

Time in the age of COVID-19

It's time that you love

Tom Waits

The sickness of time

It feels as if time too is sick. For many the coronavirus spring is racing forward fast. In Britain, doctors and nurses loop through punishing shifts, and will do so for the coming months. Final year medical students push through accelerated qualification routes.¹ Restrictions on delivery drivers' working hours are relaxed so that they can work beyond their usual stints.² The British Treasury civil servants who worked on the £330bn emergency help package over the weekend of March 14th and announced by the Chancellor on the 17th did 'three months' work in 48 hours'.³ Military engineers and medics have converted the Docklands' Excel Centre into the biggest field hospital the country has ever seen. Cancelling everything until June, the two 2,000m² event halls will no longer host the 'National Wedding Show' or 'Cake International on Tour', nor seat thousands of university students taking summer exams but instead provide 500 intensive care beds, with capacity for 4,000.⁴ The initial transformation took two weeks. The logistical and clinical exercise is enormous, and equivalent sites are appearing in Birmingham, Bristol, Harrogate, and Manchester.⁵ Meanwhile thousands of businesses, schools, and universities were forced within a fortnight to learn the conjuring trick of physically disappearing and virtually reappearing to provide some semblance of what they used to do before they could do so no longer.

All the talk of reaching peaks and flattening curves for the thousands infected globally are also attempts to measure competing timescales, human and viral. (On 10 April there were 1.5 million infected with 100,000 deaths; on 21 April 2.5 million and 171,000 deaths).⁶ The tragedy and brutality of time cut short needs no underlining. For the dead, time has come to a hard stop; dislocating, disorientating, and abrupt for their families. The rhythms of mourning have been denatured and their traditional expressions, to a large degree, suppressed.

The physical lockdowns adopted by many countries (at noticeably different speeds) has left many unemployed, furloughed, or the self-employed precariously suspended. Lockdowns of varying intensities affect c.81% of the world's workforce.⁷ One of the most frightening economic charts of the pandemic must be the *New York Times* front page of March 27 showing the previous week's US unemployment claims rocketing at 90⁰ vertically up the page to over 3 million (from a weekly average of 345,000 over the century).⁸ Here panic is bolted together with stagnation. The virus is no equal opportunities infection though. Black and

Asian individuals are seemingly more vulnerable to SARS-CoV-2 (its technical name). In the south it looks like a disease of the rich in so far as its distribution reflects the vectors of international air travel while a 'poor' disease like malaria occasions no equivalent agonizing despite the *c.* 400,000 annual deaths it causes.⁹ For the many much (much) luckier who are salaried and uninfected new rhythms and routines impose themselves – often banal – whether attempts to sustain the 'working day' in ill-fitting domestic environments or adjusting to new routines of staggered queueing outside supermarkets applying one-in-one-out rules.

Lockdown time is undergoing lethargic mutations as we struggle to differentiate the days from one another, as Jonathan Freedland observed.¹⁰ Much stress has fallen on the absolute restriction produced by our inability to move around freely, but moving physically through the world has always fundamentally structured our day and time: breakfast, commuting, shifts, meetings, lunch, appointments commuting, dinner, sleep, etc. Children have lost the highly structured regime of the school to have it replaced with wildly variable 'home schooling' environments. Dislocated from school timetables, many say they can't tell one day from the next.¹¹ Students expecting to leave school or university this year are being catapulted into boneless summers when none of those exams or markers will occur. For smaller children the monotony was compounded by the rigid canvas of the Easter holidays which parents struggled to fill. The elderly are locked down completely, possibly for over a year in the UK. Life's orbit in many countries is shrunk now into the microcosm of the home.

Right now we're labouring beneath the inadequacy of our usual measures in this new context. Changes in time's rhythms always make a big difference to us as a species.¹² The historian Jacques Le Goff wrote about the anxiety caused by the introduction of clocks in the Middle Ages, a battle he thought between 'church time' and 'merchants' time'.¹³ E. P. Thompson analysed how industrialization changed how the British felt time passing.¹⁴ All of the rituals we're constructing, often through social media (here's your daily photo of the day etc) are our attempts to take back control of our time. A traditional Madagascan measure was the thirty minutes of 'rice-cooking'. We're trying to create new measures for COVID-time.

Our individual experience of time disorientated connects to a global disorientation at the massive, obvious level of the disease itself. But there are hidden levels. COVID-19's disruption of our experience of time is symptomatic of a much bigger disruption in time. That disruption is the Anthropocene, the era of humans as global agents of planetary change.¹⁵ How can we connect the microscopic personal 'now' of COVID-19 with the macroscopic panorama of the Anthropocene? Well, the sickness we feel coping with COVID-19's ruptures

is symptomatic of the nausea we feel when facing the Anthropocene. COVID-19 is just the travel-sized version.

The weeks leading up to the lockdown are now flattened in memory (mine at least). Ironically, the constant churn of updates can make time undifferentiable. How long have the children been off school? How long have these governmental press conferences been going on for? What week of lockdown are we in? Have I gone outside today?

Even one's own timeline becomes blurred. Working from home now, with university holidays and school holidays having blurred with the lockdown itself, it took some effort to reconstruct in my diary the phony war before institutions and government actually responded to the unavoidable. Just going over this is an attempt to orientate oneself chronologically. The week of March 9 will be central to the histories of what went wrong. We'll know how privileged we were by how little our lives was affected during those weeks. On 9 March the government's Scientific Advisory Group for Emergencies (SAGE) evaluated but did not recommend non-pharmaceutical interventions (social distancing, school closures).¹⁶ That week I scanned books and journals I knew I wanted in central London libraries. A lockdown seemed inevitable. Librarians at the Warburg Institute were amazed the British Library was open. The morning commuter trains were typically, ridiculously rammed; you tried to pivot helplessly so you at least faced someone's back or the door. I tried to find out what was going on with a visiting post in Paris I was supposed to take up in April. On March 11 a conference in York due the following week was cancelled. The next day I emailed students about readings for our (physical) class the following week. It was that day though, Thursday, that I could feel the floor tilting. My university's guidance changed about physical classes. The day after I told my students the class would be online; my Paris invitation was suspended. The weekend was quiet and still. On a relatively empty train I travelled from King's Cross to a friend's 50th birthday party in Cambridge – a mix of communal drinking, eating, and social proximity whose experience will remain months away now. Both cities seemed quiet but not abnormal – spring-bright, cold. On Monday 16th I finished my scanning and humped solid logs of books home from my university office. The libraries were still open; but the British Library was already stripped of the hundreds who normally sit outside its readings rooms using the free desks, sockets, and wifi. That evening the Prime Minister gave an unusually sober press conference. His tone veered wildly through that week's later addresses but Britain's phony war was plainly over with Tuesday's £330bn rescue package, Wednesday's shutting of schools, and Friday's closure of pubs and restaurants. The day before I'd made an

early morning journey on a deserted commuter train into central London for a final hoarding exercise before the University physically locked itself up the next day. I walked to Bloomsbury from Charing Cross through a deserted Covent Garden, stopping at a Tesco's stripped by 8am of toilet roll, flour, and dried goods – increasingly familiar absences. I overheard *Big Issue* sellers discussing the queues which had gathered there from 6:30. The following Monday, the 23rd, Johnson made the announced the nationwide lockdown many had already adopted. Tinkering with the clocks for summer at the end of that week seemed either a heroic or a laughable assertion of human control over time and our rhythms – political, social, economic or otherwise.

Fever, lethargy, delirium, ennui, despair, extinction: COVID-19 is rotating the human species biologically and socially – but unevenly – through every experience of time like the gimbal rigs once used to train astronauts.

Time itself is subject to debate and criticism. What did the president/prime minister/etc know and when did s/he know it? The day the school closures were announced Richard Horton at *The Lancet* fiercely critiqued the speed of the British response. The science of the Chinese experience was demonstrable from January, ‘why did it take the UK government eight weeks to recognise the seriousness of what we now call Covid-19?’¹⁷ Since then he has described the ‘global response to SARS-CoV-2 [as] the greatest science policy failure in a generation’.¹⁸ If the economic fallout is as bad as presently predicted the eventual historical judgements are will be worse than that. ‘You can have the best system in the world, but if you give the virus an eight-week head start it will eat you alive’ said Jeremy Konyndyk, director of USAID’s Office of US Foreign Disaster Assistance between 2013-2017.¹⁹ The initial reckonings are already here. On 11 April the *New York Times* ran a major account of the United States’ missteps stressing the failures to act from late January through February.²⁰ The first draft of the American history stresses excessive scientific political caution and governmental inattentiveness. One detailed British sketch focuses more on limited scientific modelling and scientific pre-judging of the politically palatable.²¹ A *Financial Times* report into the government’s coordination and management of ventilator manufacture and a *Sunday Times* investigation into the Prime Minister’s February activities both stressed slow reactions, political incompetence, inattention, and amateurism.²² Both were sufficiently damaging to prompt detailed governmental rebuttals.²³

Scientists and doctors have also stressed speed of action. Charts showing COVID-19 fanning out from the 58 daily deaths solely in China on 1 March to the over 6,000 daily 11th

April spread across the US and Europe makes that point clearly enough.²⁴ On March 13 Mike Ryan a key executive at the World Health organization framed the issue as a struggle over whose timescales would dominate – human or virus:

... the lessons I've learnt after so many Ebola outbreaks in my career are be fast, have no regrets; you must be the first mover. The virus will always get you if you don't move quickly and you need to be prepared and I say this. One of the great things in emergency response - and anyone who's involved in emergency response will know this - if you need to be right before you move you will never win. Perfection is the enemy of the good when it comes to emergency management. Speed trumps perfection and the problem in society we have at the moment is everyone is afraid of making a mistake, everyone is afraid of the consequence of error. But the greatest error is not to move, the greatest error is to be paralysed by the fear of failure and I think that's the single biggest lessons I've learnt in Ebola responses in the past.²⁵

What is demonstrably clear is that humans have moved the virus around the planet quicker than their ability to reckon with its effects.

Symptomatic nausea of the Anthropocene

The reckonings are not just political, medical, or scientific, however. They concern how we reckon time itself, and orientate ourselves in it. Horton implied that COVID-19 has up-ended notions of the 'Anthropocene',

an era where human activity has become the dominant influence on the environment. The idea of the Anthropocene conjures notions of human omnipotence. But Covid-19 has revealed the astonishing fragility of our societies. It has exposed our inability to cooperate, to coordinate, and to act together. But perhaps we can't control the natural world after all. Perhaps we are not quite as dominant as we once thought.²⁶

To deduce from this that 'the Anthropocene' is disproved would be incorrect. It makes more sense to argue that COVID-19 exemplifies what Christophe Bonneuil and Jean-Baptiste Fressoz describe as the 'powerful impotence' propelling the Anthropocene.²⁷ A timely symbol is that one of the few places which has been 100% guaranteed virus-free was the International Space Station 240 miles off the planet entirely. The three Russian and American astronauts of Expedition 62 returned on Friday April 17 to a planet which, with them, had not heard of coronavirus when their commander Oleg Skripochka left it in September. The three new astronauts of Expedition 63 arrived on April 9 after two weeks of quarantine and medical inspections to ensure they were not carrying the virus into outer space.²⁸ Between technology and disease lies the Anthropocene.

Viewed then from a more obvious angle SARS-CoV-2 is the Anthropocene miniaturized in viral form. It is no irony that the only continent so far lacking the virus is the most inhuman,

Antarctica, fittingly the location of ice-core deposits which enable climate assessments.²⁹ The present experience of physical quarantine and economic lockdown communicates more viscerally than any book or scientific paper ever could the feelings of whiplash, vertigo and slo-mo car crash which characterize our experience of the Anthropocene. The experience is not only intellectual, it is felt.

Our sense of the speed at which human effects on the environment are running ahead of states', corporations', and scientists' ability to control them is enough to produce a feeling of whiplash. The Expedition 62 astronauts re-entering the atmosphere could get it from that alone. If the virus originated in the 'wet' food markets of Wuhan and is the result of some mediated transmission between bats, pangolins and other species it did so quickly.³⁰ That seemingly occurred in contexts of deforestation, new inter-species interactions precipitating new diseases, and industrial food production.³¹ The speed of its consequent global transmission through global industrial and retail travel is plain. It is a sharp fact that Wuhan is a major global automobile production centre.³² Likewise turning back to the mere weeks within which the extraordinary shutdown of entire economies has been achieved certainly produces whiplash. Even now it is scarcely believable that so great a forced stoppage has even been possible.

As for vertigo that can be triggered simply by contemplating the projected depths of unemployment and recession which the 'great lockdown' is initiating, according to the International Monetary Fund.³³

The pandemic has also been a slo-mo car crash though, since none of this is surprising to those in the field. Pandemic influenza was the only risk in the British government's 2015 *National Risk Register of Civil Emergencies* to figure both at the highest quadrant of impact and at the highest level of likelihood (1/20 to 1/2 likelihood). The *Register* assessed this could result in 'half the UK population potentially being infected, with between 20,000 and 750,000 additional deaths potentially by its end'.³⁴ Following the 2009-10 swine flu pandemic, British Department of Health guidance in 2011 noted that the intervals between pandemic influenzas between 1918-2009 were between 11 and 39 years and estimated that a 50% illness-related absence in the national workforce would cost the economy £28bn.³⁵ Exercise Cygnus was a three high-level simulation over three days in October 2016 of how national, regional, and local government and health services would respond to an influenza pandemic. It raised serious, but 'primarily operational issues', about public reactions, coordination between governmental levels, and surge capabilities.³⁶ Whether these were simply 'operational' is

arguable, certainly it considered ‘population triage and the moral and ethical issues associated with that’ in worst case scenarios.

These perceptions entirely gel with those produced by reflection on the Anthropocene. That idea arose from geologists’ sense that the Holocene epoch of the last 11,650 odd years was up. Humans’ effects on the planet in terms of the climate-altering chemicals they have cultivated and produced and the waste, deforestation, killing, and extinctions they cause were such that a new geological period should signal this.³⁷ How is being worked out currently through the scientific bureaucracy of the ‘Anthropocene Working Group’ of the Subcommission on Quaternary Stratigraphy, itself part of the International Commission on Stratigraphy, itself an organisation within the International Union of Geological Sciences.³⁸

Vertigo, whiplash and the slo-mo nature of these events find their home in the Anthropocene. Attempting to look beyond the tiny 4,000 year long fragment conventionally reckoned as ‘history’ (i.e. the range *c.*2,000 BCE–2,000 CE) is bound to cause vertigo. Moving to a set of chronological reckonings which reach back 9,000 years to early Holocene agriculture; 50,000 years to the rise of *homo sapiens* and the extinction of the megafauna (mastodons etc); 100,000 years and early hominid tool use, or even beyond, does not come readily. We are generally not used to time on this scale (archaeologists yes; geologists sure).³⁹ Taking more conventional historical parameters and looking from 2020 at the near vertical escalations in human energy use and population growth from the nineteenth century, and on which we stand, is likewise vertigo inducing.

To get whiplash from here is easy. On the one hand the sheer amount of *time* expressed in the burning of fossil fuels is immense. Fossil fuels are time compressed into organic, flammable form. We know that carbon is being released at levels unprecedented over the last 66 million years, faster than we – or anything else – can adapt to.⁴⁰ We reflect less often on the hundreds of millions of years taken to grow and compress the dead organic matter whose extraordinarily rapid combustion reaches only back to the last hundred, two hundred years. Two orders of time crash here at opposite speeds. The ecologist Andreas Malm has argued that ‘history is back: the panic that climate change so easily induces is really a panic in the face of history, our reaction when it dawns on us what they – those who once lit the fossil fires, spread them and keep them burning – have done to us and our children’.⁴¹ The school strikes and climate change protests of Extinction Rebellion and others in 2019 are the entirely reasonable response of a generation coming to political maturity and feeling the weight of that history on their chests. Not only has the scale of the inherited problem dawned on them, but also the ridiculously tiny window in which remedial action is supposed to occur. Millions of

years of fossils spent by humans over hundreds of years to be ‘solved’ by one generation in a few decades. Whiplash is a reasonable response.

Again, all of this has played out in slow motion. Environmental debates about the damaging effects of mining on air quality, animals, deforestation, and human health can be found – just in Europe – certainly as far back as the famous 1556 treatise on mining *De re metallica* by the Saxon doctor Georg Bauer (‘Georgius Agricola’).⁴² There is nothing ‘modern’ about European environmental awareness (to say nothing of ‘western’ or ‘scientific’). Humans have known about our earth-changing actions for a long time.⁴³

It is completely reasonable that travelling in time like this should make us sick. Attempting to swallow these timespans, these phenomena, is nauseating. That is why generating good responses to them has been so hard. But if there are affinities between the Anthropocene and our rational responses faced with global pandemic and lockdown, COVID-19 also demonstrates why a broader, not narrower, view of the Anthropocene is more helpful when thinking beyond our present crisis.⁴⁴

A tight, purely geologically defined, measure of the Anthropocene might take its starting point as either nineteenth-century’s increases in atmospheric carbon levels following the industrial revolution, or the mid-twentieth century conjunction of nuclear radiation levels, human population surge, and increased carbon emissions. Earlier, less favoured starting points might be either the increase in atmospheric methane traces produced by Chinese rice cultivation and animal domestication 5,000 years before the present or decreased seventeenth century atmospheric levels of carbon resulting from reforestation caused by massive disease-led depopulation of the Americas.⁴⁵ In all cases the question – for geologists – is where is the chemical measuring point within geological sediments such phenomena leave, and when does it date from?

COVID-19 is unlikely to leave any ‘anthropogenic’ traces of interest to future geologists. While the short-term reduced pollution from the lockdown is already globally visible that would need to continue for much longer to register geologically and there are not reasons to expect that.⁴⁶ So should any version of the Anthropocene include the virus? SARS, a coronavirus, was transmitted through an animal-human chain which jumped species (horseshoe bats) as a result of endemic disease reservoirs being ecologically disturbed (by humans) in Yunnan.⁴⁷ Some similar origin at present seems likely for SARS-CoV-2, whatever any role for Wuhan’s wet market turns out to be.⁴⁸ If Donald Trump’s political motivations in labelling COVID-19 the ‘Chinese virus’ are in themselves repulsive, it is entirely likely that

human activity precipitated the virus's spread to humans. The subsequent world-wide disruption, and trillion dollar bill which the world will swallow was certainly caused by people. It would be an odd encyclopedia of the Anthropocene which could then find no space for an entry labelled 'COVID-19'. The broader sentiment that 'We are all pangolins', a banner which hung from a quarantined balcony in Bordeaux on 19th March, is a better pointer.⁴⁹ We are indeed all pangolins, if we take that to mean that COVID-19 demonstrates how we are the subjects of highly connected anthropocenic historical processes which we neither fully understand nor, certainly, control.

That is an argument for an inclusive definition of the Anthropocene. Whenever and wherever geologists decide to locate their Anthropocene, the idea is too important a geological idea to be left to geologists. It is too important to be left to scientists at all. This seems counterintuitive at a time when science dominates every news bulletin and everyone is a wannabe epidemiologist. Janan Ganesh in the *Financial Times* suggested that the coronavirus has demonstrated that scientific knowledge should now rebalance the humanities in any meaningful conception of being educated. 'An ignorance of science will no longer be viable in polite company. Two cultures will become one. And the accommodation will have to be made by those of us in the humanities'.⁵⁰ The place of science in 'being educated' is well-taken but Ganesh's point is misplaced. The present issue has not been primarily one of hostility to, or incomprehension of, scientific explanations. The appetite for high quality general and scientific journalism on the virus demonstrates this.⁵¹ The much-circulated video clip of Angela Merkel clearly explaining the significance of a disease's reproduction number is one example. It is worth returning to what Horton said about the Anthropocene in *The Lancet*: COVID-19 'has exposed our inability to cooperate, to coordinate, and to act together. But perhaps we can't control the natural world after all. Perhaps we are not quite as dominant as we once thought.'

Cooperation, coordination, and social action are plainly things scientists do, very well. The speed with which virologists, epidemiologists, public health experts, and others have mobilized has been remarkable. An Oxford University team cautiously hopes for an antidote by the autumn.⁵² The historian of science Lorraine Daston has suggested that our escalating attempts over the last five months' to understand what COVID-19 actually is have been an attempt to orientate ourselves from a state of 'ground-zero empiricism'.⁵³ Virologists, after all, are not even sure precisely whether the virus is airborne.⁵⁴ Daston's point however underscores that science is only part of any resolvable equation. Whatever the ground zero of our epidemiological knowledge, politically, institutionally, and culturally there is never any

ground-zero. We are always in the history of our politics – and science is part and parcel of that.

Many of the most intractable problems raised by COVID-19 are non-scientific. The necessary and explicable stress on treatment and vaccine development can obscure this. Yet science will not help to explain or resolve the political tensions which have generated such dysfunctional ill-will between the World Health Organization and the US administration.⁵⁵ Science cannot resolve the extraordinary baiting of US state government by its federal head and the President's encouragement of armed protests against lockdown measures.⁵⁶ Science cannot explain the economic history which has bedevilled European attempts to agree EU-wide financial bonds in response to the crisis.⁵⁷ Sociologists and anthropologists will be best placed to explain the *cordons sanitaires* lying behind the British problems in sharing COVID-19 testing between the bigger Dunkirk 'destroyers' of Public Health England and the 'little boats' of smaller laboratories, to use Paul Nurse's metaphor at the Francis Crick Institute.⁵⁸ Philosophers likewise are providing advice on the 'ethical triage' of intensive healthcare with finite resources.⁵⁹ Anthropologists and cultural historians will be the ones to explicate the wild animal markets and medical practices which will trigger other pandemics, even if they have not triggered this one.⁶⁰ And historians of plagues and famines will be the ones to shed light on their past dynamics, and isolate what is different and similar about this, and the ones to come.⁶¹ The same is true for the Anthropocene more generally. To the degree that its most intractable problems are non-scientific, so too will any 'solutions' be non-scientific.

Much of that involves challenging some of the overarching paradigms into which we find ourselves boxed. Many of the above problems are institutional in the widest sense: they concern the functionalities and dysfunctionalities of how humans collaborate, more or less coercively. Institutions have fallen out of fashion in the humanities to a large degree, compared to questions of identity and culture. They capture the contemporary imagination mostly at moments of failure. Who for instance would have imagined that months ago the membership of the government's SAGE committee would have been front-page news?⁶² But understanding the rationalities of our institutions and their histories at all times provides a powerful way of x-raying the world. One powerful new set of lenses has been produced by David d'Avray, an historian trying to disentangle the instrumental, legal, symbolic, and normative logic of – surprisingly enough – the medieval papacy.⁶³ Students can use them though to analyse anything from Islamic State to the UK Supreme Court's ruling against the prorogation of parliament. Re-learning institutions' importance matters more than ever in the Anthropocene.

In *The Organic Machine* his beautiful history of the Columbia River's ecological-industrial travails between 1811 and 1992 Richard White emphasized the unintended ecological consequences of institutions and technologies on the river. He explained understanding their hidden importance like this:

Planning is an exercise of power, and in a modern state much real power is suffused with boredom. The agents of planning are usually boring; the planning process is boring; the implementation of plans is always boring. In a democracy boredom works for bureaucracies and corporations as smell works for a skunk. It keeps danger away. Power does not have to be exercised behind the scenes. It can be open. The audience is asleep. The modern world is forged amidst our inattention.⁶⁴

And not the modern world only. Institutions are how we have always become superhuman. They are also how we become inhuman. 'This strange century | With its slaughter of the innocent, | Its flight to the moon', wrote the poet Charles Simic in 1992.⁶⁵ What emblematic objects, institutions, of the twentieth century: Auschwitz and Apollo 11.

These are all relatively 'instrumental' uses.⁶⁶ They could also be gateway drugs to the deeper medicine that the social-historical sciences and humanities can offer. These medicines may be unexpected and disturbing. Not so much remedies for swallowing, they swallow us.

Take the Anthropocene itself. How modern it is! Yet how religious an idea! What is the Anthropocene if not a way of understanding humans' historical existence which has its roots in our species' taste for prophetic religious beliefs, premised on the advent of a revelatory understanding of an original sin, which then triggers a period of repentance and reform? Is that not what the Anthropocene is supposed to 'do'? If a 'post-natural' anthropocenic world is one where humans maximally engineer the planet's utility according to their idea of ecological balance – is that not the oldest Edenic fantasy of non-human species and spaces re-arranging themselves for the maximal benefit of the master species?⁶⁷ Perhaps its core is both ancient, medieval, and modern, if, asking Bruno Latour's question, we have ever been modern.⁶⁸ An historian of religious prophecies may be of some surprising assistance here in helping the geo-engineers understand what is is they are wanting to do! How old an idea the Anthropocene is! Unmasking the Anthropocene like this does not delegitimize it empirically. It does help us to understand its humanism.

Take too the basic fact of the COVID-19 crisis. We have shut down much of the world in response to the activities of a round or ellipse shaped virus 60-140 nanometres in diameter.⁶⁹ Yet we struggle to articulate its agency. There is an irresistible urge not just to anthropomorphize the virus's agency but to moralize it. Michael Gove in an interview talked about our need to 'deal with this invisible enemy', claiming that 'all of us are discovering that

this virus has a malignity and malevolence that is truly frightening'.⁷⁰ The attribution of ill-will makes no sense. But the agency of SARS-CoV-2 is plain to see in the restriction of our own. Virologists are unsurprisingly used to thinking about viral agency. Mike Skinner of Imperial College put it nicely discussing whether more virulent mutations were likely: 'We have got to consider this pandemic from the virus's position. It is spreading round the world very nicely. It is doing OK. Change brings it no benefit'.⁷¹ Beyond these disciplines some environmentalists, anthropologists, and historians have encouraged us to think like non-humans – mountains, rivers, forests, or even microbes.⁷² But more generally the 'developed' world stutters when talking about non-human agency, let alone incorporating it into how we think about ourselves in the world. It is a new language for most of us to learn.

Another example would come from science and technology studies and show how the ways in which we understand COVID-19 are carefully fabricated. In the present crisis one trope has been the repeated genuflection at British press conferences that political decisions are consistently following the perfectly separate scientific advice. Historians of science have long argued these sorts of separation are helpful fictions.⁷³ Our scientific practices, instruments, and measurements all have histories and politics. Adam Tooze has elegantly shown how much of our ability to even quantify climate change is a product of twentieth-century military motives.⁷⁴ Just the totemic figure of James Lovelock is almost as interesting for his complex relations with NASA, industry, and the security services as his ideas about Gaia.⁷⁵ In COVID-19 press conferences however science is presented as an inert, asocial gas which politicians inhale. Rhetorically erecting sterile compartments between politician and scientist is politically useful for both (another two metre rule). It plays a public confidence role by asserting the authenticity of both scientist and politician. But the longer the crisis goes on the more the scientists blur into politicians, and the politicians ape the scientists, until one wonders – all over again but with less certainty than Max Weber – how different are the vocations of science and politics.

Taking this deeper view to think anthropocentrically is disorientating. It involves deconstructing a deal of what we take for granted when thinking about ourselves as humans in these contexts. It entails going geographically beyond western conceptions of historical agents, as Frédéric Keck does for Chinese avian diseases, or Eduardo Viveiros de Castro in contemplating Amerindian attributions of personhood to plants and animals. It also entails going well beyond the favoured starting pistols of the Anthropocene – industrial or nuclear – as Sylvain Piron does in his medieval archaeologies of contemporary conceptions of labour or economy.⁷⁶ A modernizing account of the Anthropocene stubbornly hinging on the last two hundred years for its sole points of reference will be inadequate to our needs.

It will also entail critiquing our disciplines from the inside out. Thinking anthropocentrically is unlikely to leave them unscathed. Take history. Disciplinarily it still mostly conforms to a late nineteenth century, European, rationalist, empirical ideal.⁷⁷ ‘All history is the history of thought’, R. G. Collingwood (in)famously argued.

‘When a scientist asks ‘Why did that litmus paper turn pink?’ he means ‘On what kinds of occasions do pieces of litmus paper turn pink?’ When an historian asks ‘Why did Brutus stab Caesar?’ he means ‘What did Brutus think, which made him decide to stab Caesar?’ The cause of the event, for him, means the thought in the mind of the person by whose agency the thought came about: and this is not something other than the event, it is the inside of the event itself’.⁷⁸

Collingwood’s is already too restrictive a definition of history as a discipline. But it is dominant enough, and its inadequacies are plain when faced with the ‘event’ of COVID-19.

‘The beast of the event is there and is coming, whether through terrorism, this great pandemic, or other shocks’.⁷⁹ Emanuel Macron’s interview with the *Financial Times* on April 17 must be one of the most wide-ranging reflections on COVID-19 a major head of state has offered. No one needs disabusing any more that history has ended, as Francis Fukuyama once claimed. We know that history – the beast – is coming for us.

In a book published just over a year ago Christopher Clark examined how successive German regimes from the seventeenth to the twentieth century mastered time to shape themselves – ‘as gravity bends light, so power bends time’. By contrast, he suggested that today we lack collective political projects which carry conviction – and us – into an imagined future. ‘If states can no longer generate plausible futures and civil society lacks the means to do so, then we truly are imprisoned in the present’.⁸⁰ Clark suggested that the scale of the climate crisis compounds this. He agrees I think with Amitav Ghosh that the concentration of past environmental impacts in the present means that ‘if the entirety of our past is contained within the present, then temporality itself is drained of significance’.⁸¹

Clark was writing before COVID-19 but even so I am not sure he is right. The climate crisis does radically challenge our conceptions of time, but not necessarily to flatten them so much as to elongate and multiply them by challenging our anthropocentrism. Today we find that the power bending time is not human but viral. It is not discernible without the most sophisticated equipment and technologies. And it is only one of many actors making itself felt on a human history which will have to re-imagine itself in order to take account of them.

COVID-19 is a caesura which will mark multiple generations' experience of time in, it seems, profound ways.

COVID-19 and the Anthropocene are connected, and our connected to our experience of time. COVID-19 does not mean that everyone knows what the Anthropocene is. They don't. It means something more interesting: vast swathes of our species have felt that they're living in the Anthropocene, and acknowledged that feeling, whether they call it that or not. The Anthropocene concerns how to locate ourselves in time – human, evolutionary, climatic, geological, and planetary. If we feel sick today with time, perhaps thinking anthropocentrically can provide some kind of medicine for that. The greatest lesson of COVID-19 is the simplest one: the whole planet knows we're in the Anthropocene now. That could be something quite powerful to work with.

John Sabapathy

25 April 2020.

Endnotes

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