



Chris Sunderland

Chris Sunderland has been a scientist, priest and environmental activist. He is a former member of the editorial team of Trans**mission** and has written several books including, The Dream that inspired the Bible, which considers the biblical dream of shalom in a creation context. He is currently preparing a new book provisionally entitled, The Power of Dread – to create an earth-centred society.

The Covid-19 pandemic has caused enormous disruption to societies right around the world. It has brought our personal lives to a standstill and has reaped a terrible harvest of suffering and death, especially amongst older, vulnerable and disadvantaged people. We are all wondering what the future holds for human society in its wake.

We have, quite understandably, put climate and ecological issues on the back burner during the pandemic. The planned 26th Conference of the Parties (COP26) international gathering has been postponed and all eyes have been focused on minimising the damage done by the virus. But how will all this shake out in terms of our relationship with the Earth? On the face of it there have been some very encouraging signs. Carbon emissions have fallen dramatically. Air travel has almost ceased. Air pollution in cities has fallen so much that the skies of Mumbai are now clear and wildlife has once more drawn near our human habitations. The oil industry is wondering what to do with its oil, while cars sit on the driveways and aeroplanes on runways. In some ways it is an environmentalist's wish list. All those things we have been campaigning for over so many years have been achieved almost overnight. Yet all is not as it seems. It could be that everything has changed and yet nothing has changed.

Deep cultural change?

As I write this, in early May 2020, all we have truly experienced is an interruption in culture, not culture change. The world is poised to resume its activities

and there is, as far as I can see, little appetite for radical economic or other change. Phase two of the pandemic will involve adjustments in patterns of work and leisure to ensure social distancing. We could see more people working from home and more attention paid to walking and cycling for personal transport. We might continue to feel a concern about flying and cruising that weakens those particular industries. We might also see a faster disintegration of our high streets in the face of online deliveries. But these things are relatively superficial. Dealing with climate change and ecological destruction can only come about, as I see it, by a deep and lasting culture change. And that is not currently on the public agenda.

A culture can be understood as an ongoing, interactive relationship between an inner state of mind and an outer way of being. The lasting impact of Covid-19 can therefore be judged in terms of whether it has changed the way that we perceive the world around us and whether this will work itself out in different patterns and rhythms of life. We can only draw tentative conclusions at this time, but I would suggest that although deep culture change has not yet occurred, we might have discovered how it might be possible.

Humbled by a virus

This tiny RNA virus, so simple it would not normally be described as a life form, has humbled us. Our global economic system, the great organiser and destroyer of modern life, has been stopped in its tracks. Consumer capitalism and its associated

pleasure-seeking have been made to look rather silly. The advertisers have little to do and their brands suddenly seem ridiculous. Influencers no longer influence and their implicit narcissism becomes laughable. There is no point continuing to manipulate people when there is nothing much on sale.

Meanwhile, there are some deeper and more lasting fruits of being humbled in this way. The spin of politicians has become deeply suspicious. Presidents Trump and Bolsonaro look like fools as they try to blame others for the crisis or deny it altogether. The public are now deeply concerned to understand the science. They are also asking serious questions about resilience. Are our food systems secure? Or does a 'just-in-time' model of global food supply mean that we are always susceptible to shortages in a time of crisis? Likewise, why are we struggling for ventilators, for personal protective equipment and for the ability to carry out mass testing? Is this part and parcel of our globalised industrial strategy and does it leave us hideously weak in a crisis? The need for resilience points us toward local sourcing and the more general localisation of the economy. Such things would be deep changes if they happened and they are very much in line with the sort of transformation required to deal with climate change. Greta Thunberg has cried out to the world, 'Listen to the science' and now we are. Environmentalists have championed local food sourcing for decades and now we can see its wisdom. So, we can see the possibility of change. Our faith tradition would argue that being humbled is a good starting point for change.

The other positive thing that may have shifted is a growth in our sense of solidarity. Turning out to clap in support of our key workers is not a trivial thing. It has been deeply moving for many. As the NHS was formed in response to the wartime experience so we can now realistically hope that government spending on health and social care will rise to a more realistic level and we will no longer be exposed to the systemic weaknesses revealed by this crisis. The pandemic has also drawn us together within neighbourhoods and I sense a new kindness in the air. Such things matter. People are once more genuinely and deeply concerned for the welfare of others. This is also a good sign from a faith perspective. Such solidarity is another essential ingredient of any effective response to environmental issues.

Our dependence on this living planet

All these developments are movements in the right direction, but I am afraid that they are not yet sufficient to achieve our environmental goals. The focal point of the environmental challenge that we face today is our perception of the Earth and our relationship to it. The virus may have come from the Earth, but we do not yet associate it with the Earth. We need to recognise that the Earth is

immensely powerful and that we are absolutely dependent on it.

The microbiologist Lyn Margulis argued passionately in her lifetime that the Earth should be considered to be a living thing in its own right.¹ She was particularly interested in the simplest of all creatures, the bacteria and other single celled

although deep culture change has not yet occurred, we might have discovered how it might be possible

organisms, which were the only life form on Earth for more than a thousand million years of our history. Tiny cyanobacteria produced the oxygen that oxidised our rocks. Ancient coccoliths made the calcium carbonate that was deposited on the seabed and now forms cliffs around the world like the White Cliffs of Dover. Algae and diatoms in the sea played, and continue to play, a vital role in maintaining oxygen levels in our atmosphere. Margulis defines a life form as autopoietic, meaning something that has a boundary and is selfmaintaining and self-regenerating. That definition fits the ancient bacteria and it fits the Earth itself.

I fear that many of us do not appreciate that the Earth continually produces its own atmosphere or that the life on Earth holds the Earth's systems in a metastable state that is far from thermodynamic equilibrium. If there was serious disruption to the great systems of the Earth that support life then it is entirely possible that the atmosphere would rapidly degrade and we would become a dead planet, like all those around us in the universe, with atmospheres almost entirely of carbon dioxide and enormous variations in temperature. Such a planet would be at a low point in energy, the place of thermodynamic equilibrium from which nothing can arise. This is, of course, an unlikely scenario. The Earth has proved its stability as a living system, but the possibility of its demise is the great proof that it should be considered alive.

Life has continued on the Earth now for around 3.6 thousand million years. It has survived five mass extinction events and many other challenges, like the gradual warming of the sun, yet life has continued through it all and the planet's atmosphere remains relatively hospitable. Many of the first types of bacteria are still with us. Multicellular creatures have been for around five hundred million years and humans for the last fifty or hundred thousand years.

I describe the Earth in this way because I want to emphasise that we are utterly integrated into this living planet. Our life is part of its life. Every breath that we take, every sip of water we drink and every mouthful of food we eat reminds us of our

NOTES

- 1. L Margulis & D Sagan, *What is Life?* (New York: Simon & Schuster, 1995).
- 2. R Otto, The Idea of the Holy: An Inquiry into the Non-Rational Factor in the Idea of the Divine and its Relation to the Rational (London: Oxford University Press, 1936), p. 16.
- 3. MB Ingham & R Rohr, Holding the Tension: The Power of Paradox, 2007. CD & MP3 audio.

dependence on its life. This description is also based on the best science, which is a strong argument for its reliability. The tragedy is that the very same science now tells us that human beings are currently disrupting the living systems of the Earth, that we are entering the sixth mass extinction of species on Earth, and that the climate is already changing. The extraordinary thing is that although we know these things at a rational level, we do not feel them. We are clever enough to understand our world, yet so stupid that we cannot respond. How can we find our way through this conundrum? I think there is a way, but it comes from an unlikely place.

we are clever enough to understand our world, yet so stupid that we cannot respond

Dread and fascination

I believe there is an appropriate dread that we need to feel about our relationship with the Earth. Dread is an ancient feeling. It comes from a quite different part of our brains to our reasoning and it is extraordinarily powerful in changing societies. We have felt it recently in the Covid-19 outbreak. The infection was a source of dread that spread through our societies and rendered so much else irrelevant.

Traditional societies felt a similar sort of dread in relationship to those things and places that they felt to be sacred. Rudolf Otto is famous for his work Das Heilige (The Idea of the Holy). He thought that religion was best described, not as a set of ideas, but as an experience, which he cast in terms of an encounter with the Mysterium, Tremendum et Fascinans. He described it in these terms:

The awe or dread may indeed be so overwhelmingly great that it seems to penetrate to the very marrow, making the hair bristle and limbs quake. But it may also steal upon us almost unobserved in the gentlest of agitations, a mere fleeting shadow across our mood.²

Such dread was intimately associated with a fascination with that which was perceived as holy. This type of description of religious experience may seem strange to us who have been brought up on the familiarity of the relationship with God that dominates Christian experience today, but it has proved its worth over the years, as religious leaders like Richard Rohr have tried to revive an experience of faith using Otto's description of dread and fascination.³

We see this type of relationship in the story of Moses and the people drawing near to Mount Sinai. The mountain was a focus for awe and dread. We read, 'there were thunders and lightning, and a thick cloud on the mountain, so that all the people in the camp trembled (Exodus 19:16 ESV). There was an

order given that no one man or beast should touch the mountain at pain of death. The narrative is so constructed that it was from this moment of dread that the commandments were given and a new society was born.

The question I would ask is this: Does that holy mountain give us an appropriate way of approaching our relationship with the Earth today? Clearly, the Earth is not personal, nor is it divine and this is why metaphors like Mother Earth and Gaia, which have been championed by the environmental movement, are ultimately misleading. Yet science itself teaches us that the Earth is immensely powerful and that we are absolutely dependent on it. So, I ask, should we allow ourselves to feel this deep dread about our relationship with the Earth? And if we do so, might we find the way to transform our society?

Putting the Earth at the centre of our priorities

The challenge to humanity today is to enter a new phase in our history. Our present society has drawn its roots from a tradition of human-centredness. All our institutions have developed around the unquestioned assumption that they work to enhance the interest of human beings. This new phase of our history must put the Earth at the centre of our priorities and our relationship with the Earth as the paramount consideration in all our decision making. We are not going to find our way to the future by mere changes in our lifestyles, or even by a new green revolution in the marketplace. We will only come to a place of true peace by a deep acknowledgement of our relationship with the Earth.

There is also a theological challenge to this new phase in our history. It is urgent that we discover a way of speaking about a creator God that complements science rather than conflicts with it. We have a few experts who can do this, but many ordinary believers struggle with it. I believe we need to refocus our thoughts away from a moment of origin to the continuing work of God in upholding the universe. We need to understand that God speaks to us through the created order and especially through the Earth, as God spoke to Moses on the mountain.

So, what might God be saying? I am interested in the series of plagues, through which we understand that Moses, inspired by God, was able to persuade Pharaoh to let the people of Israel leave Egypt and escape slavery. The Covid-19 pandemic is certain to be the first plague in a series. We are already seeing forest fires and droughts around the world of increasing severity. These are but the foretaste of the future. In the years to come there will be terrible fires, droughts and famines. It is very possible that social order will collapse and the best and worst of human nature will be evident. There will be terrible suffering to

both human beings and other creatures as we enter the sixth great extinction of species on the planet. These are the key features of the coming age of crisis.

We need to acknowledge that we are enslaving the Earth in the same way that Pharaoh enslaved the Israelites. All those creatures in our megafarms that never see the light of day, are they not enslaved? The pollution of our atmosphere, is this not an abuse of the Earth? Our encroachment into all the wild spaces and the destruction of habitats, is this not an imprisonment of nature? Can we hear God calling for release of the Earth from its enslavement in the same way as God inspired Moses to call for the release of his own community? The focus of that ancient struggle was the Pharaoh, but today God addresses the economic system, which has become the great idol of modernity. Covid-19 has caused this idol to wobble, but it has not yet fallen. Future crises will cause it to fall.

Conclusion

This moment is also the stuff of apocalyptic literature. Think of Isaiah and his vision in the temple, when God told him to say to the people, "Keep on hearing, but do not understand; keep on

seeing, but do not perceive." Make the heart of this people dull, and their ears heavy, and blind their eyes' (Isaiah 6.9 ESV).

We are a community that cannot hear today. We know but do not know. We see but do not perceive. In response to the question as to how long this delusionary period will remain, God replies, 'Until cities lie waste without inhabitant, and houses without people, and the land is a desolate waste' (Isaiah 6.11 ESV).

I have been telling this piece of Isaiah to music for around fifteen years. Some readers of *The Bible in Transmission* may have heard it in that context. It is now coming true.

These things are hard to receive and I make no excuse for using the Old Testament in days when many churches have retreated from its study. There are no easy answers to this moment. Forgiveness is some way down a road that must be marked by deep repentance and a fresh realisation of the crucifixion. Yet encouragement may be found in the fact that things are currently changing more radically around us today than we might ever have dreamt of and, for the first time for ages, I have some hope about the future.

