change, but with time those ideas [were dropped] and nothing [has been] done about it... (EC-NA04)

Despite sobering reflections on the state of the world, the pandemic was seen as opening possibilities for change, whether in the shape of environmental education initiatives, personal

consumption, or in how life is organized. One parent living in a farming region of Austria described how prior to the pandemic people were dissatisfied with life. Mounting climate and environmental movements illustrated that current rhythms were untenable:

I think to myself: this is exciting and where do we go from here? Do we really use this chance as a community, and not just go back to the familiar? Or do we believe in the familiar as we knew it, although this was also not as we imagined it to be ideal? Do we want to go back to that? (AT-KK07)

Whether in direct or indirect ways, the pandemic sparked reflection for many on their own position in relation to immediate and more distant environmental concerns. For participants in European countries, these concerns tended to be broader, more global questions such as climate or consumption at large, whereas Latin American participants tended to provide more specific, localized examples of concerns that they had experienced.

Caught between hope and resignation

Hopes for socio-environmental change. The window of opportunity opened by the pandemic, in the views of many participants, created space for an emergent sense of hope in relation to the environment. This ranged from calls to return to how things were "before" such as more communitarian forms of living in Bolivia, the possibilities of regeneration in Portugal, or of attaching greater value to nature in Ecuador, all of which prompted reflection on the sort of post-pandemic future that the participants could imagine. In various ways, participants reiterated that they hoped that "everything doesn't immediately get back into the old, fast rut," and that life would instead remain a bit slower and calmer, such that "[people] also realize that they don't have to have everything, don't have to be part of everything. Don't have to go everywhere. Not jetting around the world all the time" (CH-BZ24). In another case, one Mestizo-Chiquitano doctor working in the rural eastern lowlands of Bolivia noted that although the pandemic came at a "high social cost," it was "necessary to see that continuing in the same way may not be the right way" (BO-MJ04). Likewise, as a middle-aged participant living in a large town in Austria who worked for a large international organization noted that, "...there is simply this hope that we will not waste this crisis and then everything will be as it always was, [...] that's why I think that this maybe could really have longer-term effects as well" (AT-KR09).

For some, the small changes participants saw in their own backyards were linked to global environmental questions, such as fewer emissions from air traffic. A retired individual who had worked in the health sector in alpine Austria described their delight at changes in the natural world around them:

When I look out at our place, you have a brilliant blue sky, there are no airplanes, no contrails or anything up there. Fascinating, isn't it? Or the bird life. [...] It just seems like the whole planet is about to breathe a sigh of relief somewhere. (AT-LS05)

The same doctor working in rural Bolivia notes that there were times in the past when the "purest skies of the Americas" were polluted. After the pause forced by the pandemic, the participant went on, they were now able "to look at the sun in its true splendor … we could see the stars and the galaxies in a spectacular way" (BO-MJ04). Similar refrains were heard from participants elsewhere, such as from one middle-aged parent living in a small town in the UK, who noted that:

It would be really great to see more of an understanding of an impact that we have on the planet. And those lessons to be learned, in terms of conservation and global warming. Seeing no planes in the sky, and immediately, kind of a boost in wildlife. My garden is absolutely riddled with birds and species that we wouldn't normally see around here. I just think, wow. That is how quickly it can change. (UK-GS04)

A participant in their 20s with a management degree living in a small village in Portugal echoed the sentiment, noting that "our planet basically regenerated" and "everything was much more beautiful [...] I don't remember seeing foxes on the road, and I saw about two or three." For this individual, who took pleasure in exploring the local woods, the appearance of previously rarely seen wildlife prompted her to reflect, with caution, on what might be retained from the pause afforded by COVID-19: "There are things that we do not need to have back. [...] Maybe we don't need to have 300,000 flights a day anymore. Maybe we can have a little less, and maybe we can try to use more electric cars..." (PT-EA2) This participant's comments were reflected in other responses in Portugal, Germany, and Austria, where hope for change was figured as specific forms of reduction or reorganization of daily life, from reducing car and plane use, to limiting tourism, or rethinking lifestyles and everyday consumption choices.

In Ecuador, the same Amazonian entrepreneur described their observations that others have begun to realize the value of clean air and a rural lifestyle, with the hope that such feelings would extend to a broader societal level. "[P]eople look at the countryside or nature with more affection, with more respect, perhaps [...] I think that people, or society, [...] are going to realize that we need to maintain these forests, and I hope it lasts..." (EC-NA06). One retired participant in Austria described how they felt it was evident that the air quality had improved, and that the pandemic could support arguments for making bolder changes on environmental matters:

...look at yourselves, the world hasn't been completely thrown off its hinges. It has still continued to function, bumpily, but still, and you can now seriously say, really, the Corona crisis is only a small problem, comparatively, and it will pass, but the climate crisis will remain with us. (AT-KP01)

Hopes for socio-environmental change were often directed towards a nascent consciousness among people about specific environmental concerns. A young woman from the Monkoxi nation in Bolivia connected local environmental changes such as a lack of rain and excessive heat to changes in the global economy, noting that, "it is opening up our vision of continuing to conserve and protect our forest and to see in some way how we can provide solutions to different changes in order to continue caring for our springs, our rivers and in some way to be able to show the world that way of caring for nature" (BO-SB02). Others made similar associations, such as one young, well-educated participant who worked for an international company in a rural area of Germany was unsure if it was the pandemic that had triggered a shift in attention to climate, or if it was instead the mounting environmental disasters, such as the heat waves and flooding that occurred in Europe during the pandemic: "Perhaps it all came together, and perhaps the pandemic in recent years has made us particularly receptive to thinking about our future and therefore perhaps be more open to the issue of sustainability" (DE-FS03). Some participants in Switzerland and Austria saw the pandemic as a chance to decrease the consumption of resources, to have greater appreciation for local food and products, or to reduce international travel.

For those who had direct experience with a given environmental concern, such hopes often manifested as tied to matters of local survival or personal wellbeing rather than a more vague, global aspiration. For one participant from the Gwarayú nation who worked in the local municipality of an Indigenous territory in the north-eastern Bolivian lowlands, environmental concerns constituted a threat to local survival such as with aggressive logging in the Guarayos region. They noted that

while they recognized the economic pressures at hand, "[m]y hope is that people will be conscious, that they will not continue deforesting [the land]. That is what I hope that people will realize that it is because of the trees that there is oxygen, that the rain falls" (BOL-IR01). For others, heightened awareness took shape through more deliberate appreciation of what life in rural areas has to offer, from increased tranquility, to clean air, or the ability to grow one's own food or start a new initiative. One participant who believed in the value of local development initiatives, and had a business commercializing high quality coffee in the Amazon Region of Ecuador, noted that

Well, the beauty of the pandemic is precisely to value, to be in the midst of all this nature and all this potential and to be able to enjoy not being stuck in a small apartment there in the city, believing that you are in the middle of development. (EC-NA04)

They went on to describe how while it was more challenging to start a business from their rural location, that they were able to "salvage" the potential of creating new opportunities from the pandemic. These differing socio-environmental positionalities, shaped in part by relative forms of proximity or distance to specific environmental concerns, illustrated the dramatically different stakes of the COVID-19 Anthropause for participants.

Across the board, participants noted that it was clear that going back to how things were before the pandemic was not an option, and that it was also no longer possible to pretend that things could not be otherwise. A recently retired, very active and academically interested individual who lived in a German city noted, "I hope that we don't go back to normal [...]I really hope that there is a shift in what is important to us. What is important to us as a society and as people? And one result [of the pandemic]: no one can say the word *alternativlos* anymore. We are not without alternatives" (DE-NH04).

Ambivalences around the staying power of pandemic change. In general, while various hopes were raised for the pandemic to create space for positive social change and more environmentally friendly practices, most participants were doubtful that such changes would be maintained in the long term. As one young, self-employed participant in the UK noted, after describing their hope that people would rethink driving and work to lower emissions, on the long term "I don't think it's very realistic, to be honest, (UK-SM04). A retired participant in their mid-60 s with secondary education who lived in a small town in Portugal with her daughter and grandson was highly critical of management of the pandemic, including economic interests in vaccines, shared these doubts: "I'm completely skeptical, I don't think it's going to change at all. I don't think so. I think people have already gone back to what they were they used to be [before the pandemic]" (PT-HM5). A retired participant who regularly looked after her grandchildren in rural Germany commented that the pandemic was complicating ecological commitments, "[i]t's already apparent that the Germans are once again ready for car purchase premiums, completely without ecological and economic considerations [...] Instead, we have to think in a completely different direction. And in my view, COVID-19 is putting the brakes on [thinking differently about the future]" (DE-NH18). Across many countries, participants expressed the sentiment that very few of the positive changes of the pandemic would be retained in the long run because all would require broader, structural interventions. Participants noted that the pandemic itself does not have the power to change individual or societal practices, such as a middle-aged individual working in the health sector in a large metropolitan city in Portugal, who was pessimistic about the redemptive promises of the pandemic for environmental solidarity:

If you ask me that ... I live in front of the sea and I have seen that the sea waters got cleaner during the pandemic and everything? Yes. But then I also started seeing too many masks on the ground, too many plastics, too many other things that are not good for the environment either, and so I think [...] the

pandemic cannot be understood as the driver for a change about how we are going to inhabit the planet, because pandemic was something external to us, and with which we had to deal with. (PT-HM09)

Specific concerns and resignation emerged in interviews, including the feeling that people are really going to "screw things up more," as one younger participant who worked in tourism in the Galapagos and was forced to close her business during the pandemic (EC-CF07). In contrast to those participants who described efforts to work from home, purchase local products, or change social practices, others felt that there was additional risk that environmental concerns would be neglected. Some described increased consumerism and online shopping, or worried that corporate priorities would prevail. As the participant described earlier in Portugal noted, any environmental gains were backsliding:

I think we're going backwards, [...] what the planet has regenerated in these almost two years, I think we're going to ruin that in a very short time. Things are coming back to the normal, some are turning worse than before. The industry is growing a lot, despite the lack of raw material, they are always trying to hire people, always trying to expand. There are a lot of companies that have grown a lot with the pandemic, and a lot of those companies don't care about how they grow or about what they're going to produce, or how they're going to produce it. (PT-EA2)

During the early months of the pandemic, media coverage and conversations pivoted around matters of virology, healthcare, and public health infrastructure. Yet, as some participants noted, this laser focus on the pandemic also obscured other issues that particularly impacted marginalized communities, such as concurrent natural (and not-so-natural) disasters such as fires, floods, and oil spills. Participants in Austria and Germany worried that the pandemic was eclipsing other important environmental and social concerns on political agendas. One middle-aged participant in Austria hoped that solutions for emerging from the pandemic could be thought together with solutions for climate: "But I'm a little worried that this goal of a climate crisis will somehow be lost from sight, and I think it's important to look at how we can link these things together. In other words, how can we somehow link something [...] a revival of the economy, with overcoming the climate crisis?" (AT-WS10). Others raised issue with growing abuse in the extraction of natural resources with less control from authorities.

Participants living in places with active natural resource extraction had particularly critical perspectives on environmental conflict and consequences during the pandemic. In Bolivia and Ecuador, the national economy is based in great part on extractive industries such as oil extraction, large-scale mining, gas, and agro-industrial production of cash crops. In both countries, the COVID-19 pandemic worsened situations for populations living in areas affected by extractive activities. In Bolivia, conflicts arose when loggers or gas plant workers were entering and leaving territories that were isolating during lockdown. In rural areas, people simultaneously faced food shortages due to interrupted public transport and lack of supply. Land grabs intensified during lockdown and annual wildfires caused by increasingly long dry-seasons and slash-and burn land clearance created parallel crises with the pandemic. In 2021, Bolivia had the highest forest-loss ever reported in one year (Andersen et al., 2022). The risky efforts to address forest fires during a COVID-19 peak overburdened the already-strained public health infrastructure.

The state does not have a contingency plan for when these things happen [...] last year there was a wild-fire in Bolivia, more than six million hectares were burned [in total] and five million hectares had to be burned [before the government moved] to bring an air tanker, to put money to solve that problem. [...] we have no strategy for any emergency, we have to wait for the emergency to arrive to see where to get [necessary resources ...] (BO-MJ04)

Participants expressed concerns that these multiple crises revealed how unprepared governments were to respond effectively to peoples' needs.

In Ecuador, pressing environmental issues relating to oil extraction and large-scale mining particularly affected Indigenous peoples and peasant farming communities, which often live in ecologically sensitive environments such as the Amazon. As in Bolivia, extractive practices were also associated with the spread of the COVID-19 virus due to a constant mobility of people and machinery. The arrival of workers from other parts of the country, the presence of trucks bringing in machinery and transporting material, and the opening of roads for the construction of oil wells, created a constant flow of movement and posed a greater risk for communities that were isolated or facing socio-economic and political marginalization. Some participants noted that environmental abuses increased during the pandemic, and they drew links between the incapacity or unwillingness of the government to fulfill its obligations of environmental control over resource extraction in a variety of contexts, from shrimp farming on the Pacific Coast, to oil and illegal mining in the Amazon. One individual from an Ecuadorian city who had previously worked for the Ministry of Tourism and was well-versed in national data on environmental changes observed:

[Regarding] the environment we are very concerned, during the pandemic there has been a lot of abuse against nature, at all levels. Suddenly the authorities removed so many [staff] that sometimes it seems that it is on purpose. So, [...] there is expansion of shrimp farms, there is destruction of forests, there are tons of shark fins captured supposedly unintentionally, there are turtles sold, so it has been chaos. (EC-NA09)

Instead of the pandemic yielding more environmental awareness, here the opposite was true. One participant living in the Galapagos was highly attuned to the tensions between individual and more systemic level changes:

At times I thought, "well, it will be a moment for, for people to stop consuming so much, [...] generating so much garbage," [...] but no, but we are already seeing, I think this will generate more garbage, more pollution, which I also think is a very serious problem. [...] we should not romanticize this idea that COVID is going to help us be better, and [if] we are not attentive we are going to, we are going to screw it up more [laughing] [...] I don't mean that this is only the responsibility of the people, I'm talking about the big companies, of all that, right?" (EC-CF07)

Such responses highlight the ways that while the pandemic was often spoken of as a window of opportunity for environmental recovery, it was also a moment of environmental opportunism on the part of actors in extractive industries and the state. Most participants were doubtful that the initially positive signs of the COVID-19 Anthropause would be maintained in the long-term due to existing social practices and political-economic structures.

Dual crises: intersections of the COVID-19 crisis with other forms of systemic crisis

The pandemic offered a rare glimpse of how quickly the world could seemingly change course. Participants routinely drew parallels between the climate crisis and the COVID-19 crisis, noting that it was now evident that quick, effective policy action could be taken on important matters, in particular given that the climate crisis presents greater risks for humanity than the pandemic. As a dentist in Germany noted, "So, if we had made the effort we are making together now for the climate, then we really would have saved the climate" (DE-BZ02). Such comments reflected both the ability of people to commit to changes, and also policy-makers to reach swift, science-based decisions for change. As an architect who lives with young children in a German city noted,

In other areas, such as climate change, climate crisis, there is exactly the point that, unfortunately, science is still listened to far too little. And if this [scientific] awareness – what most scientists say is right – was transferred and was acted upon accordingly, as now in COVID times, where measures were introduced enormously quickly. (DE-NH09)

Several participants in Germany echoed this response, noting that there was now a collective experience that demonstrated how important it was to take expert warnings seriously. Others commented that the all-consuming focus of the media on the pandemic could be turned instead to climate concerns.

Politically, it became clear that the tools that enabled quick policy action in response to the pandemic could be productively transposed to the climate change debate. The motif of the pandemic as an opening was particularly clear in this regard. As an architect from a Swiss city noted,

And so [the pandemic] could be viewed as a great, great opportunity. We can see how quickly [...] very radical decisions can actually be made. And that's actually also a good example to illustrate that we can no longer allow ourselves excuses that everything always takes so long. Especially with all the political decisions on climate protection. Within hours, gigantic aid packages, etcetera, are decided, and in the best-case scenario, this willingness to make decisions must continue. Just to move forward with the whole climate protection issue. (CH-NH03)

An academic on the verge of retirement in a rural area of Switzerland described the reaction to the pandemic as "almost a bit hysterical", given that there are "greater problems" that may not have the immediate effects of a virus but will have even more serious long-term consequences. Citing a collective myopia, they noted that the pandemic had come to eclipse other concerns, "For example, climate change, which is being completely forgotten at the moment" (CH-BZ06).

For participants who were experiencing the immediate effects of climate change during the pandemic, whether in the form of wildfires, deforestation, environmental destruction, or changes in air quality, the climate crisis was not a question of rhetorical comparison but was rather part of the experience of the pandemic. Local weather patterns were one example in which this emerged. Participants in Bolivia reflected on changing weather patterns that were felt dramatically in regional farming, and the need to cultivate practices for caring for the environment as part of plans for moving out of the pandemic. Another participant, who was retired and placed great emphasis on the need for green spaces, describing the planet as "tired" and described how the local climate of their home in a small, touristic town in Portugal was becoming increasingly hotter with out-of-season storms, noted that,

Of course, scientists warn, warn, [but] our governments don't pay attention, don't pay attention but scientists are constantly warning. [...] So the melting ice and those things worry me. It worries me to watch that, because we know that if that happens, keeps happening, the [climate] changes are going to happen. And we don't know to what extent ... what consequences will climate changes will bring to our health. (PT-HM01)

For others, hopes were tempered by a fear for the future of their children and grandchildren, describing a world where there was insufficient food or water, and minimal living conditions were not met, such as one mother with an immigration background and a precarious employment situation who was living in a small city in Portugal noted (PT-CF02). Some participants in Bolivia highlighted the high social cost, tremendous loss of loved ones, and extreme vulnerability experienced in addition to growing environmental crisis, as the woman from the Monkoxi nation noted:

Well, in my community, my mother got ill. [...] all the time we were in the city and she was here [in the territory] [...] it was much more difficult and traumatic, where many times we wanted to call her but there is no [cell phone] signal here, so it was very traumatic for us. [...] The village where we live, we decided to use traditional medicine. And so she was able to recover from the virus. But half of the people close to us who died, that is, infecting other family members, because there was no way to protect themselves from the virus. (BO-SB02)

Conversations in the interviews around the changes brought by the pandemic led frequently to discussion of climate concerns, and how they were also changing daily life in ways which intersected with pressing concerns brought about by the COVID-19 virus. The retired teacher in Bolivia who was quoted earlier noted that,

Now there are things, for example outside of Corona that are also happening, for example global warming. Look, in La Paz we are at 3500 meters above sea level, that's about ten thousand feet above sea level, I have rarely worn shorts in my house. And for about four, five years we have been wearing shorts in the summer because it's very hot. It is warmer. We live in the mountains where there are a lot of glaciers. We see how the glaciers are [receding]. So, there will come a time when [...] there will be no more water. It is a crucial moment for humanity. (BO-AF02)

While the pandemic was clearly a crisis, participants reiterated in various ways that it was never the *only* crisis. Rather, the COVID-19 Anthropause served to highlight aspects of different environmental concerns that were experienced in concert with the pandemic: the contrasts in action between climate and COVID-19 crises, the forms of reflection on environmental matters prompted by the zoonotic origins of the pandemic and direct experiences of personal loss, and the forms of possibility that emerged in a moment of profound global change.

Despite various hopes for change, the overwhelming response was that individual experiences from the pandemic would do little to alter structural problems like climate change or ecological collapse. Some were dismissive of the ability of the individual to have any effect on "global" issues like climate. As one participant in the UK who worked at an urban farm and had spent years organizing around social justice concerns pointed out, there are major issues of inequality in relation to the choices people are able to make. Participants' gaze was directed at governmental forms of action, such as policy makers, and on business leaders, to shift the logics of their governance and production. In Austria, participants cited the need for state-level investments, in terms of better public transportation, or at the level of industry, by allowing more flexible work arrangements for employees to avoid unnecessary travel. In Portugal, participants acquiesced that companies, governments and international organizations are driven by the logic of capitalist extraction, rather than one of environmental sustainability.

One young person in Austria worried that the needs of the pandemic would exacerbate the problems of climate change, noting that despite the "degrowth" that had been achieved through the pandemic with temporary reductions of C02, that the response would be to put climate policy on the back burner and restart the economy with old habits. "I wish that on the one hand somehow a system change would result from [the pandemic] and that the economic system would be rethought, [...] but I don't think that will happen" (AT-WS06).

In drawing connections between the realities made evident by the pandemic and the ongoing realities of climate and environmental concerns, participants underscored the existential nature of both. Both the pandemic and environmental crises point to matters of (in)action that implicated the very structures that enable daily life. As one retired academic living in a large Bolivian city responded, both crises are intimately related to questions of inequality in health and wealth, in which the pandemic emerges as an opportunity to better grapple with the costs of modern life:

We cannot continue to use the planet the way we are using it. We cannot continue to allow that [...] there is a minimum percentage of people who have, for example, more money than most of the people in a town. [...] So, [we need to] change that paradigm, [to] a paradigm that makes us more responsible: What are we doing on earth? [...] So, that's when I mentioned to you that this [pandemic experience] could be a civilizing process that makes us see reality. (BO-RK01)

For this participant, the pandemic was something that had acted as an accelerant, helping to reveal the extent of change that was necessary to change planetary course. The experiences of multiple crises in Bolivia and Ecuador were one of the most striking distinctions we found. While participants from Austria, Germany, Switzerland or the UK spoke of overlapping environmental crises, they had not personally lived them during the COVID-19 Anthropause. In contrast, Latin American participants had closer experiences with the syndemic of COVID-19 and climate change, increasing extractivism, and more (Radhuber and Jasser, 2021).

After the COVID-19 Anthropause

The initial framing of the COVID-19 Anthropause in the natural sciences was intended to capture a range of lockdown effects on the environment without any normative assumption about whether those effects would be positive or not. Yet, the term intersected with a broader set of conversations around environmental change during the lockdowns. These tensions were captured in our data: while many participants described being cautiously hopeful that the pandemic would bring about positive changes in emissions levels, air quality, or a turn toward sustainability, they also warned that environmental indicators require a long-term perspective and attention to complex human—environmental dynamics. It is useful to briefly contextualize the conversations around environmental changes in our interviews with related data on the longer-term environmental changes brought by the pandemic.

Short term reductions in emissions and energy use, as well as other environmental gains during the pandemic, were extremely limited. Celebrations of cleaner skies and water often conflated air and water pollution with carbon emissions, confusing localized, temporal changes for structural solutions (Mathur, 2020). By December 2020, Carbon dioxide levels had again surpassed the prior year's level by 2% (SRF Staff, 2021). Even the reductions achieved during the pandemic would not be enough to limit global warming to 1.5 degrees Celsius, as discussed at the Paris Climate Conference in 2015 (Carstens, 2020). In other spheres, the pandemic prompted an increase in online shopping, bringing a concurrent increase in the production of waste through packaging and transport costs.

Medical waste is also on the rise because of the pandemic, including the trash generated by masks, gloves, and other one-time-use products necessary for personal protection against infection. Even widely hailed advances, such as the COVID-19 vaccine have come at a significant environmental cost: the first eight billion doses of vaccine administered also generated 144,000 tons of glass vials, syringes, needles and disposal boxes to be thrown away. 3.4 billion disposable masks are thrown away daily, which, when combined with other disposable COVID-19 products generate 1.6 million tons of plastic waste every day (Uhlmann, 2022).

In indirect ways, the pandemic has had pernicious effects in relation to extractive industries. Participant observations that environmental agencies were conducting fewer controls have been documented beyond the countries in the SolPan(+) studies. For example, on-site management of protected areas in Madagascar was suspended from March-July 2020, which resulted in 76-248% more fires than predicted (Eklund et al., 2022). Many people around the world have lost sources of income during the pandemic, and some have moved from urban to rural areas placing additional strain on natural resources. Deforestation rates had risen dramatically since

the beginning of the pandemic, on average 150% worldwide, and in particular in countries such as Brazil and Indonesia (Carstens, 2020). Illegal mining and logging have been reported along with increase in deforestation in parts of Asia, Africa, and Latin America, along with additional pressures due to land grabs, poaching, and deforestation (Staff, Conservation.org, n.d.). In short, the idea that nature caught a "break" during the COVID-19 Anthropause is myopic, and fails to capture the increasing pressure on biodiversity, natural resources, and extractive economies (Staff, World Economic Forum, 2020).

The shifting environmental terrain in relation to the pandemic points to the crucial temporality of the COVID-19 Anthropause: climate and environmental crises are enduring problems, not momentary ones. While initial improvements during lockdowns are instructive in that they illustrate the immediate effects of changes in human behavior on the environment (Young et al., 2021: 275), they also point to the long-term predominance of environmental crisis, the contingencies of political action and structural reform, and the relationships between the economic precedents of the present and broader socio-economic inequalities. Ultimately, reports of environmental recovery during the pandemic point to a momentary blip within the continued trajectory of worsening environmental trends: chemicals are still present in the soil and water, greenhouse gases have not been sufficiently reduced, natural resources are under increasing pressure.

Limitations

Due to the circumstances under which the SolPan project was established (under great time pressure at the onset of the pandemic to begin interviewing during the first lockdown), saturation was not reached in all countries. As in any qualitative study, it is never possible to ensure that all groups in each place are represented. While we sought to ensure general distribution across age, gender, socio-economic and geographic position, and type of employment within each country, there are some groups which are more represented in this study than others. Underrepresented voices in this study include those who were unemployed, or in very precarious living situations. Similarly, overtly denialist positions in relation to the pandemic, science, or climate were largely not voiced by the participants (cf. Machado et al., 2023).

Discussion: destabilizing the COVID-19 Anthropause

The perspectives and stories of hundreds of people living across Latin America and Europe illustrate the heterogeneous lived experience of the COVID-19 Anthropause, and help to critically engage with the implications of the pandemic for human–environment relations.

Drawing on the diversity of experience recounted in our research and related scholarship in anthropology, geography, science studies, and environmental humanities, we argue that it is necessary to destabilize any presumed universal experience of the COVID-19 Anthropause. While some participant responses rehearsed reductive binaries between humans and nature, others underscored the inseparability of the pandemic and its effects from other forms of profound socio-environmental inequality and crisis. The participants who had first-hand experience with extractive industries or referenced environmental concerns specific to the places they lived were in Latin America. These responses illustrated the need to root any discussion of environmental "possibility" emerging through the pandemic within intersecting, situated forms of socio-economic and environmental inequality (Sultana, 2021; Mathur, 2020).

While the pandemic pause was over, the COVID-19 Anthropause retained rhetorical and symbolic significance among many of the participants with whom we spoke. For almost all our participants, the COVID-19 Anthropause was a period of both hope and heightened uncertainty. Participants raised specific concerns of global warming, resource extraction, supply-chain

questions, or the sustainability of present rhythms of life in relation to COVID-19. While many saw the enforced pause of the pandemic as a window of opportunity for reconfiguring human and environmental relationships, their ideas about how possible these changes were differed. While those in richer and safer parts of the world spoke about the need to protect nature with no less passion than the others, the examples they offered illustrated that failing to do so would affect them less directly than people who lived in frontline communities. In Latin America, participants who lived in regions such as the Amazon or the Galapagos Islands in Ecuador, as well as participants from Indigenous communities, expressed their concern around environmental issues through examples that had personally affected them. Differences in socio-environmental proximities between oneself or community and a given concern illustrates the dangers in assuming a shared or redemptive experience in the COVID-19 Anthropause. One risk, as Mathur (2020) argues, is that pandemic narratives which reiterate the possibilities of redemption from a temporary pandemic "pause" brought by the removal of humans from nature can be inimical to substantive climate politics and broader forms of structural change.

News of environmental improvements following the withdrawal of humans from their usual circuits initially celebrated the presumably positive implications for the environment; such tropes play on romantic, modern ideas of the existence of a nature outside of culture and draw on colonial ideas of empty or pristine land and nature. Within these conceptions, the removal of humans allows nature to return to a prior "balance" or to "heal itself." Yet data from around the world shows the illusory nature of such simplistic claims; field scientists noted that the return of some wellestablished animals had negative effects for species occupying more precarious ecological positions: specialists pointed out that the clarity of water (e.g., the Grand Canal in Venice) meant little for water quality; forestry scientists described the "anthrocrush" when the retreat of people from their usual circles resulted in overcrowding and increased pressure in other places (Geng et al., 2021; Young et al., 2021). This suggests that as the COVID-19 Anthropause concept bleeds into popular conversation, it carries the risk not only of glossing over increasingly grave environmental realities, but reinforcing problematic and exclusionary binaries of development versus conservation, or humans versus nature (Mathur, 2020). In so doing, the idea of the pandemic as a singular crisis is reinforced, rather than understanding its emergence as a result of broad-scale human transformation of planetary processes, including, for example the increase of zoonotic diseases, extractive industry pressure on niche habitats, and a global economy predicated on fossil fuels (Grove et al., 2022). That said, while some participants reiterated romantic ideals around the "regeneration" of the planet, others pointed to the tensions inherent in the window of opportunity opened by the pandemic, noting the increasing conflict on extractive frontiers, (i.e., the intensification and expansion of extractive industries within contemporary capitalist systems; see (Mezzadra and Neilson, 2017), warmer temperatures, or the occlusion of other important planetary concerns, such as climate-driven collapse. The Anthropause retains the most significance in our data where participants point to the very interconnectedness of humans and their environments, prompting reflections in relation to their own positions on what can be learned from the pandemic going forward (cf. Searle et al., 2021; Young et al., 2021: 276).

The COVID-19 Anthropause only comes into being through its perception as something extraordinary and time-limited: when quarantines and lockdowns began, they were understood to be moments of exception, after which life would resume as normal. The responses from participants illustrate how, especially during the first months of the pandemic, the Anthropause took shape through the comparison of the moment to life "before," and how life might be "after." At that time, many of our respondents spoke of a hope that life would not simply return to (the prepandemic) normal. Although even in these early days, some participants already anticipated that this change would not last long, participants pointed to the uniqueness of the early pandemic moment, as well as the contingent nature of change and enduring complexity of the problems

that emerged with new clarity in the pandemic. On the one hand, the pandemic confirmed that quick political action and public cooperation was possible (e.g., to instate stay-at-home orders or hygiene routines), as well as the interconnectedness of people across the world. On the other hand, the pandemic underscored the depth of action needed to achieve structural change for issues such as climate change. In this sense, the COVID-19 Anthropause emerged as a source of contingent potential amidst global hardship, throwing questions of what life *is* and what life *should be* into sharp relief.

The possibility to reflect on what life should be like after the pandemic is predicated on structural and positional forms of inequality and opportunity. As Grove et al. write, "the pandemic moves in fits and starts, blurring the boundary between normalcy and emergency. This distended temporality brings into sharp relief other slow emergencies such as racism, poverty, biodiversity loss, and climate change, which inflect how the pandemic is known and governed as an emergency" (2022:6). For some participants, the future after the pandemic was imagined in the terms of a post-pandemic reset, while for others the pandemic largely served to amplify existing forms of precarity amid already existing forms of socio-economic and environmental crisis (Grove et al., 2022:7). Among our respondents, participants across all countries engaged in post-pandemic imaginaries that invoked new forms of climate politics, new personal choices, or relationships to nature. However, those participants that offered more personal observations of the unequal distribution of Anthropause inequalities tended to be from Bolivia or Ecuador.

As lockdowns began to end and restrictions shifted, it became clear that the pandemic was not something short-lived that could be "bracketed off," in turn, the framing of the "pause" began to lose its meaning. For participants, this was clearly evident amid the concerns they stated about things returning already to "normal" – often referencing consumerist practices or the return to fossil-fueled travel they had hoped would shift in the post-pandemic future. The environmental effects of the pandemic within global economic capitalist systems of production and inequality continued unabated on the long term. This points to the need to center the experiences of those who have been most affected by the climate crisis, industrial capitalism, colonialism, and globalization within any plans to "build back better" after the pandemic. The intersectional effects of the COVID-19 pandemic and climate crises are essential to understanding the ways that different forms of socio-environmental inequality and injustice are linked, such that more equitable futures can be pursued after the moment of crisis has passed for those better-off (Sultana, 2021).

A critical approach to the "Anthropause" can also enrich debates over the "Anthropocene": the geological epoch coined to capture the irrevocable impact of humans on planetary life. Reflecting on debates over the Anthropocene in light of participant responses, a critical look at the COVID-19 Anthropause concept reiterates the need for a more careful recognition of the differential impact of human activities on environments, and the centrality of power and inequality in human–environmental relations. Who is included in the "anthropos" of the "anthropause" concept, and what does it mean to "pause" across gradients of inequality, injustice, and difference? Without attending to the radical forms of difference glossed through the global reach of an analytic like the Anthropause, the risk is that – much like the Anthropocene debates before it – the concept fails to adequately account for power relations and the gross inequalities that have been exacerbated by the pandemic (Searle et al., 2021: 75; Young et al., 2021: 276), while simultaneously advancing an anthropocentric understanding of the present crisis. Narratives which presume a shared global experience within the Anthropause run the risk of perpetuating ideas that nature will simply recover with the absence of humans, or that anthropogenic forms of environmental harm will be resolved through a momentary eclipse in day-to-day activities (Searle and Turnbull, 2020).

By extension, if the word *pause* in the context of the Anthropause – is taken to mean *to remove* oneself from the usual routines and to reflect on the conditions of life – then most of the world was excluded from such a reprieve. While for some the lockdowns were a moment of reflection, or of

time spent at home with family or in home-office, for others – such as necessary workers, informal workers or people in precarious economic situations, the pandemic did not afford any such break. In contemplating matters of inequality and human–environment relations through the COVID-19 Anthropause, it is necessary to destabilize the ways that the terms through which these questions are thought which continue to rest largely on the experiences and epistemological assumptions of the West (Chakrabarty, 2017; Radhuber and Jasser, 2021). This is seen within our own sample of participants who, while occupying different political, geographic, and socio-economic positionalities across two continents, for the most part did not challenge the modern divisions of nature/culture or environment/society (Latour, 1993) entangled within their observations of COVID-19 Anthropause possibilities.

To that end, this paper has pointed to the ways that "nature" was also not able to pause. Matters of environmental contamination, climate change, and the radical socioeconomic inequality that preceded the pandemic were not affected by the momentary removal of some humans from their daily activities. This was clearly attested to through experiences with flooding, forest fires, extraction, deforestation and more by some participants, as well as by empirical data on climate change and environmental crisis. For example, this is evident in the Sarayaku Indigenous community in Ecuador, which was dealing with severe flooding amid the pandemic. Facing overlapping crises – both with origins linked to climate change and deforestation – there was no pause, neither for the Sarayaku people nor for their immediate environment (Castro, 2020). Thus, a major constraint of the "anthropause" concept when explored for its qualitative meanings, is the anthropocentric framing of the concept. This critique is true of our own data as well: even as participants reflected on the window of opportunity that emerged for "nature," the conditions of that moment were always contingent on human understandings, motivations, and hopes for their own wellbeing.

As feminist anthropologists, geographers, and science and technology scholars have long insisted, any emphasis on continuity with a global concept must be accompanied by careful discernment within the category of "the human" (Hecht, 2018). To do otherwise is to naturalize the role of "all" humans in driving human-led environmental change, while at the same time reinforcing distinctions between humans and nature rather than contemplating the complexity of more-than-human relationships. To this end, Gómez-Barris' reflections on the Anthropocene ring true for the Anthropause as well: "Humanity is not universally implicated in the demise of our planet's non-renewable resources, the diminishing of its biodiversity, or the history of capitalism's destruction of communal interdependence" (Gómez-Barris, 2019). Pollution alone kills far more people than COVID-19, the effects of which are borne almost exclusively by low and middle-income countries (Agencia IPS, 2022). As Searle and Turnbull (2020) argue, any resurgence of "nature" such as that implied in the Anthropause concept will not happen by chance, but rather will be actively cultivated. While many of the responses of participants reiterated well-trodden dualisms between humans and nature, what they hint at is the possibility for cultivating specific, cooperative ways of living in the Anthropocene and underscore the necessity of systemic change in the face of structural inequalities. The challenge, then, is to find a way to engage with the COVID-19 Anthropause that is responsive to the opportunity offered through the pandemic without erasing the role of power, capital and colonialism that enables the present moment (cf. Tironi, 2019). The significance of the COVID-19 Anthropause for making sense of future of human-environment relations, then, depends on where you are located, and the relations you are cultivating moving forward.

Highlights

• The pandemic created an opening to reflect on the relations of humans and their environments, including post-pandemic alternatives.

More than just a natural phenomenon, the COVID-19 Anthropause also has saliency as a cultural
event.

- The COVID-19 Anthropause has sparked social critique surrounding what kinds of structural change is necessary to achieve new post-pandemic realities.
- Uncritical engagement with the term can obscure inequalities and reinforce harmful nature/ culture binaries.
- The COVID-19 Anthropause underscores the centrality of power and inequality in humanenvironmental relations.

Funding

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the University of Basel Research Fund, German Federal Ministry of Education and Research (grant number 3BE1003, 01KI20510).

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Supplemental material

Supplemental material for this article is available online.

Notes

- Rutz cites the Black Death as another clear Anthropause, with high magnitude global impact. Others, such
 as Searle et al., take a more expansive understanding of an Anthropause and note that there are many precursors to the COVID-19 Anthropause that similarly reduced human impact on the environment across
 various spatial and temporal scales, such as other pandemics, anthropogenic disasters, state or military interventions, global economic crises, and the deliberate creation of wilderness spaces (Searle et al., 2021: 70).
- 2. Extractivism refers to a "pattern of accumulation based on the overexploitation of generally nonrenewable natural resources, as well as the expansion of capital's frontiers toward territories previously considered nonproductive" (Svampa, 2015: 66).
- 3. Not all European country teams conducted the third round of interviews.
- 4. See for example Kohn & Picq (2020) and Sierra Praelli (2020).

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