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Is the Anthropause a useful symbol and metaphor for raising environmental awareness and promoting reform?

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Summary

Lockdowns associated with the COVID-19 pandemic temporarily restricted human activity and removed people from many places of work and recreation. The resulting 'Anthropause' generated much media and research interest and has become an important storyline in the public history of the pandemic. As an ecological event, the Anthropause is fleeting and unlikely to alter the long-term human impact on the planet. But the Anthropause is also a cultural symbol whose effects may be more enduring. Will the Anthropause inspire people and governments to mobilize for meaningful reform, or does it present a misleading and too-comforting portrayal of resilient nature and wildlife that could ultimately discourage action? While it is too early to gauge the impact of the Anthropause on human behaviour and politics, we use existing research on environmental symbols and metaphors to identify factors that may influence long-term behavioural and political responses to this globally significant period of time.

Is the Anthropause a useful symbol and metaphor?

The COVID-19 pandemic caused governments around the world to restrict human mobility on a massive scale. At the beginning of April 2020, more than half of the world's population was on enforced lockdown, and the emergence of COVID-19 variants of concern has extended mobility controls in many regions well into the year 2021 (see https://ig.ft.com/coronavirus-lockdowns/). Lockdowns removed people from work and recreation spaces, thus reducing air and water pollution (Venter et al. 2020), as well as the pressures of constant human activity on wildlife and ecosystems (Bates et al. 2020, in press, Rume & Islam 2020). The term 'Anthropause' was suggested by Rutz et al. (2020) as a label for this dramatic but temporary period, and researchers immediately noted this as a unique opportunity to study human impacts on the biosphere and the Earth's physical systems (e.g., Stokstad 2020). The Anthropause has also become a major story in traditional and social media. Articles about the Anthropause appeared in daily newspapers such *The New York Times* and *The Globe and Mail* and in magazines such as *The Atlantic* and *Wired*. Images, videos and memes of animals wandering urban and rural landscapes emptied of people circulated widely on Twitter, TikTok and Facebook (Searle et al. 2021), including faked images of dolphins swimming in the canals of Venice and elephants wandering farmers' fields in China (Daly 2020).

Despite the immediate impacts of the Anthropause on both humans and nature, a recent meta-analysis reveals that its ecological and biophysical effects are most likely fleeting (Bates et al. in press). Reductions in carbon emissions and air and water pollution due to lockdowns are temporary and will not alter the overall trajectory of increasing environmental degradation from human activities (Forster et al. 2020). However, the Anthropause is also a symbolic and cultural event that might affect how people and governments perceive and act on environmental challenges once the crisis phase of the pandemic has passed (Dandy 2020). The long-term human response to the pandemic and the Anthropause is a major unknown. Calls to take advantage of this reset and to 'build back better' have been adopted by the United Nations, the World Bank and the Organisation for Economic Co-operation and Development (OECD), as well as the governments of Germany, France, the USA and Canada (e.g., OECD 2020). Building back better has connotations of reduced inequality, social justice and enhanced sustainability (Bolton 2020). While the phrase may prove empty or transient in the end, social scientists have long known that language and symbols matter in environmental discourse, even though their impacts may be indirect and evident only in the long term (Lakoff 2010). The legacy of the

Anthropause may well lie in its indirect impacts on human perception and action in the realms of activism, politics and policy rather than directly on the natural world itself.

Empirical studies of long-term shifts in public perception and political support for conservation and environmental reform following the Anthropause will undoubtedly appear in the future (Rousseau & Deschacht 2020). However, it is important to start thinking now, while still in the midst of the global pandemic, about how these impacts might play out. Human cultural and political actions are unpredictable, so it is helpful to outline a range of factors that could lead to different outcome scenarios. Scenario development can help environmental advocates identify effective messages and opportunities for activism, as well as potential cultural and political obstacles to reform (Sandbrook et al. 2020).

Our exercise is informed by existing social science literature on environmental symbols and metaphors. Symbols and metaphors are powerful organizers of human thought (Maasen & Weingart 1995) and can serve as motivators for individual and collective action (Charteris-Black 2011). Symbols and metaphors are referents to cultural values and ideas (Blumer 1986). They can be visual (images, videos, infographics), conceptual (words, labels, turns of phrase) and embodied (gestures, mannerisms, dress) (Cox 2013).

Symbols and metaphors are particularly salient in environmental perception and learning because many environmental concepts, issues and problems are highly abstract and complex (Stibbe 2015). Importantly, many environmental symbols and metaphors are simultaneously descriptive and normative, communicating messages about what nature is and what it ought to be at the same time (Carolan 2006). Symbols and metaphors such as iconic environmental images, charismatic animals and words like biological 'invasions', ecosystem 'services', environmental 'health' and biodiversity 'hotspots' provide frameworks for thinking and feeling about environmental phenomena (Larson 2011, Raymond et al. 2013). The Anthropause is itself an intentionally crafted metaphor (see box 1 in Rutz et al. 2020), alluding to a temporary deviation from the pressures of the Anthropocene that might yield benefits for people and the planet. Drawing on this literature, we organize our discussion as alternative scenarios in response to the following question: is the Anthropause a useful symbol and metaphor for raising environmental awareness and promoting reform?

The Anthropause metaphor might resonate widely and inspire activism and reform

The Anthropause has some characteristics of a meaningful symbolic event that could inspire positive change. It is a sudden, unexpected, highly visible development that has grabbed the attention of politicians, media and the general public. It has a clear cause (lockdowns due to the pandemic) and fits longstanding environmentalist narratives about human impacts on wildlife, habitat loss, overpopulation and the consequences of relentless consumerism and 'always on' economies (Royle 2020). The Anthropause has generated clear, highly desirable benefits for people, such as clearing air and water (Venter et al. 2020), and it has been accompanied by arresting images and video clips of animals cautiously but confidently re-entering empty human spaces such as golf courses, playgrounds and city streets (Searle & Turnbull 2020). These benefits are observable at multiple scales, from people's individual anecdotes to global indicators of emissions and air chemistry. The Anthropause also has thematic connections to longstanding conservation priorities such as preserving ecosystem connectivity, rewilding and ensuring biodiversity preservation (e.g., Mackinnon 2013).

We also suspect that the Anthropause has drawn public and media attention because of the simplicity and salience of the metaphor. Searle et al. (2021) note the resonance of the notion of a 'pause' in the midst of the broader social and financial turbulence felt by those living through the pandemic: an opportunity to reflect, to regroup and to reset. The Anthropause metaphor also implies that there are physical and spiritual benefits to slowing down, treading lightly and limiting unnecessary human interventions in natural processes. We note that these associations are consistent with non-Western and Indigenous conceptualizations of human–nature relationships as requiring care, balance and reciprocity (Berkes 2012). These messages also align with preservationism, which is a longstanding current in Western environmentalism. Preservationism is a set of ideas about civilization and wilderness, heavily inspired by the anti-modernist Romantic movement in literature and philosophy of the eighteenth and nineteenth centuries. In North America, preservationism is associated with the thinking of Ralph Waldo Emerson and Henry David Thoreau, and later the activism of John Muir and Aldo Leopold (Kline 2011). This type of preservationism assigns a special intrinsic value to nature and wilderness and sees human activities as an impingement on natural dynamics and balance (Young 2015). European preservationism is more pastoral than in North America, focusing on the rural idyll and countryside more than unpeopled wilderness (Murdoch & Lowe 2003), which may incidentally explain the particular resonance in Europe of images of sheep and goats wandering about abandoned spaces. Notwithstanding such differences, 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.

The Anthropause might also have symbolic staying power because it makes thinking about environmental solutions less abstract. The gains in human well-being from reduced pollution during the Anthropause are not the result of new breakthrough innovations or technologies. They are not due to high-level changes in environmental laws, regulations or markets. Rather, they are the clear and direct results of sudden and widespread changes in human behaviour, even if those changes are involuntary and temporary. As such, the Anthropause has focused attention on the basic simplicity of the problem before us: humans need to reduce their cumulative impacts on biophysical systems. Technological and policy innovations that incrementally improve efficiency while maintaining business as usual are less impactful than a more fundamental scaling back of high-impact activities.

Finally, the emergence of immediate benefits during the Anthropause also re-temporalizes environmental expectations. A cleaner environmental future is no longer something to strive for in order to benefit our future selves or future generations, but rather to achieve quality-of-life improvements in the here and now (El Zowalaty et al. 2020). Will these gains be quietly surrendered as a necessary sacrifice in order to return to pre-pandemic life, or will they become an important theme in future environmental activism and politics? This is an open question that should be addressed in future research.

The Anthropause metaphor might have minimal long-term impact or be counterproductive

For all its present-day cultural and symbolic resonance, the Anthropause may fade from our collective experiences and memories with no discernible impact on environmental politics. Worse,

the Anthropause as a symbol and metaphor might hinder difficult but necessary discussions and changes.

We can anticipate these possibilities by looking at ongoing debates about the utility and effects of the parallel concept of the Anthropocene. Many critics of the Anthropocene as an academic and political idea argue that it masks the true origins and dimensions of present human–nature conflicts. For example, critics have argued that the Anthropocene as a metaphor reinforces the prejudice in Western thought of seeing the human and natural worlds as separate and distinct (Mathews 2020). By concluding that 'we are virus', Anthropause memes may further this dualism of humans as colonizers of nature rather than interdependent parts of a whole (Kinefuchi 2020, Bosworth 2021). The Anthropause metaphor, again much like the Anthropocene, also implies that simple human presence or absence is the cause or solution of many problems, a logic that ignores the role of particular political and economic systems in generating environmental harm (Mathews 2020). The human practices of industrialism and market capitalism therefore go unacknowledged and unexamined, despite their voracious environmental inputs and deleterious outputs (Moore 2016). This misdiagnosis may direct activism in harmful directions, such as discouraging or persecuting traditional users of sensitive spaces rather than addressing the structural roots of degradation.

It is also possible that the Anthropause is a perversely comforting metaphor in that it presents too resilient a portrait of nature and wildlife that just need to be left alone, thus absolving humans of responsibility for enacting more difficult long-term changes (Searle & Turnbull 2020). Images, videos and stories about the immediate return of flora and fauna to empty spaces are inspirational, but the mere presence of wildlife in unusual places cannot be presumed to be sustainable or even beneficial to the individual plants and animals portrayed. For example, the return of individuals to built environments does not mean that they could successfully survive there or establish viable populations, even in the prolonged absence of humans. In addition, the narrative that wildlife 'comes back' or 'resurges' in the immediate aftermath of reduced human activity glosses over differences among species. The species that did not move, migrate or expand are invisible in this portrait, an important consideration given recent evidence that the vast majority of species did not change their habitat use or range during the pandemic (Bates in press). The narrative also fails to distinguish between threatened and healthy wild populations (the latter being most likely to 'return' or resurge), thus downplaying the hard work required for habitat preservation and rehabilitation of species and populations most in need of protection.

Last, the Anthropause itself is not the whole story of the pandemic and its effects on nature and wildlife. While reduced human mobility has emptied some spaces, it has overcrowded or increased pressures on others. There is evidence that subsistence hunting and gathering activities in poor regions have increased because of economic disruption, significantly increasing the harvesting of plants, animals and fish (Pinder et al. 2020, Mendiratta et al. 2021). In the latter months of the pandemic, strict stay-at-home orders have been intermittently lifted in some regions while inter- and intranational travel restrictions have remained in place. Early evidence suggests that some places, particularly those in or near major urban areas, have experienced what may be termed an 'Anthrocrush' that has involved large increases in visitors seeking nearby outdoor activities (Geng et al. 2021, AN Kadykalo et al. unpublished data). There is also evidence that socially distanced outdoor activities such as recreational angling have increased with many new entrants to the fishery (Howarth et al. 2021). More use of concentrated spaces brings pressures such as increased road traffic, garbage and waste, trampling and erosion and incidental animal mortality (Benson et al. 2021, AN Kadykalo et al. unpublished data). This suggests that many residents of cities and heavily populated areas are not personally experiencing an Anthropause in any meaningful sense, and perhaps are even experiencing the opposite. This may reduce the salience of the Anthropause metaphor for those turning to suddenly crowded spaces for outdoor recreation.

A lot will depend on what happens next

The Anthropause has gained political, media and public attention because it resonates with a wide range of people at a symbolic and metaphorical level. Whether this resonance is transient or long term remains to be seen. So too is whether the metaphor is ultimately productive or counterproductive for environmental awareness and mobilization. We have argued that the Anthropause metaphor might help people better grasp issues such as the impacts of human activities on the environment, habitat loss, biodiversity and water and air pollution. It might lead to a greater appreciation for noise reduction, tranquillity and reflection (a collective physical and spiritual 'pause') and to underlining the benefits of a radical break with past practices. It is also possible that the symbols and metaphors of the Anthropause may prove counterproductive, providing a misleading or incomplete portrait of the resilience of wildlife and ecosystems and a misdiagnosis of the structural roots of environmental problems and the necessary actions to resolve them.

At this moment, both scenarios are plausible in whole or in part. Much will depend on what advocates of environmental reform do next. Scientists, activists, citizens and politicians should not let this opportunity to promote and solidify a useful new symbol and metaphor go to waste. Advocates should start by placing emphasis on the constructive connotations of the Anthropause metaphor while countering its misleading elements. The images of animal, plant and environmental resilience during periods of restricted human mobility are amazing and wondrous. However, this resilience should be understood as partial and incomplete. The images of foxes running through downtown streets show what is possible for wildlife with reduced human pressure but do nothing to solve problems of habitat loss or urban sprawl. Similarly, advocates of the Anthropause metaphor should focus less on human absence as a determining factor for what is being witnessed and more on the interconnectedness of humans and nature, as well as what can be learnt from this exceptional time about improving human–wildlife and human–environment interactions over the long term (Searle et al. 2021).

The links between experiences of the Anthropause and human institutions of industrialism, capitalism and materialist consumerism should also be stressed. Learning is needed from existing critiques of the parallel Anthropocene metaphor that it is not humans per se who cause widespread environmental degradation, but destructive patterns in human activities (Malm & Hornborg 2014). There are plenty of historical and contemporary examples of low-impact human societies maintaining more balanced relationships with nature (Young 2015). Looked at in this way, the Anthropause can be seen less as a singular fleeting event and more as inspiration for everyday life. The benefits of slowing down, treading lightly and making room for nature can be made permanent with better choices. At the individual level, the metaphorical Anthropause can be extended post-pandemic by engaging in voluntary simplicity, recreation closer to home and (for some) remote

work at least some of the time. At the societal level, advocates should emphasize how the unplanned Anthropause brought immediate, widespread, highly tangible benefits to humans as well as to wildlife and the Earth's physical systems. Broad quality-of-life improvements are possible in the very near future from coordinated large-scale efforts to reduce emissions, pollution, noise and resource consumption.

The Anthropause as it has been experienced thus far is a fleeting event, but it has offered a tantalizing vision of possibilities. This is an unexpected gift in the midst of a terrible pandemic that, if handled with care by environmental thought and opinion leaders, could provide a lasting symbolic and metaphorical anchor for activism and reform long after the crisis has passed.

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