

Lessons from lockdown: how a 'discontinuity event' opens possibilities

Andrew Simms, SGR, assesses the research so far on behavioural change during the COVID-19 pandemic, and considers the implications for tackling the climate and nature emergencies.

We are challenged to use all our creativity and innovation to reduce our climate impacts in the wake of the science on global heating, and a year which has seen numerous temperature records broken, wildfires, melting ice, unnatural disasters, human displacement and lives wrecked.

Of all the options available to take action, curbing demand amongst those groups of the human population that already consume resources far above sufficiency levels should be the easiest. We have decades of research showing that life satisfaction does not rise with higher levels of consumption beyond a plateau found at a relatively moderate level. Also, that the chances of experiencing well-being are just as good at 'one planet living' levels as consuming many times more.

And many of us do consume many times more, especially in the Global North. In 2022, ['Earth Overshoot Day'](#) fell on July 28th – meaning that from that day on, humanity as a whole was consuming more and producing more waste that the biosphere could replace and safely absorb.

We know that many of the straightforward measures that would reduce demand would be good for us in other ways too. The switch to renewables from fossil fuels, from driving private cars to active travel and public transport, the switch to a more plant-based diet, and from disposable, short life goods to a repair and remake economy – all these things, as well being necessary to reverse the climate and nature emergency, have big additional benefits for health, well-being and a dynamic but sustainable economy, rich with employment.

But they are not coming together in a systematic way. How can we turn things around? Are there lessons to be learned from the system and behaviour changes people experienced in the COVID-19 pandemic?

Across the political spectrum measures were introduced that put public health before short term, private economic interests. It was not uniform, and it was not perfect, but in those years populations in very different circumstances achieved rapid system and behaviour changes that demonstrate far greater ability and agency to change than we give ourselves credit for.

Pedal power

I live in a city, London, that has far too many cars. You only have to drive 500m (or even less) in an average, petrol-engined car to [produce enough pollution to melt the equivalent of 1kg of glacier ice](#). Getting out of our cars and onto public transport and bikes is one of the big shifts we need. Vocal minorities in favour of privileged car access, often strongly resist traffic reduction measures. But, for example, where low traffic neighbourhoods (LTNs) have been introduced, apart from benefits like increasing freedom of movement for non-car users, other significant positive outcomes include [traffic accidents halving in areas with LTNs](#).

People around the world were getting on their bikes in huge numbers in 2020 and 2021. In the USA, [one in ten American adults reported riding a bike for the first time in a year or longer since the onset of the pandemic](#). Across the Atlantic, in

>>

» the UK, [cycling surged by 200%](#) during the initial lockdown on weekends and [100% on weekdays](#). Data from over 100 European cities showed growing cycling rates of between [11% and 48% on average, generating health benefits of somewhere between \\$1 billion and \\$7 billion](#). Bike use in the Argentinian city of [Buenos Aires saw an increase of 129%](#), with a similar increase identified across China's bikeshare infrastructure.

Bike suppliers [struggled to keep up with renewed demand](#) and a [global shortage of bicycles was declared](#) expected to last a considerable time.

The shift to pedal power wasn't just due to individuals either – there has been a big rise in the use by businesses of cargo bikes. An electric cargo bike in London [can deliver 60% faster than vans in busy urban centres, achieving higher average speeds, and successfully and safely delivering ten parcels in an hour to a polluting van's six](#). When compared to a diesel delivery van, an e-cargo bike [cuts emissions by 90%](#). Another estimate suggests that cargo bikes' ability to use both roads and cycling infrastructure means that journey times [can be cut by between 25% to 50%](#).



Micro-mobility

Another shift has been the rise of micro-mobility – things like electric bikes and scooters for hire. These have had more than just the immediate, obvious benefits.

A study conducted by the Micro-mobility Coalition and DePaul University found that when paired with walking and public transit, micro-mobility provided access to [44% more jobs within a commute of 45 minutes or less](#). In the city of Boston, micro-mobility services – alongside walking and public transit – [allowed people to access 60% more employment opportunities](#). A report from the [North American Bikeshare and Scootershare Association \(NABSA\)](#) found that approximately half of the shared micro-mobility systems surveyed saw increases in their first time riders during the pandemic. This was strongest among bike sharing platforms. In 2019 North American bike sharing platforms aided [seven million trips](#). During the pandemic, this had risen to [ten million trips](#).

All change for commuting and business travel

We haven't just been travelling differently, we've found that a lot of travel simply isn't necessary. [One survey of 45 large businesses in the US, Asia and Europe](#) supports this claim, showing that up to 84% of firms plan to spend less on travel after the pandemic subsides ended. Those businesses that said they would be cutting corporate travel budgets are eyeing up reductions of between 20% and 40%, with roughly two in every three businesses curtailing both internal and external in-person meetings too.

Aided by a realisation that for many people, although not everyone, it is possible to work more from home, it looks like there has been a long-term reduction in commuting. The Bay Area Rapid Transit (BART) system that moves commuters around the San Francisco Bay Area [hovered at between 25 and 30% of its pre-pandemic daily ridership](#) in late 2021. The Parisian public transport authority is [never expecting to see pre-pandemic levels of daily travellers ever again](#). As of September 2021, [half of British workers were still working from home at least some of the time, with 60%](#) of all respondents wanting to see remote working as a permanent feature going forward. In early 2023, three years on from the first lockdown, home working has normalised to the extent that around [one in three of all UK workers work from home most of the time](#), that is at least three days per week. Travel [across all modes](#) in the UK is still below pre-COVID levels.

Safe landing and staying grounded

One of the most dramatic shifts during the pandemic was the virtual mothballing of aviation, and the realisation that it is possible to live well without flying frequently.

From 2019 to 2020, air travel [fell by 60%](#), which is an overall reduction of 2,703 million passenger trips. In 2021, passenger numbers were [still down by approximately 49%](#). Estimates vary, but approximately [80% of people have never stepped foot on a plane](#). The richest 10% of humanity, however, [use 75% of all aviation fuel](#).

[Recent research has shown](#) that advertisements for cars and flights could be responsible for between 202 and 606 million tonnes of greenhouse gases in 2019. At the lower end of the range, [the emissions are equivalent to that of the annual emissions from the Netherlands, while at the higher end of the range it is approximately twice the national emissions from Spain](#).

As a result, many are arguing – including myself – that we now need to consider ending the advertising of high carbon products and lifestyles in the same way that we ended tobacco advertising.

The appeal of taking holidays more locally has also grown. Staycations are here to stay. Recent data shows that [almost half of holiday-makers in the UK](#) chose a staycation in 2022, with the beauty spots of Cornwall and the Lake District pushing France and Spain off the top spot for UK holiday-makers. A similar trend can be found in Sweden, where record numbers of Swedes rushed to get their hands on summer lodges in anticipation for continued staycations, [driving prices up by 12% on the previous year](#).

Slow tourism is [forecast to grow](#) by an average of 10% per year, bolstered by the experience of the COVID-19 pandemic, and set to become a viable alternative to more energy-intensive and stress-inducing holidays.



The UK's Ordnance Survey Maps app saw a year-on-year sales [increase of 41%](#) in April 2020, as people took to the streets, lanes and footpaths in search of space. Even sales of custom made paper maps in May 2020 were up by 175% as people made up their own local walks and trips.

The great urban shift

For much of the last half a century in many countries cars have taken priority in the imaginations of planners, but the pandemic showed how quickly this can be reversed.

Local and national governments were quick to respond to the pro-car bias in public space with a range of pop-up cycling and walking initiatives. According to research from the science think-tank [MCC](#), these temporary infrastructures boosted cycling levels across European cities by between [11% and 48% in the first few months of the pandemic](#) at a cost of [€1.7 billion](#). The same study concluded that, in the space of just a few weeks, the European continent surpassed many of the active travel goals that [were set for 2025 and beyond](#).

In Ireland, where people have been encouraged to return to work and restrictions have been eased, [levels of traffic were still between 5% and 20% lower](#) than pre-pandemic in early 2022, depending on the road. A survey of data collected by a leading satnav company, [shows that traffic congestion in cities around the world was 10% lower in 2021 than it was in 2019, with around three quarters of the cities surveyed experiencing less traffic than they did before the global pandemic](#). During rush hour, the drop in traffic was even more apparent [at 19% lower than pre-pandemic levels](#).

Traffic in the UK is still not back to pre-pandemic levels either, with weekend car traffic in England [sat around 10% below the levels experienced before the lockdowns](#). The amount of people

now working from home, and companies adjusting to this new reality, has had profound impacts on travel behaviour. But even if all the people who switched to working from home in the UK were to go back to travelling for half of their working week, [car commuter miles will still be reduced by 16%](#).

Ending cultures of overconsumption

One of the hardest things that many people find to do, is being able to imagine life without the culture of consumerism that has taken over our economies in the last half a century and is breaking planetary ecological boundaries. It's often said, in fact, that it is easier to imagine the end of the world than it is a different economic system to the model of debt-fuelled overconsumption that grips so many relatively wealthy countries.

But again, the last couple of years have given us glimpses of how life might be different, and even better. Several interesting new terms are creeping into use – heard by many for the first time: things like 'quarantine of consumption', 'habit discontinuity event', 'post-traumatic growth', and 'behavioural spill-over effect'.

For one thing, we've been entertaining ourselves more, and finding that getting creative beats consumerism. While all but the shops that sold essential goods were closed, and shopping as a leisure activity was put on hold, the pandemic unlocked abilities to entertain each other, and brought people together over jigsaws, singing, chess and learning the ukulele.

Dancing was an activity that demanded some of the highest ingenuity during the pandemic, with online classes proving popular, [living room dancefloors](#) booming, and students keeping up their physical fitness and skills by [dancing at home](#) in gardens and bedrooms.

The Dutch National Ballet made an [at-home ballet](#) to connect people and keep the love of dance alive. General keep-fit at home also flourished online, with the UK's fitness guru, a man called [Joe Wicks](#) getting millions of people off the couch for his 30 minute morning workouts. Yoga aimed at beginners also drew huge new audiences, with the internationally famous Yoga with [Adrienne](#) seeing up to 35m viewers on some videos.

An online survey of [nearly 4000 choir members](#) in the UK identified that continuing the choirs online – even in a limited way - improved people's sense of wellbeing, was important for their community and social identity, and encouraged creative co-creation.

There was an explosion too of public art during the time when being able to walk in the open air and in green spaces was one of the few activities available. From children chalking on newly peaceful pavements – as cars were left in garages – to tree decoration – and more.

Some of the results, for example, in leading artist Grayson Perry's [Art Club](#) on television were inspirational, entertaining and transformative, giving thousands effective permission to find satisfaction and meaning in a creative activity. Antony Gormley's [The Great Big Art Exhibition](#) emboldened people to turn their front windows and gardens into galleries to turn neighbourhoods into open galleries during lockdowns – transforming the local atmospheres and sense of community.

When faced with limits and restrictions, human imagination thrived as people chose to do things differently. >>



Waving farewell to food waste and shifting diets

Meat-based diets and food waste are other big habits pushing our lifestyles out of balance with the biosphere. Rotting food in landfill accounts for around **8% of global greenhouse gas emissions, which is only slightly less than the amount of emissions created by road transport.** In just the US, the **production of food that gets wasted generates the equivalent of 32.6 million cars' worth of greenhouse gas emissions.**

During the pandemic, in spite of the occasional rush on supermarket shelves, the amount of food wasted actually declined. Also, while some panic buying was much hyped, research shows generally that people don't behave badly in crises – quite the opposite.

The decline in waste wasn't concentrated in just a few countries: it happened around the world. In Italy, one of the nations hit hardest by the first wave of the virus, **food waste fell despite vast increases in the purchase of foods.**

As well as being more careful, some other attitudes were shifting too. Germany saw sharp falls in food waste and, at the height of the pandemic, **91% of Germans were checking food after its sell-by date and not automatically throwing it away compared to only 76% in 2016.** In the UK, **where 59% purchased more food than usual,** food waste also dropped significantly. In November 2020, food waste in the UK was **22% lower than the previous year.**

The forced suspension of habits is what psychologists and behavioural scientists call a **'habit discontinuity event'**. Whether it's **the way we travel,** how we understand our relationships with other people, or even **the beliefs that we hold dear,** a habit discontinuity event can cast everything in a new light.

It became a cliché when people posted pictures of their freshly baked loaves on Instagram, but the rise of home baking, especially sourdough bread was another example of reskilling and taking more care over food.

In the UK, the pandemic was also a tipping point for accelerating the uptake of vegan diets. According to **industry research,** one quarter of British people aged between 21 and 30 said that the pandemic had made a vegan diet far more appealing to their lifestyle. When this question was put to people of all ages, **12% agreed** that a vegan diet became more attractive to them during lockdowns. The reasons for these shifting sentiments go beyond environmental concerns. The same survey found that **over half of British adults** believed that plant-based ingredients can have medicinal and health benefits. And, further, **23% said they were eating more fresh fruit and vegetables** for health reasons, while 27% made changes because they wanted to save money.

Pandemic epiphanies

One thing that surprised many – and which contradicts the disaster movie cliché of people acting selfishly in emergencies – was the degree to which people complied with behaviour changes to look after each other and protect public health.

In Canada, for instance, polling shows **that 84% of citizens complied with COVID-19 restrictions most of the time. Figures from the UK paint a similar picture** with the compliance rates of social distancing remaining in the range of 80%, **despite the government's official advisors expecting rates of between 50 and 75%.** Regardless of what individual citizens wanted to do and the disruption that lockdowns and social distancing caused,

» How people learned to use their hands again

Spending more time at home, surrounded by piles of 'stuff' and forgotten purchases, **led many people to realise they had too many things.** These realisations caused people to shift their priorities around consumption, **with many deciding they wanted to buy fewer, higher-quality products that can stand the test of time,** or instead **choosing to repair and maintain what they had.**

Extensive research into human well-being has shown time and again the benefits of working with our hands. And we know that the regenerative green economy of repair, recycle, remake and re-use rather than buy, use and throw away is an essential part of restoring balance between people and the biosphere.

In the UK, throughout the first lockdown, spending on DIY and home improvements jumped up by 21.6% in just three months. Sewing machine sales saw a 127% increase, with both large retailers and smaller shops experiencing a sudden shortage of fabric and sewing paraphernalia. People were mending, making and upcycling clothes in droves – a reskilling was taking place.

Slowing down fast fashion

A **2020 report** by The Business of Fashion suggested that there was already an increasing awareness of the wasteful nature of fast fashion and a growing interest in "purpose-driven, sustainable action". It predicted that what it called the lockdowns' effective "quarantine of consumption" could accelerate some of these shifts. A **follow up report in 2021** showed the fashion industry experienced a 20% decline in revenues in 2019–20, with 7% of the industry participants leaving the market entirely.

A **ThredUP report** also estimated that 33 million consumers bought second hand apparel for the first time in 2020 and these habits were in place for long enough to stick. It estimates that the second hand clothing market will double in the next 5 years to \$77 billion. and predicts that within 10 years secondhand clothing will outstrip fast fashion.

high compliance rates across different contexts suggests that people were prepared to put self-interest to one side in favour of keeping both their loved ones and complete strangers safe.

The UK saw [4,300 mutual aid groups blossom in the first throes of the lockdown](#), with citizens offering help to the vulnerable or those needed to self-isolate – over 40% of these groups are still active and the US mutual aid groups are organising regionally.

Now that we are in a position to reflect on the last few years, it's clear that many people experienced a variety of epiphanies about their lives and what they wanted to do with them.

[Studies show](#) that in the wake of natural disasters and traumatic events people are more likely to make big transitional decisions in their lives, such as getting married or divorced. Psychologists have labelled this phenomena as [‘post-traumatic growth’](#)

[One study from Germany](#) found that respondents used this additional time to go outdoors, to experience nature more intensely, to spend more time with their partner and their children – and generally to have more time for themselves – and reflect on what gives meaning to life.

Finding the nature cure

In the UK, [1.5 million people live in overcrowded accommodation](#), with [one in eight households having no access](#) to a garden. These trends disproportionately affect ethnic minorities in urban areas all around the world, [who are less likely to have access to well-maintained green spaces](#). Considering that [65% of cities’ public realm is given up to cars](#) – and cars are static 80% of the time – claiming back space for people and communities was quietly revolutionary.

In May 2020, 36% of people in the UK responding to a government agency’s [People and Nature Survey](#) said they were spending more time outside during the pandemic than before. This rose again to 46% in July 2020, a pattern that was repeated across the world, particularly in [highly urbanised](#) societies like Australia and Hong Kong. Oslo, Norway, saw a [291% increase](#) in outdoor recreation activity during the pandemic relative to a three year rolling average for the same days, particularly for pedestrians (walking, running, hiking) and cyclists.

It wasn’t only parks – one study found that in Spain, Israel and Croatia some people started using even small urban areas of greenery and [tree-lined streets](#) as places of refuge during the pandemic when larger parks were still closed.

Access to public greenspace became a political issue; a human right at a time of global health crisis. [Research](#) showed that, across the United States, areas with lower income and where the majority of residents were people of colour had fewer parks and green spaces. This meant that the communities worst affected by COVID-19 also had the least nature nearby.

More warm bath than cold shower

I think that what all these examples show is that not only are we better at change than is generally accepted, but that many of the changes we need to make to help get human activity back within the Earth’s planetary boundaries, are things which can also make our lives better. Good lives do not have to cost the Earth.

There are many things that as individuals we can choose to do differently. But this is not enough because individuals are locked into high-energy, high-consumption systems and infrastructure – largely due to poor choices by industry and government. We



need to make the right choices easy and design out the bad choices. Every town, region and nation also needs to enable and invest in zero carbon, socially just rapid transitions, and support and enhance behaviour change. The policy package of choice that includes financial reform with public investment is a Green New Deal.

We need to raise our levels of ambition to tackle the climate and nature emergencies – and realise what we are capable of – but the traumatic years of the COVID-19 pandemic revealed the huge scope for practical and rapid change and the enormous potential of our poorly appreciated capacity for adaptation and change.

Andrew Simms is Assistant Director of Scientists for Global Responsibility, Co-director of the New Weather Institute, Coordinator of the Rapid Transition Alliance, and co-author of the original Green New Deal.

A fully referenced version of this article can be viewed via: <https://www.sgr.org.uk/publications/responsible-science-no-5>