

COMMENTARY

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After the anthropause: Lockdown lessons for more-than-human geographies

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The drastic reductions in human activities and mobilities associated with quarantines implemented to curb the spread of SARS-CoV-2 was recently described as “the anthropause” by Christian Rutz and colleagues. Field scientists argue that the anthropause is a once-in-a-lifetime opportunity for observation and data collection in a world devoid of anthropogenic disturbances, notably those from extractive industries and travel. In this commentary, we unpack the anthropause as a spatio-temporal event, attending to its geographies, histories, and genealogies. There are multiple precursors of anthropause events which have locally altered human impacts on the environment. We document the ways in which the COVID-19 anthropause has brought into focus human–animal relations through an analysis of the practices of scientists, publics, and nonhuman animals themselves. Following Arundhati Roy, we conclude by advancing an understanding of the pandemic as a “portal” rather than a pause, identifying lockdown lessons from the anthropause for a post-pandemic new normality.

KEYWORDS

animal geographies, anthropause, COVID-19, ecological science, more-than-human geographies, vernacular ecologies

1 | INTRODUCTION

Pause:

an interval in a course of action, a space of silence or inactivity; moments of uncertainty, doubt, or reflection; an intermission; a delay, a lag, a hesitation; a breath, a rest—a *pause for thought*.¹

Billions of people globally were forced to pause their usual lives in 2020 as the coronavirus, SARS-CoV-2, spread around the world, necessitating the imposition of quarantines to constrain its further spread. Many representations of this event portrayed it as an unprecedented disruption to human “progress,” everyday rhythms, and mobilities. In a recent *Nature* article, Christian Rutz et al. (2020, p. 1156) – a team of ecologists and biologists – coined the term “anthropause” to signify the “considerable global slowing of modern human activities” due to worldwide mobility restrictions. Human impacts on the environment were called into question as stories of nature’s apparent resurgence gained widespread media attention and spectacular images of wildlife “reclaiming” “human spaces” circulated rapidly online (Mathur, 2020; Searle & Turnbull, 2020; Turnbull et al., 2020a).

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What, then, does it mean *to pause*? Pausing invokes a specific spatio-temporality in which time apparently slows down and/or stands still. Like pausing a film, the experience of the realities we inhabit are put on hold. To inhabit a pause involves a sense of being in the middle of things, at a turning point, in a moment (or series of moments) of uncertainty. As such, pauses offer the chance for reflection. Equally, a pause is a disruptive, piercing event, engendering distinctions of “before” and “after.” A pause is thus a moment of potentiality, suspended between past and future. Herein, we critically discuss the ways in which the anthropause has simultaneously been framed as a slowing down, a disruption, and a unique epistemic moment for more-than-human geographies.

For instance, the anthropause is presented as a golden opportunity for ecologists; a once in a lifetime occasion to “quantify the effects of human activity on wildlife” (Rutz et al., 2020, p. 1156), providing unique reconfigurations of seismic, ecological, and atmospheric circumstances. Reduction in noise, traffic, and seismic vibration (Lecocq et al., 2020), alongside declines in various forms of pollution, provide epistemic opportunities for research on the behaviours, ecologies, and geographies of animals. Due to its scale and profound impacts on the nonhuman world, the 2020 pause has been described as a “giant, global environmental experiment with potentially far-reaching consequences” (Davenport, 2020), and “a rare opportunity to collect a wealth of data that would otherwise be impossible to obtain” (Saraswat & Saraswat, 2020, p. 594). Rutz and colleagues hope that anthropause experiments will enable detailed understandings of human–wildlife relations to “inspire realistic, evidence-based proposals” that contribute to conservation policies with multispecies coexistence at their core, and that “challenge humanity to reconsider our future on Earth” (2020, p. 1158).

The anthropause has also reconfigured human–animal relations outside of the epistemic realm of ecological science. Varied practices of furlough, lockdown, shielding, and working from home created new modes of human (im)mobility and forms of attention, allowing a diverse array of human–animal encounters to flourish. These range from back-garden bird-watching (Rice et al., 2020) and domestic pet-keeping to livestreamed digital animal interactions (Turnbull et al., 2020b) and virtual gaming. Different people’s everyday interactions with nature, animals, and wildlife have been significantly restructured, out of both necessity and choice.

In this paper, we first unpack the anthropause as a spatio-temporal event, attending to its geographies, histories, and genealogies. Drawing together a range of commentaries on the event, we then document the principal ways in which the COVID-19 anthropause has reconfigured human–animal relations and encounters, focusing on the practices of scientists, publics, and nonhuman animals themselves. As the global coronavirus pandemic and associated lockdowns continue to unfold, much research is still required to attend to the differences in the ways these changes are felt across locales, social categories, and species. But following Arundhati Roy (2020), we conclude by advancing an understanding of the pandemic as a “portal” rather than a pause, identifying lockdown lessons from the anthropause for a post-pandemic new normality.

2 | ANTHROPAUSES

The temporal experience of the current anthropause is universally framed as a *slowing-down* of everyday life; at odds with the general accelerationism of globalised extractive economies. For the philosopher David Farrier (2020, n.p.), lockdown life in Edinburgh could be distilled to a few basic quotidian rhythms and activities: “the same walls, the same street, the same single trip outside for exercise or to buy food.” Farrier (2020) argues that COVID-time is more like the 19th than the 21st century. It is presented as a suspension of “progress”; a pause from the space–time compression awkwardly associated with globalisation and contemporary capitalism (Gregory, 2009). Yet if the anthropause entails the *decompression* of space–time, it is not simply a reversal of globalisation. Pausing is not linear or spatially consistent. Rather, global networks and flows are reconfigured such that some localised parts and daily mobilities may be intensified whilst others are abated. Philosophers were housebound, but the volume of internet traffic and the circulation of online purchases increased, even as the diurnal and monthly mobilities of many workers returned to pre-industrial spatial formations (Thrift, 1996).

COVID-19 quarantines are not the first anthropause. Precursors can be identified in the form of historic pandemics, anthropogenic disasters, state/military interventions, global economic crises, and deliberate “wilderness” creation projects, amongst others (Table 1). Previous pandemics like the Black Death or the Columbian Exchange led to mass human death and the implementation of quarantines on a variety of spatial and temporal scales. These slowed anthropogenic impacts on the environment (Lewis & Maslin, 2015) and reconfigured cultural and economic activity (Clark, 2011). Disasters like Hurricane Katrina or the Chernobyl nuclear catastrophe radically reconfigured human mobilities and led to the creation of landscapes in which human presence was removed overnight. Equally, economic shifts associated with globalisation and economic crises like the 1930s Great Depression led to the abandonment of agricultural, industrial, and residential areas, curtailing human prosperity and enabling the unintentional rewilding of urban and rural landscapes in parts of Europe and North America. Finally, anthropause events can be deliberately initiated via military interventions or the creation of

TABLE 1 Types and examples of anthropause events.

Type of anthropause event	Example
Pandemic	Black Death (14th century) Columbian smallpox exchange (16th century), “Spanish” influenza (20th century), COVID-19 (21st century)
Anthropogenic disaster	Chernobyl (1986), Fukushima (2011)
State/military intervention	Korean demilitarised zone, military bases, and nuclear test sites (e.g., Diego Garcia, Bikini atoll)
Economic crisis	1930s Great Depression, 1970s US “Rust Belt” de-industrialisation, 2008 financial crisis, Eurozone and Argentina monetary crises
Deliberate “wilderness” creation	Yellowstone National Park, Serengeti

wilderness projects—like the Demilitarised Zone in Korea or the North American and Southern African National Parks—that removed particular forms of human activity and presence (Brockington, 2002; Cronon, 1995).

These examples demonstrate how anthropauses vary considerably according to at least three differentiating factors including: (1) their causal agent (human, geological, microbial); (2) their temporal duration; and (3) their topology (spatial scale, and territorial or networked pattern). There is much comparative work to be done to explore the space–times of different anthropauses, the everyday anthropause experiences of humans and nonhumans, and the knowledges produced in response to them. Yet the current COVID-19 anthropause is unprecedented due to its global scale and coordination, and the disruptions it has caused to a hyper-mobilised and hyper-connected world. Whereas the safe human re-inhabitation of Chernobyl may not be possible for thousands of years (Figure 1), the COVID-19 pandemic has – since its inception – been haunted by the seeming inevitability of a post-pandemic return to reconfigured normalities (cf., Lynteris, 2020). The temporal boundedness of the COVID-19 anthropause can explain, in part, the urgency of anthropause ecological studies.

This anthropause multiplicity raises political and ethical questions about *who* and *what* has the ability to pause or be paused, according to what authority, and with what consequences. (Im)mobility is a fundamental aspect of quotidian space–time experience (Kwan, 2013), shaped by a plethora of differentiating factors such as race, age, and gender (Schwanen et al., 2008). Recent work in carceral geographies highlights the differential spatio-temporal experience of being locked-down; of “doing time” (Moran, 2012). For some “key workers,” COVID-19 did not involve any pause at all. Workers in certain sectors (e.g., healthcare, retail, sanitation, and education) worked tirelessly around the clock to keep certain vital services running, saving lives directly and indirectly. Epidemiologists researching COVID-19 and immunologists seeking vaccines and treatments saw their working lives intensify. At the everyday level, mutual aid groups and alternative social relations emerged to foster community wellbeing during a time of isolation for many vulnerable people (Springer, 2020).



FIGURE 1 Nature “reclaims” Hotel Polissya in Pripyat, Chernobyl Exclusion Zone. Photograph by Jonathon Turnbull. [Colour figure can be viewed at wileyonlinelibrary.com]

Understanding the forms of human activity that were paused and intensified during the anthropause is essential for the development of post-pandemic conviviality strategies that avoid reinforcing pre-pandemic inequalities.

3 | VERNACULAR EXPERIENCE

The multiplicity of anthropause events means they are experienced differently across various sociocultural, economic, and environmental striations. The vernacular offers a reading of the COVID-19 anthropause in a minor key. For Joe Gerlach (2014, p. 31), understanding vernacular experiences of natures allows geographers to “enrol and extend political recognition to more-than-human company.” Analysis of the “vernacular ecologies” (Whatmore & Hinchliffe, 2010) of quarantine life offers insight into the differential experiences of the anthropause. Here, we examine three vernacular ecologies common to urbanites in developed countries – domestic pet-keeping, garden ecologies, and digital human–nature encounters – to explore palpable changes made evident due to pausing. Vernacular ecologies signal changes in the sensibilities of urbanites towards their nonhuman companions due to absences of noise, new temporalities, and new modes of attention. They are, however, embodied and felt differently across various types of housing tenure, health, cultural background, and socio-economic status, which are themselves inflected by existing inequalities underpinned by gender, race, and class.

In lockdown, many people sought ecological solace and fulfilment closer to home. Confined indoors, some people had both the time and desire for more-than-human companionship, especially when physical distancing was championed by health experts as a means of slowing viral transmission. Across the US and the UK, requests to adopt animals from animal shelters spiked, notably in COVID-19 hotspots where people were more likely to abide by physical distancing rules (Lipschultz & Baker, 2020). Pet sales skyrocketed, and pet companies' shares rose as many other businesses suffered (Lipschultz & Baker, 2020). Global quarantines, engendered novel circulations of “lively capital” in which the “affective labour” (Barua, 2020a) of domestic animals was commodified for the provision of more-than-human companionship. In other places, however, there was an increase in pet abandonment due to fears of interspecies viral transmission (Ganapathy, 2020), economic pressures, or opportunistic neglect (Raman & Sen, 2020). Many companion animals were not afforded the chance to pause; rather, everyday life was significantly intensified for some species, whilst not for others.

Second, a familiar set of domestic human–animal interactions flourished at hyper-local scales, including vernacular garden ecologies (Figure 2). Back-garden birdwatching grew in popularity (Rice et al., 2020), evidenced by the foundation of *The Self Isolating Bird Club* across social media.² David Farrier's (2020) account of lockdown discusses his observations of the previously unnoticed “desire paths” of animals. This illustrates how newfound ecological sensibilities go hand-in-hand with the slowing down anthropause entails. A range of stories were shared by *The Urban Field Naturalist Project* exemplifying new attention to “backyard biodiversity” around the world – fungi in Toronto, sunbirds in Delhi, magpies in Melbourne.³ The stories shared on this platform attest to the great multiplicity of experiences people had regarding natures at various scales. Stuck at home, without daily commutes or national or urban parks to retreat to, many urbanites turned to gardening on their patios, balconies, or indoors. Commentators claimed that this recalibration of attention and interest was associated with reductions in stress and anxiety during the pandemic (Atkinson, 2020).

Third, more-than-human vernacular experiences of the anthropause often took place in digital spaces. Through the emergence of digital “creaturely cameos” (Turnbull et al., 2020b) – the livestreaming of animals to paying customers – people found new ways to interact with animals and nature during quarantine. In the UK, webcams livestreaming video from birds' nests experienced surges in online traffic as confined people flocked online to birdwatch (Turnbull et al., 2020a,



FIGURE 2 Photos of garden ecologies were regularly uploaded by publics to social media platforms. Photograph by Henry Anderson-Elliott [Colour figure can be viewed at [wileyonlinelibrary.com](https://onlinelibrary.wiley.com)]

2020b). Instances of game-based virtual wildlife encounter, evidenced through the success of *Animal Crossing: New Horizons* (Garcia, 2020), also offered distraction from confinement, as did virtual tours of landscapes including the Faroe Islands and Yosemite National Park. These online encounters proliferated the potential for human–nature encounters during lockdown. Despite many of them being screen-based, the multiplicity of affects generated via digital encounters is enormous; from feeding charismatic free-roaming dogs in the Chernobyl Exclusion Zone, to attempting to recreate the sublime landscape experience of monumental national parks.

These examples of vernacular anthropause ecologies highlight how people interacted with and sensed wildlife differently during quarantine; new ecological aesthetics emerged that produced novel modes of attunement. For example, quietness afforded by the absence of the background anthropogenic hum made present the multiplicity of auditory experiences outside of the “normal” range (Derryberry et al., 2020). During the COVID-19 anthropause, the *Dawn Chorus* citizen science group⁴ was able to produce the first ever uninterrupted global recording of the dawn chorus (Morss, 2020). As the pandemic unfurled, they wrote that industrial standstill was “bringing the otherwise often drowned out sounds of nature to the foreground”; such changes constituted “a historical moment that makes us stop and consider, feel, and above all hear!” (Dawn Chorus, 2020, n.p.). These changed ecological sensibilities were communicated and represented in various ways: for instance, poet and artist James Roberts (2020) published a short collection written during “lockdown in Wales when birds were given back their spaces for a time”; and Filipa Soares (2020) shared recordings of “soundscapes of lockdown”: the birdsong of ring-necked parakeets in Lisbon.

With relative pauses on heavy industry and travel, certain humans were without *noise*: not simply understood as auditory interferences, but in data; in understandings of the spaces and ecologies around us (Derryberry et al., 2020). Such urban quietness speaks to the lived sensibilities of the anthropause, but these pauses happen continuously around us in the form of marginal spaces across different spatio-temporal scales (Gandy, 2013). Vernacular experiences of the anthropause, however, should not distract from continuing ecological disruptions. As Bill Adams (2020, n.p.) notes, birdsong must not offer too much hope when “the real and horribly familiar silent spring is still the default model.”

4 | ANIMALS’ LIVES

The disruptions of the anthropause have also made visible a variety of ways in which different animals are both dependent on, and threatened by, the types of activities that were paused. To explore animals’ experiences of the anthropause, we turn to three broad types: animals directly dependent on human care; synurbic or commensal animals; and feral or wild animals flourishing in the absence of humans. There may be many others. Attending to these disruptions helps to understand which relations break down in anthropause events, whilst simultaneously illustrating the unevenness of anthropauses. Equally, in the absence of “normal” experiences of time and space, it is interesting to notice which nonhuman temporalities and spatialities are altered and which become more noticeable through changing human sensitivities to the nonhuman world.

During global quarantines many animals dependent on humans were no longer afforded human care, for both direct and indirect reasons. For instance, laboratories were forced to euthanise testing rats as researchers were unable to attend to them (Grimm, 2020). However, as laboratories reopened, many animals were rapidly bred during clinical trials for a COVID-19 vaccine (Gorman, 2020). Meanwhile, agricultural animals were slaughtered *en masse* across the US due to indirect market pressures and the breakdown of supply chains (Kevany, 2020a). Whilst these animals were killed for financial reasons, others were implicated as biosecurity hazards leading to their meat markets collapsing (Barua, 2020b). In Spain and the Netherlands a million mink were culled due to 87% of the animals testing positive for COVID-19 in fur farms (Kevany, 2020b). The lives of animals in captivity were also directly affected by the absence of visitors and volunteers, leading to changed behavioural patterns of individual animals (Turnbull et al., 2020b). Legitimate concerns have also been raised about the companion animals of the deceased during the pandemic (Scannell, 2020), who are at risk of abandonment and neglect (Fraser et al., 2020). Dogs’ (and other companion animals’) schedules and daily rhythms were altered, often impacting their behaviour, according to a report by the Dogs Trust (2020).

Maan Barua (2020c, n.p.) argues that these changes to multispecies relations during quarantine led to “a breakdown of the commensal city.”⁵ Animals indirectly dependent on human activity fared worse during the anthropause due, for example, to the absence of roadkill carrion (Garlick, 2020). Those dependent on human waste for food, such as synurbic rats, pigeons, and foxes, were forced to alter their rhythms and topographic patterns. Rats in cities around the world, for example, became more visible during the day and expanded their geographic ranges in search of food as restaurants closed and stopped leaving discards on the street (Parsons et al., 2020). Attention to animals’ temporalities and territories point to the ways in which anthropauses operate at different scales; the night-time itself being a mini anthropause in which the

slowdown of human activity creates the atmosphere for animals to roam more freely, which for some species involves adopting nocturnality.

Finally, spectacular images of “resurgent natures” flourishing in humanity’s wake were rife during the pandemic (Mathur, 2020; Rubio Ramon, 2020; Searle & Turnbull, 2020). Benjamin Schultz-Figueroa (2020) suggests these images encapsulate certain hopes and fears regarding human–animal relations amidst the ongoing climate emergency. Although certain viral resurgence images were later proven false (Daly, 2020), the lives of animals in cities and other places were undoubtedly affected during quarantine, many of them becoming more visible to confined urbanites – such as the famous wild goats on the streets of Llandudno (Figure 3). Many viral images, moreover, were not evidence of radical ecological change; rather, they reflected an enhanced awareness of animals that already comprise urban ecologies. Equally, concerns have been raised regarding increased poaching activity during lockdowns due to both opportunism and necessity in the context of diminished surveillance. Furthermore, ongoing expansions of the legal and illegal wildlife trade continue to pose threats (Cortlett et al., 2020; Rutz et al., 2020), complicating the idea that animals (in general) benefit from anthropause events. Again, who and what has the ability to pause is highly unevenly distributed, requiring further scholarly attention.

5 | UNPAUSING: THROUGH THE PANDEMIC PORTAL

Within the framing of the COVID-19 anthropause is an assumption that, eventually, things will return to normal: planes will take to the skies, cars to the streets, and ships to the seas. However, attention to the multiplicities of anthropauses sheds new light on Arundhati Roy’s (2020) claim that “the pandemic is a portal.” A pause implies looping temporalities of a return to the past, whereas a portal embraces the political potential of disruption, transition, and affirmative world-building. As the imaginaries of science fiction suggest, a portal offers a passage to an alternative period or configuration of space–time. Rather than a *resumption*, the portal provides a fruitful intellectual arena for considering the *reconfigurations* which may be offered by anthropause events. Following Roy, we conclude by suggesting ways in which moving through the pandemic portal can generate new concepts and convivialities for departing from the old normal.

Conceptually, the pandemic encourages geographical analysis of the ebb and flow of the processes of space–time compression and decompression. The COVID-19 anthropause is one of many anthropauses, albeit one of great magnitude. Space–times have been slowed and paused before, and will be paused again. Thinking with the pandemic as a portal sensitises us to the risk of an analytical bias towards accelerationism; foregrounding the prescience of geographical work concerned with ruination, slowness, and incarceration. Here, we suggest that this work might attend more to the affective experience of pausing and its implications for human ecological sensibilities, and for the lifeworlds of the animals entangled in human ecologies.

Politically, Rutz *et al.* stress the urgency of anthropause experiments with the hope that the data generated during this unique period will help “to find innovative ways of reining in our increasingly expansive lifestyles, to rediscover how important a healthy environment is for our own well-being, and to replace a sense of owning with a sense of belonging” (2020, p. 1158). Such a framing by natural scientists highlights the COVID-19 anthropause as a biocultural event, whose



FIGURE 3 Images of wild goats on the streets of Llandudno, North Wales, quickly went viral during lockdown. Photograph by Andrew Stuart. [Colour figure can be viewed at [wileyonlinelibrary.com](https://onlinelibrary.wiley.com)]

comprehension requires collaboration with scholars with expertise in the social, ethical, and political complexities of scientific knowledge production and environmental governance. We share their hopes, but just as the Anthropocene label can serve to depoliticise the inequalities of environmental damage through grouping all humans together as equally accountable (Yusoff, 2019), considering *who* is afforded the privilege to pause, where, and why, is crucial. Asking such questions, we hope, will serve to highlight the gross inequalities experienced during COVID-19 by different humans across lines of race, gender, and class, whilst also raising attention to the other-than-human impacts of the current anthropause, both positive and negative.

Focusing on the vernacular ecological experiences of the COVID-19 pandemic makes clear the intricacies of human–nonhuman relationships. New forms of lockdown multispecies relatedness taking place closer to home (physically and digitally) have provided valuable opportunities for engaging people, especially urbanites, with often-unnoticed wildlife around them. They provide participatory platforms for public engagement and ecological awareness raising. The manifestations of animal agencies in an anthropause world through changed mobilities, dependencies, and visibilities also demonstrate how quickly multispecies worlds can be made anew. These reconfigured mobilities reveal that urban spaces are *already* spaces for animals and that humans can – and should – learn to incorporate the needs of animals, commensal and otherwise, into more liveable cities in the Anthropocene.

However, the continued disruption caused by the virus reminds us that the current anthropause event was initiated by a proliferating nonhuman actor whose spread is ongoing in spite of widespread efforts to pause its transmission (Kirksey, 2020). This demonstrates both the limited efficacy of attempts to pause certain (nonhuman) processes and flows and the precarity of the modern globalised economy, which has been unable to pause whilst ensuring the wellbeing of many workers and citizens around the world. The self-willed and decidedly non-affirmative mobility of SARS-CoV-2 serves as a caution to any hyperbolic celebration of nonhuman emergence and wilding, whilst highlighting the need to reset and rethink environmental relations. Emerging policy responses to the causal drivers of viral emergence and spread – be they deforestation, intensive agriculture, or factory farming – are decidedly underwhelming. New pandemics will come if the geographical “disease situation” stays the same (Hinchliffe et al., 2016). Systematic efforts are required to recalibrate both the intensification of human–nonhuman relations that generate hotspots for microbial pathologies and the acceleration of global mobilities that permit their unfettered movement.

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DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analysed in this study.

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ENDNOTES

¹ Paraphrased from the *Oxford English Dictionary*.

² The public Facebook group now has almost 50,000 members as of January 2021: <https://www.facebook.com/groups/sibirdclub>.

³ These are ongoing at <http://www.urbanfieldnaturalist.org/stories>

⁴ <https://dawn-chorus.org/>.

⁵ Tweeted by Maan Barua, PI of *Urban Ecologies*, 29 June 2020: <https://twitter.com/UEcologies/status/1277522075121524736>

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