



Report on the First Colloquium of the Owl Club

Wednesday, 14 June 2023 at Kelvin Grove

The COVID Pandemic: A Balance Sheet of Impacts

Introduction, by the convenor, Owl Mike Bruton

On behalf of the President of the Owl Club, welcome fellow Owls and guests to the First Colloquium of the Owl Club. This colloquium is an activity of the Owl Club that is in addition to its regular monthly meetings. By inviting non-Owl guests, it is also an intellectual service to the broader community.

The goal of our colloquia is to provide Owls and their guests with an opportunity to discuss topical issues in an informal, daytime setting. As you know, Owls, both animal and human, usually meet at night. This is not a top-down scientific conference but a discussion forum in which we will share our own knowledge and lived experiences. The discussions will be recorded, and the proceedings will be published in an informal newsletter of the Owl Club.

The theme of our First Colloquium is 'The COVID Pandemic: A Balance Sheet of Impacts'. There is no doubt that the pandemic was a human tragedy, with over 6.9 million people dying worldwide and more than 102 000 dying in South Africa. Many livelihoods were lost and trade and supply chains were severely disrupted. Notwithstanding the above, the pandemic, and particularly the hard lockdown, also resulted in some positive, seemingly permanent, changes to the ways in which we work, play and live.

In our deliberations let us not forget that Long COVID is still with us, and that the risk of further viral pandemics remains high. Furthermore, it is important to note that the other nine million plus animal species that inhabit the planet, and the millions of plants, on whom we depend for our continued survival may have benefitted from this human tragedy. In a short colloquium we cannot possibly deal

with the impact of the pandemic on all professions or sectors of the economy, so we have had to choose a few.

The structure of the colloquium is as follows: we will have two sessions of speakers followed by discussions, and then a wrap-up discussion at the end. We can continue with informal discussions over lunch in the Terrace Restaurant if we choose to do so.

First round of talks

How did COVID-19 Change Medicine and Medical Research? by Owl Mike James

In 2019, a new disease, COVID-19, hit the world like a tsunami. Originating in the Chinese city of Wuhan, this new coronavirus

*“...came down like a wolf on the fold;
The Angel of Death spread his wings on the blast
And breathed in the faces of those that he passed”¹*

Europe becoming the first major epicentre of the disease. Italy was initially the worst affected with thousands of patients dying and intensive-care units overwhelmed. In a desperate attempt to control the spread of this new disease, governments around the world introduced a swingeing array of countermeasures including severe lockdowns, compulsory wearing of facemasks, hand washing, physical distancing, travel restrictions and a variety of other measures of varying efficacy.

The pandemic sparked an unprecedented drive to control this new disease with billions in public and private money pumped into research as never before. The responsible virus, SARS-CoV-2 was identified in December 2019. Within a year, the first vaccine to receive authorisation from the FDA, by Pfizer, was released. Creating an effective vaccine within one year was an unprecedented feat. However, this was partly because researchers were not starting from scratch. There are hundreds of coronaviruses, including four that cause the common cold and others responsible for influenza, acute respiratory syndrome (from 2002) and the Middle East respiratory syndrome that appeared in 2012.

¹ Lord Byron. Adapted from “The destruction of Sennacherib”

Scientists had been studying coronaviruses for more than 50 years, and research into vaccines for these viruses was well established, including preliminary work on mRNA vaccines that had been underway for 10 years. These vaccines deliver information to the immune system that allows it to recognise the protein spikes characteristic of the virus and prepare the immune system to attack these organisms. In a remarkable, worldwide cooperative effort, the normally lengthy process of phase 1, 2 and 3 trials proceeded with unprecedented speed, assisted by modern communication technology to allow almost real-time assessment of the benefit and risk of the new vaccines. The pandemic ushered in a new era in vaccine research with the combination of unique collaboration between scientists and the development of mRNA vaccines likened by one prominent researcher to a “landing on the moon moment” in virology and vaccine research.

Doubts about the efficacy and safety of the new vaccines were rapidly dispelled as it soon became apparent that vaccination markedly reduced the risk of severe disease requiring intensive-care management, particularly in vulnerable patients. Research was published in many journals during 2021 and 2022 showing that the incidence of severe disease, especially in vulnerable patients, was markedly reduced and that the majority of patients requiring intensive-care admission were unvaccinated. The importance of this was emphasised by the fact that the cohort of patients vaccinated against COVID were generally older and sicker than their unvaccinated comparators, making the reduction in severe disease by vaccination even more impressive. Unfortunately, one failure of the vaccine appears to be that it does not significantly reduce the spread of the virus. Nevertheless, the benefit of vaccination remains and all of the major world health organisations accept that the benefit: risk ratio of the vaccines is favourable, despite ongoing concerns about safety that are loudly expressed in some quarters.

An unexpected spin-off of this monumental research effort has been an unprecedented drive to control other lethal diseases with this new form of vaccine. Already, vaccines have been developed against plague and dengue fever whilst a vaccine against Ebola is currently undergoing human trials. This research has also opened the door to the development of a vaccine against malaria, a disease that has probably killed more human beings than any other. This vaccine has already been successfully tested in mice and is currently undergoing preclinical testing. It is

estimated that the first human trials could take place within two years. The Holy Grail in vaccine research, an effective vaccine for HIV, is now possibly within reach.

Other medical research has also received surprising benefits. In intensive-care medicine, it rapidly became apparent that the standard response to type 1 respiratory failure (oxygen deficiency) - that of positive pressure ventilation – was not necessarily the best answer to patients suffering from COVID and a far simpler oxygen support treatment - high flow nasal cannula oxygen - was not only simpler and cheaper than positive pressure ventilation but was, for the majority of patients requiring oxygen support, superior to mechanical ventilation. This realisation massively reduced the pressure on critical care units and will probably continue to show benefits.

Data showing that the new disease was far more severe in patients suffering from obesity and type II diabetes has also directed major research attention to controlling these two scourges of modern society. Recognition of the importance of controlling these twin scourges has led to the licensing of an anti-diabetic medicine, semaglutide, a semi-synthetic mimic of a human hormone (GLP-1) that naturally increases insulin secretion and decreases blood glucose. Whilst this medicine has substantial side-effects, recent research has shown that it has the potential to cause quite remarkable weight loss, combining the benefits of controlling diabetes together with reducing obesity. Whether this will prove to have long-term beneficial effects remains to be seen, but initial research is promising. Such a medicine could have far-reaching effects for public health well beyond the context of COVID.

The pandemic has also shone new light on the potential benefits of vitamin D. Research in Finland, Norway and Iceland, where there is a major emphasis on the maintenance of vitamin D levels consequent on the low levels of sunshine in those countries, has shown persistently low COVID mortality rates compared to other northern hemisphere countries. Recent research has suggested that lack of vitamin D, possibly together with other deficiencies, is an important contributor to all-cause mortality.

COVID also brought digital health into the spotlight with the use of smartphone applications greatly assisting public understanding of the disease and the importance of vaccination, but with more widespread benefits to public health in

general with people becoming more accustomed to accessing clinical advice at a distance. This is a trend that is likely to improve, particularly with the development of artificial intelligence.

Further research has been stimulated by the realisation that one aspect of COVID that was not initially appreciated was its effects on blood coagulation. The possibility arose that the development of micro-clotting throughout the circulation may be contributing to the development of Long COVID. The hypothesis postulated was that small clots developing in blood capillaries prevent oxygen from reaching tissues where it is needed, and this may be a crucial factor in both the severity of the initial disease and in the progression to Long COVID.

Perhaps the greatest, possibly unexpected, benefit from the pandemic has been the stimulus it has provided to scientific collaboration and the impressive advances that have emerged in such a relatively short space of time.

The pandemic has been horrific. Apart from the enormous impact of the disease on the economies and living standards of people throughout the world, millions of people have died. However, it is an ill wind that blows nobody any good and, for medical science, there have been substantial advances in the wake of this pandemic.

COVID-19 and SARS-CoV-2: past present and future, by Owl Joe Tyrell

You will probably not be surprised to learn that, in the 3 000 years of recorded history, there have been about 250 major pandemics, and that infectious diseases have wiped out more human lives than famine and violence. COVID-19 is merely the latest in a long line of pandemics which pose an existential threat to humanity, along with nuclear conflict, the climate crisis and unregulated artificial intelligence. The future of our species does not look bright!

The COVID-19 pandemic – or ‘syndemic’ (synergistic epidemic) as some liberal academics prefer to call it - is not yet quite over, but it is certainly time to take stock.

COVID-19 was a catastrophic event for our small planet, but it is true that there were a few positives. Technological improvements made it possible for us to work from home. Vaccines were developed far more rapidly than in the past, and saved millions of lives. For some people COVID created business opportunities. In South

Africa, we had the unique and bizarre situation whereby lockdown caused such a reduction in deaths due to motor vehicle accidents that it more than offset the increase in excess deaths due to COVID! So, for a while, South Africa had a negative excess death rate!

Both the human and the economic costs have been massive. In South Africa there have been at least 100 000 excess deaths, and probably many more. In the United States of America there were more than a million deaths. The total number of deaths will never be known with any accuracy but appears to have been between 16 and 28 million people. By the end of 2021, after just two years of COVID, the human species had lost approximately 340 million years of life.

The economic costs were also massive. Over the year 2020 to 2021, for example, the United Kingdom lost UK £430 billion, or almost 20% of its pre-COVID gross domestic product. A paper published by Harvard University scientists estimated that, by the end of 2021, the economic cost of COVID to the USA would be about \$16 trillion dollars, i.e., 16 thousand billion dollars! The lost income from the Great Recession in the 1930s was only one quarter as large.

Overall, in my view, the legacy of COVID has been overwhelmingly negative and it is also fair to say that, overall, the pandemic was badly managed. As a species we were poorly prepared, and the consequences of the pandemic need not have been as severe as they were.

Some countries managed COVID less well than others. In London, a committee is sitting at this very moment hearing evidence about the British government's handling of the pandemic. In the USA an article in *The Atlantic* stated as follows:

"How did it come to this? A virus a thousand times smaller than a dust mote has humbled and humiliated the planet's most powerful nation..... How did the world's richest country, ranked first in its ability to respond to pandemics, see more than one million people die from COVID, and have one of the highest rates of death per capita in the world?"

The answer seems to be that it was the USA's inequitable and variable population health, high levels of non-communicable diseases, and its lack of universal health coverage which left the country susceptible.

What then must be done to ‘Pandemic-proof our Planet’? In December 2021 the World Health Assembly recognized that there had been “a catastrophic failure of the international community in showing solidarity and equity during the pandemic”, and it established a board to reach agreement by 2024 on pandemic preparedness, a so-called ‘Pandemic Treaty’. The people responsible for this treaty will need to understand that pandemics are generally ‘zoonoses’, which begin as a result of ‘spillover’ from animals, either wild animals or more often domestic animals. Ideally, they will also need to reach agreement on more general measures such as improved infectious disease monitoring, information sharing, improved health care systems, and equitable access to pandemic counter measures, e.g., vaccines. And they will need to understand and address the factors that influence ‘zoonotic spillover’, such as climate change, land use change, the wildlife trade, and antibiotic resistance in domestic animals.

As always, cost is an issue. It has been estimated that about US\$10.5 billion will be needed annually to produce a binding treaty that will confer real and lasting benefit on all our fellow humans. But, so far, the World Bank’s Pandemic Fund has only received about 10% of that amount. So, we have been warned! And, in the meantime, the clock is ticking towards the next pandemic.

COVID-19 and formal education, by Owl Hugh Amoore

There has, as yet, been no serious publication on the impact of COVID-19 on higher education and higher education institutions in South Africa. South African universities adapted (as did much of the world) to the need to move to online teaching and testing where this was possible. UNISA is perhaps the stand-out university in that it moved more rapidly than most believed it capable of doing from a hard-copy, Post Office/courier-dependent correspondence institution with >350 000 students to online teaching and (albeit with serious quality and security concerns) online assessment in a matter of three months.

A small number of universities were at the forefront of developing and rolling out good-practice online teaching and assessment, which will have long term application. Effective provision was starkly uneven; for many rural universities and its students the distribution of devices, the availability of connectivity, and the distribution of data, was uneven, e.g., compare the University of the

Witwatersrand, Stellenbosch University and the University of Cape Town to the University of Zululand, Tshwane University of Technology and the University of Venda. Students who would have had the 'student experience' at a residential university in 2020, and for many 2021 as well, may have been able to benefit from online teaching but lost out on the student experience that is so important a part of university life. They will never enjoy that experience.

Regarding 'back to work/working from home', universities as we know them do not survive if everyone 'works' from home. Collegiality, interactive teaching, mentoring and especially informal mentoring, are absent. In mid-2023 there remains a reluctance by many universities to get staff back to work at the workplace, and power outages exacerbate the problem. There is no doubt that university life and university work is suffering long-term damage from this COVID-19 idea that the home is the workplace.

Important research has been done on the impact of COVID-19 on schools in South Africa. Key publications are those of the Centre for Development and Enterprise (CDE) and StatsSA, from which much of what I say is drawn. In short, the effect has been devastating. The COVID-19 pandemic has hugely exacerbated the many challenges already faced by the country's basic education system. Apart from the impact on the health of those who contracted COVID-19, and the school closures that resulted, the effects of the pandemic can be seen in the loss of learning throughout the 2020 and 2021 school years, higher levels of absenteeism, worse matric results, and budgetary constraints.

These impacts have affected schools in quite different ways, firstly, by exacerbating existing inequalities and, secondly, by hiding the impact from most decision-makers whose children and grandchildren attend schools that were able to function. The CDE regards the COVID-19 crisis as the biggest shock to the country's public education system of the democratic era.

The following impacts were experienced:

1. Death and illness: The most obvious way in which COVID-19 affected the education system is through death and illness. Up-to-date figures are not available but, on 24th July 2021, Basic Education Minister Angie Motshekga revealed that

more than 1 650 teachers had died from complications due to the coronavirus. These tragedies have also been severely disruptive for schools – when teachers died, they often left significant gaps in subject-specific expertise and institutional memory at individual schools and throughout whole districts and even provinces. Other disruptions have been the many cases of COVID-19 amongst children. Even when learners and staff were not incapacitated by illness, their non-attendance had huge ramifications for the time spent teaching and learning.

2. School meals: Malnourishment is especially injurious in children, leading to physical and mental stunting in the medium- to long-term. More than 10 million learners depend on the National School Nutrition Programme (NSNP), which provides free daily meals at schools. When schools were closed at the start of the initial lockdowns in March 2020 the programme was shut down by the Department of Basic Education (DBE) across the country although the Western Cape continued to operate a reduced NSNP, despite opposition from both the DBE and the South African Democratic Teachers Union (SADTU). When schools re-opened, not all learners received their meals. The DBE was forced to reinstate the NSNP for all learners after Equal Education took it to court in July 2020. The Basic Education Minister, and eight of the nine provincial heads of education (the Western Cape’s MEC excepted), were judged to have failed in their constitutional duties. Mandatory monthly reports, the last of which were filed in March 2021, showed that more than 1.5 million learners were still not receiving their meals.

3. School closures and rotational timetabling: Since South Africa first shut its schools in March 2020, an average of 54% of teaching time was lost in 2020 and 22% was lost in 2021, adding up to 155 school days in total, or three-quarters of a school year. Even when schools reopened learners still faced reduced instructional times, owing to rotational timetabling. Many learners thus only attended school every second day (or in some cases, every second week). Only 11.7% of schools offered remote learning options nationally. Nic Spaul, Associate Professor in the Economics Department at Stellenbosch University, believes that, during the initial school closures, “for the poorest 80 percent of learners in South Africa” virtually no curricular learning took place.

4. Absenteeism and dropouts: There were high rates of absenteeism once schools re-opened. Estimates in August 2020 by the DBE were that more than 50 000 Grade 7s and nearly half as many Grade 12s will have dropped out in 2020. National Income Dynamics Study – Coronavirus Rapid Mobile Survey (NIDS-CRAM) researchers calculated in July 2021 that 522 000 additional learners had dropped out of school since the first pandemic-induced school closures, bringing the total of absentee school-aged children to 750 000, 6.5% of the relevant age groups. Subsequent research has found that overall dropout rates have declined since the pandemic; however, there were 27 000 fewer first-time enrollees than expected in 2021, suggesting dropouts in the initial school grades.

5. Learning losses : All these challenges have contributed to learning losses larger than those identified in international reviews of COVID-19 impacts. NIDS-CRAM researchers estimated that, by June 2021, learning losses for children in no-fee schools (76% of public schools) were between 70 and 100% of a year’s worth of learning. DBE research found, in a study conducted in the North West Province from September to November 2021, that learners in Grade 4 were more than 15 months behind in their home language.

A paper published by the Research on Socioeconomic Policy (RESEP) group on learning losses in the Western Cape indicated mathematics losses of around 100% of a school year between 2019 and 2021. Seventy-two children in 2023 are estimated to be a full year behind same-age children from 2019. Nic Spaull’s models of future trajectories of learning indicate that, at the pre-pandemic improvement rate, only 27% of Grade 4 learners will be able to read for meaning by 2031.

6. Educational inequalities: Educational inequalities have greatly increased as a result of the pandemic, with the richest schools experiencing the lowest levels of reversals. The example of Grove Primary School, of which I have first-hand evidence, is instructive. Within a week of the hard lockdown, online classes were running for all pupils. When schools were allowed to re-open on a rotational basis, Grove opted to have rotation on a novel basis: half a class would be in classrooms in the morning and on the fields in the afternoon; the other half had sport and recreation in the morning and classes in the afternoon.

7. Remote learning: Although remote learning programmes were designed, this did not guarantee that children participated in the instruction. According to StatsSA, only 11.7% of schools offered remote learning options. Its report discusses the readiness of households, during COVID-19, for alternative or remote learning options available to learners from television-based instructions to internet-based instructions. These options required access to the necessary technology or tools by households in order to benefit from these methods of learning. Their report shows a strong urban-rural digital divide as well as the inequality by income in access to the Internet. The report also shows that not all learners had access to remote learning options. The lockdown had a high impact on the number of out-of-school children in 2020. The number of out-of-school children aged 5 to 13 rose to 779 000 in 2020 compared to 259 000 in 2019.

Minister Motshekga, in the DBE annual report for 2020/2021 had this to say:

“The 2020 academic year has been the most challenging one due to the adverse effects of the COVID-19 pandemic. Yet, our teachers, non-teaching staff and basic education stakeholders buried the schism, albeit temporarily, to save the 2020 academic year. They managed to save a whole generation of learners from possible long-term cognitive deficiency occasioned by the proverbial “9 lost months” of learning. For this, I will always be grateful.”

Sadly, she may have believed that.

A more sober assessment of the impact on UK schools appeared ten days ago:

“If you know any teachers, one story will probably be very familiar: a chronically overlooked crisis in attendance, behaviour and attainment that shows few signs of going away. The relevant statistics for schools in England are shocking: since the autumn of 2019, the number of children absent for more than 50% of school time – these are the kids colloquially known as ‘ghost children’ – has doubled, to about 125 000. Rates of ‘persistent absence’, defined as missing more than 10% of school, have soared from 13% to 24%, which means that 1.7 million children in England are regularly not in the classroom. These numbers are much worse in places with high levels of poverty and deprivation: Newcastle, Bradford, Middlesbrough.

Teachers I know talk about kids who seem to be neither in school, nor entirely out of it, drifting in and out of lessons on a whim; this highlights what happens when young lives have been subjected to long months without any structure. There is a lot of concern about a big uptick in disruptive and challenging behaviour”.

In the USA, a Stanford University study which looked at the impact of COVID-19 had the following additional point to make:

“High schoolers have lost a great deal during this pandemic. What should have been a time of establishing more independence has been hampered by shelter-in-place recommendations, graduations, proms, athletic events, college visits, and many other social and educational events have been altered or lost and cannot be recaptured.”

What has the world learned about managing a pandemic? We meet today on the second day of the UK public inquiry into COVID-19 under Baroness Hallett; this promises to be a meaningful inquiry. On the other side of the Atlantic we face the prospect of the election of the orange menace and COVID-19 denialists.

Impact on commerce and conferencing, by Owl Bill Coetzee

On the 19th of March 2020 our world changed completely. Our President announced a three-week national lockdown to combat the spread of COVID-19. We were staying at home, we could not meet with our friends and family, we could not buy the things that we need beyond the basics, we could not go to work, our children could not go to school. COVID was fundamentally affecting all aspects of our lives. But it was only going to be for three weeks, then it was for much longer. We needed to find ways to deal with the challenges. Our lives needed to continue. The impact of COVID on society was devastating.

So, how did it affect us individually? The continued physical isolation from friends and family was damaging to our psyche. Social media was popular before, but now it was embraced by all ages and cultures. We always had telephonic conversations, but we needed more. We also needed to see each other. Teleconferencing was not a new thing, but it was largely confined to the formal work environments. But it was also a way for ordinary people to talk to and see each other. We embraced Zoom, Google Meet, Microsoft Teams and many other teleconferencing platforms. At our house we hosted a wedding during COVID that was viewed via Zoom by friends and relatives from four different countries that were not allowed to travel to the wedding. We had Zoom meetings with granny and granddad. The ultimate acceptability of teleconferencing was when ‘Zoom’ became a verb.

We could not go to work. If you were someone whose work entailed physical objects or physically dealing with people, you were limited to what you could do.

However, if you were a knowledge worker or your work required telecommunications, such as call centres and help desks, the Internet was there to help you.

How did we cope with not being able to go to the office anymore? Work-from-home had been spoken about for years prior to COVID. Companies had resisted the introduction of remote work except in limited instances. It was felt that the same levels of productivity could not be maintained, management supervision would be compromised, and that company morale would suffer. In other words, workers could not be trusted if they were not under the beady eye of the supervisor.

During COVID companies realised that remote work was critical for their survival and ways had to be found to make people productive and happy. Tools were developed for teams to be managed, projects to be coordinated and performance to be monitored, and online motivational events were held. It was not so bad after all. Work-from-home not only became acceptable overnight but was also embraced.

However, even though tools were available, remote work was difficult to adjust to for both workers and management. There was an uncomfortable blurring of work and home life. You did not have to dress up for work, or at least your bottom half. Meetings were conducted with kids running around the house and the added noise of the vacuum cleaner. Office hours lost their meaning. There was no trigger of having to leave for work or going home that signalled the beginning or end of the workday. People, contrary to expectations, worked longer hours, and it became acceptable to message a colleague at any time. It was also lonely. You could not chat over the water cooler or share lunch.

It was uncomfortable if it was your turn to speak and be the focus of everyone's computer screen. You could not hide at the back of the room. How do you shine or get your manager's attention if you share a Zoom meeting?

Being away from the office, or being partially laid off, caused many people to rethink their careers and their jobs. It seemed like a suitable time to bring changes about in their lives. Job changing shot up in many countries. Silent quitting or work-to-rule became the thing. Some people thought that it was a suitable time to leave the job market completely and retire.

Management found that many of the old practises relied on people being in the office and meetings had to be managed differently over Zoom. How do you ensure that everyone contributes or feels part of it? Innovation was another concern. Much of innovation is stimulated by interacting with, or being inspired by, other people. What would the long-term effects be on the business?

There were many knock-on effects. Office spaces emptied. Businesses that were dependent on the custom of office workers, such as coffee shops, retail stores and business services, lost their clientele. Car dealerships and service stations were not as busy anymore as you did not travel as much, needed less fuel, the car needed less servicing, and you did not need to replace it so soon.

The COVID pandemic also forced everyone to change the way they shop. Whether you were a fan of online shopping or in-store browsing, the pandemic altered routines in many obvious, and some not so obvious, ways. Grocery store shelves were quickly emptied of toilet paper and cleaning supplies as everyone scrambled to stock up amid the global lockdown. As the lockdown continued, supply chains tightened, cleaning supplies were increasingly hard to come by, and everyone was scrambling to find basic food staples and necessities. An interesting side effect was how quickly brand loyalty fell by the wayside. In fact, 40% of consumers said they switched brands during the pandemic.

The property market experienced fundamental changes because of COVID. The work-from-home phenomenon made knowledge workers realise that they can work from anywhere. Prior to COVID, residential areas close to the centres of business were desirable properties and the suburbs were where you went to get better value, larger properties. That changed with work-from-home and there was a strong move to suburbs and to bucolic seaside areas. Prices shot up in these areas while city centre property prices declined.

Companies realised that not all that expensive real estate was needed. Office space requirements were slashed or eliminated. Office rental fees decreased, and large swathes of office space stood empty. Even today, the amount of empty office space in New York is equal to 40 Empire State buildings!

e-Commerce spurred a boom in warehouse space. Large companies invested in warehouses to serve the increase in online shopping spree. These warehouses are now seen all over.

The hospitality and travel industry took a big hit. Restaurants were closed, travel stopped, and airlines and hotels ceased operating. The cruise line business came to a halt, then gradually reopened. The closure of restaurants led to a boom in food deliveries. New types of businesses appeared such as dark kitchens that only serve the food delivery market.

Conferencing, a big source of revenue for the hospitality and travel industries, was replaced by webinars and virtual meetings. Travelling to have face-to-face meetings with current or prospective customers was replaced. I remember prior to COVID jumping on a plane to have a meeting in another city just to return that same day. No more. It proved hard to get new business online with someone that you never met before. It was easier if you already had a prior relationship with that person.

So, what are the lasting effects of COVID? Teleconferencing for both private and business use is now part of our daily lives but at lower levels than during the pandemic. Business travel has reduced as business started questioning the need for every meeting to be face-to-face. The significant savings in time and money is likely to result in this trend remaining in place.

Office workers are returning to the office on the insistence of businesses, but not wholesale. Hybrid working, i.e., a blend between working-from-home and at-office, is becoming the norm for knowledge workers. Remote work for professionals is becoming more commonplace, with auditors and other professionals able to ply their trade internationally. This reduces the need for office space, which remains a problem for property owners. The migration to the suburbs has slowed down but has not stopped. Property returns are therefore declining with a slowing in new property investments. The vacant office space in New York today is still equivalent to 40 Empire State buildings.

The boom in online shopping has cooled but is still stronger than pre-COVID. People have returned to the bricks-and-mortar businesses, but what has changed is the nature of the business. Retail operators are changing their stores to become more of an experience for the shopper. Many customers prefer to browse in the store but then go online to get the best deal.

People were able to save during COVID due to not being able to go out as much or not being able to travel. In the USA and other countries governments provided vast

sums of money to citizens. This led to a boom in the retail sector, particularly for durable goods. This increase in demand put a huge strain on supply chains, leading to a shortage of goods. The supply chains are still recovering from the demand. Recreational travel is booming but business travel is still far off the pre-COVID levels. Inflation caused by the pent-up demand is still high and is proving to be particularly sticky despite central bank interventions to increase rates. This is partly due to the increased pricing power that businesses have, coupled with customers getting accustomed to price increases.

Outside South Africa unemployment has dropped to historically low levels. The demand for workers has increased the mobility of workers who previously did not have this privilege. Hospitality and travel industry workers are, for instance, leaving these industries for other less demanding jobs with better pay, causing labour shortages.

In summary, culture can be defined as the way we do things. The way we do things has changed. We realised that the old ways were not the only ways. COVID has changed our culture forever. To quote Yogi Berra, “The future ain’t what it used to be”.

First discussion session

Owl Mike Bruton: With reference to formal education and research, during the pandemic the National Research Foundation (NRF) decided to remove travel funds from the grants of researchers as air travel was no longer possible; the result was that conferences had to be attended online. So far, post-COVID, most of these travel grants have not been re-instated and our researchers are not able to travel to conferences abroad, participate in research in colleagues’ laboratories or field stations, or gain experience in foreign countries. This development has been particularly detrimental to young researchers.

Professor Dave Woods: Both during and after the pandemic the public lost confidence in science and scientists. Initially they were told that COVID-19 is spread by contamination, so we washed our hands, cleaned surfaces and fumigated schools. Then we were told that it is spread through droplets, so we all wore masks and distanced ourselves from one another, which was very disruptive. Finally, we

were told that it is spread as an aerosol and that we need good ventilation and outdoor environs to stop the spread.

The public started to ask, “Why are the experts changing their minds all the time?”. There was very little public understanding that science is not static but is an ongoing, everchanging events as new facts and understanding arise. This was complicated by false news and misinformation, especially from a famous tennis player. I think that this was a missed opportunity. We should have educated the public about the nature of science and how sciences advances. We can be wrong and, when new data arrives, we can change our story.

Mike James spoke about problems with vaccines. There was major disappointment among the public that the vaccines protect you from getting very sick but did not prevent you from being infected. We have had many vaccines in the past, for diphtheria, whooping cough and tetanus, that stopped you from getting sick but did not prevent an infection. So, the action of the COVID vaccine was nothing new.

Then there were the side effects. If you get vaccinated then you may suffer from some side effects, but the risk of getting infected is much worse. This reminded me of the early days of oral contraception. There was huge pushback due to the side effects, but this risk was minute compared to falling pregnant. So, I think that there was a missed opportunity and I hope that, when the next pandemic comes, and it will, we will be better prepared to not only convey the facts but also to generate some understanding.

Mike Bruton: I agree. It is not only important for the public to be taught the facts but also to understand the scientific method. Science will always be work in progress and it is healthy for scientists to change their minds of new information becomes available.

Unknown speaker: Was the lockdown necessary at all?

Mike Bruton: Sweden had a very different lockdown policy to that of most countries, with very few restrictions on movement.

Mike James: The hard lockdown actually resulted in negative population mortality. Because people were forced to stay at home, they kept off the roads and road accident deaths decreased significantly.

Gavin Michelmore: Tourism is the largest industry in the world and the hard lockdown brought it to a complete stop. The good news is that, after the pandemic, business has started to take off quite markedly. Some tour operators had given up but those who persisted have thrived.

Tour guide Chris Taylor: Cruise ships are a large part of our tourism business and, when they were forced to discontinue their services, foreign tourists were driven away. Large hotels sold up and took their business elsewhere and owner-operated boutique hotels, of which there are many in Cape Town, faced instant disaster. Many of these small hotels, with 8 or 10 rooms, have revenues so small that they were unable to cover their costs and were forced to close down. The same happened with the operators of minibus taxis and small tourist buses who could no longer cover their bonds. Tour guides, like me, who are all freelancers, have no work if there are no tourist buses. Bed-and-breakfast establishments usually have supplementary income sources so they were not as badly affected. What surprised me is how quickly the industry recovered after the lockdown.

Owl Sheila Camerer: Organizations with which I worked went online via Zoom during the pandemic but we have had trouble attracting live audiences back to their activities. Have others had a similar experience? How do we get them to come back again?

Owl Mike Bruton: I think that one of the solutions is to hold hybrid events so that those who cannot attend live can attend virtually.

Second round of talks

Impact on music and musicians, by Owl David Little

I asked a range of people in the music industry to supply information under the following headings:

- The immediate impact of the lockdowns on your activities and those of your colleagues
- The steps taken to adapt
- The positive and negative outcomes
- The anticipated long-term effects on their activities.

My main findings include the following:

- The evidence is that the enforced innovation by musicians is likely to have increased the resilience of the industry – new ways of working and maintaining livelihoods have clearly emerged.
- The drought of live music during lockdowns may have led to a positive reassessment of the value of live music in the minds of performers as well as audiences.
- One cannot discount the trauma of disrupted careers, especially among the younger musicians. This may be persisting in the form of premature disillusionment and a chronic sense of insecurity and impermanence.

Anecdotal data gathered from respondents revealed the following impacts:

- The immediate impact was monumental.
- Performance and rehearsal activities stopped completely.
- Teaching activities generally continued online. One respondent who had already been teaching online internationally for about two years said that “Teaching and business experiences exploded with activity, wonderful and overwhelming at the same time”.
- Orchestral players’ salaries were cut but continued as donor funding continued.
- Instrument technicians managed to pay employee salaries for a few weeks and then had to apply for overdrafts to continue to pay employees.
- There was an almost universal sense of isolation and disconnection; some said it was surreal and apocalyptic.

The steps taken by musicians to adapt to the pandemic were diverse and ingenious:

- There was investment in software and equipment.
- Online platforms were established to create and/or improve branding and to make recordings, which is vital for performing artists.
- Teachers had to learn how to use online tools and to set-up office for online lessons.
- Performers had to innovate their marketing strategies so as to persuade the public to buy tickets to access recorded performances.

In addition, several new ways of working were devised:

- Teachers spread their teaching out over longer hours as teaching ‘back-to-back’ on Zoom became too intense and exhausting.
- Big adjustments were made to teaching styles to make up for the lack of physical presence, poor sound quality or bad connections.
- Students from all over the world needed a space to ‘get out of their living room’ and find inspiration and connection. One respondent started online challenges, launched online courses, and started group classes and community meet-ups.

Regarding social distancing protocols, the following initiatives were taken:

- When lockdown levels eased, the orchestra started working first in smaller chamber groups and then finally with the full orchestra (with masks and socially distanced, and the wind players behind Perspex standing screens – all very difficult). These concerts were then video-recorded and offered online.
- Similar protocols followed with other bands and groups.

Financial re-adjustment also had to be made. Businesses secured the UIF salary payments for employees that the Government had implemented and drew on the COVID loan that banks were offering. Re-opening after lockdown was, at first, with reduced staff and subsequently with full staff, but on reduced hours.

Many personal development opportunities were pursued. Most musicians seemed to enjoy the complete change of routine, which allowed more time and space for creativity and for catching up on administrative backlogs. Performing instrumentalists found time to develop particular techniques and to hone existing skills. Some musicians took the opportunity to learn a new instrument or to revive forgotten skills. I took the opportunity to hone new techniques to improve my facility on the clarinet (circular breathing and double-tonguing) and to improve my bass clarinet playing. I also spent the price of a small car on a new bass clarinet from Selmer in Paris!

The many positive outcomes included:

- Most mentioned their *deep gratitude* for being able to perform again. The lockdowns had enforced introspection and a re-focus on career objectives.

- Musicians were forced to *find alternative ways* to utilise their musical skills and performing opportunities and to develop a strategy to ensure that work can continue should such a situation occur again.
- There was an increased focus on *marketing* one's skills and branding, which resulted in a greater awareness of one's role in the music value chain.
- The world has *woken up to online learning*. There is now a realisation that, when teachers or students are sick or need to isolate or otherwise cannot travel, it is still possible to carry on with work as usual.
- There has been a growth of a *new global community of musicians*. One reported a huge growth in the music business, which required an expansion of his team, and has resulted in the development of a thriving community that is still present and supportive today.

The negative outcomes included:

- The lockdowns were extremely disruptive to young careers, which hit young musicians very hard. A typical response: "I was at the start of my music career in Europe (aged 23). I had many opportunities, connections and concerts on my agenda. All these fell away, and it felt as if I had to start over again thereafter." The older generation may not have been sensitive enough to the plight of the young, who are less vulnerable to COVID but were nevertheless severely impacted.
- Funding, sponsorships and audiences declined dramatically, and there was apparently less money to spend on hiring musicians for functions.
- Audiences have not rushed back to support the arts, and we are only now slowly getting back to seeing fuller halls.
- COVID loan repayments hurt businesses every month although, without the loans, instrument repair and retail businesses would no longer exist.
- The workload doubled without commensurate return as group lessons, and even band rehearsals, had to be broken up into individual sessions online.
- The orchestra suffered from a drain of experienced key players through emigration and resignations. This trend affected performance levels and it is taking time to recover and stabilise.

The anticipated long-term effects of the pandemic on musical activities include:

- The expectation is that money to support the music industry as a whole will be harder to come by, which will lead to a sense that it will be necessary to work harder and smarter in order to create opportunities.
- Online teaching will perhaps become more mainstream.
- The 'cocoon effect' learned in lockdown might have become hard to shake off, resulting in isolation becoming the norm, and more musicians operating 'in the comfort of their living room' and not feeling the need for live entertainment when so much is available online. Many musicians have really struggled with Long COVID. This is very acutely felt when playing a wind instrument. This challenge will probably keep re-emerging with COVID now being an integral part of human existence.

Is the balance sheet positive or negative?

Psychological

- The sense of disconnection appears to have faded with a return to normality. The 'new normal' looks very much like the old normal.
- There is some fear over the vulnerability of the music sector in South Africa but the evidence is that audiences have returned and might even have become younger as the young try to catch up for lost time.
- Regarding the sense of impermanence and loss, evidence suggests that the lockdowns might have caused a traumatic re-think of the importance of live music to the human soul.

Social

- The need for connection and purpose was extremely powerful, and the steps taken to achieve this were diverse, and mostly successful.
- There is evidence that the 'cocoon effect' is lingering and for some (maybe older) people this may never entirely dissipate.

Artistic

- Human ingenuity prevailed.
- Had it not been for lockdown, I would not have had the chance to benefit from a series of video-recorded bass clarinet lessons arranged by the International Clarinet Association, created by twelve of the world's leading orchestral bass clarinetists, plus a live bass clarinet maintenance workshop from the USA, which was attended by a group of musicians from all over the world.

- People took enormous steps to be able to continue performing and playing together during isolation. The net result was the exercise of human imagination and ingenuity in ways that we could scarcely have imagined even just before lockdown.

Financial

- Money has always been fairly scarce for the arts, but even this extreme event did not result in the taps being turned off. The allocation of funds might have become more discerning, which might ultimately be good for high quality live music.

Technological

- It seems clear that innovations made during lockdowns are here to stay and have opened up opportunities that would otherwise not have existed.
- The adjustments made were earth-shattering. Imagine trying this all pre-Internet!

My conclusion is that comfort can be drawn from the evidence that, if the music community and institutions could survive the lockdowns, in some ways stronger, more diverse and more resilient than before, they have proved that listening to or performing music is an evolutionary imperative that is indispensable to humanity. The traumatic impact of disrupted and halted careers will probably persist for decades among younger musicians, although they have proven to be highly adaptable.

Whether the impact of the pandemic has been net-positive or net-negative is impossible to state with conviction. In practice it is probably too complex and nuanced to weigh up for one net effect or the other, and that humanity may have achieved a new balance.

Impacts on the performing arts, by Owl Nicholas Ellenbogen

The reality in theatre is similar to that in music but we are the poorer partner. David (Little) and I are survivors, which is a great privilege. I have spent 54 years in theatre and have had a fantastic life. When I first trained in this business all we heard from our lecturers was that theatre is dead. But theatre is alive, it is constantly re-inventing itself, and we have made it so. Now, along comes COVID and the question comes up again, will theatre survive?

Theatre is divided into three layers. The actors are the most critical contributors in dance, musicals and theatre, then we have management and producers, and then you, the audience.

Let's start at the bottom, because that is where actors are. It takes, in my view, ten years to make an actor – if you did it in less time it was because you were pretty or did a nude scene. As an actor it takes you ten years before you become a contributor – an actor, someone who writes plays, and someone who creates opportunities for other people. Therefore, for those ten years you depend on being employed.

During COVID actors were the first to feel the mighty guillotine, and we were the last to be allowed again to perform in theatres, even performing under trees was forbidden. Those who saw performances by Pieter-Dirk Uys and Alan Committee were lucky; they defied the ban, and well done on them. The actors who didn't defy it were wiped out. If you think it was for one year, it wasn't. It was over two years before they lifted the veils and made it possible for them to act again.

I discussed this with Pieter Toerien, who is a bit of a hero in the theatre world as he has subsidised his own theatres for years because the government subsidy is utterly unreliable. No actors in our country are on a permanent salary, and they never were. Even in the height of the Performing Arts Council's pompous rule they were not permanently employed. I was lucky if I could get three-year contracts for my actors, and that only ever happened for one actor. The others got two- or even one-year contracts. So, actors were always down there.

Dancers – what a fragile life. They could walk in tomorrow and be told, sorry, the sponsors didn't put money in, off you go. Ballet dancers have a *sixteen-year* cycle, they are the real heroes of our profession. They go through hell before they start earning and what they earn, even when they are soloists or principals, is pitiful.

Anyway, actors do a little better as we have some bargaining power, for instance, with the film industry. I will not talk about that as it is another whole debate, but we are also very poorly paid by the film industry. I have responded to offers by saying that I am not going to drive into town for that kind of money.

Anyway, it is clear that actors lose ten years when their cycle is disrupted. Listening to Hugh (Amoore) and Mike (James), it is not one or two years that we lose but ten

years, and we are never able to catch up with that. Those ten years include a lot of experience on stage, and working with teams, and when you eventually start acting and employing people, ten years have whizzed by.

The number of people in theatre who died during COVID is alarming. I had nine companies that I operated in Africa, from Tanzania downwards. Not one of them is functional today. I was sponsored by the World Bank, we set them up, we got fairly good management skills into them, also environmental skills, so that these people could live and work off performing. When I did a little phone-around, we always have pre-Christmas connections, of the 120 people who benefited from that programme for a decent amount of time, 15 to 20 years, there are only five of them alive. That is a tragedy.

I am a diabetic, I survived COVID even though I had to go to hospital (which was empty). Some of my actors were dying of Aids five or six years ago, some only died last year. They had no right to die of Aids. Two of them were working in Scandinavia on a cross-pollination production and came home to die of Aids. They had every reason to be alive. So, the effects of COVID were devastating, and Long COVID is a reality as well as it takes a lot of getting over, certainly for an actor.

Acting is a physical profession; you've got to be strong in the theatre to survive. When you have survived, things like COVID must become a milestone because, if you roll over and say that's it, the existing theatres can't work without you. They think they can, but they can't. The government puts all the money that it puts into theatre into management. I feel sick when I look at the Baxter or Artscape, the only people with salaries sitting there are the non-performers! As I have emphasized to you, the foundation of theatre is the performers.

David (Little) could walk out of his job and work in any orchestra in the world, which is a phenomenal achievement, but even his parents were wise and said you have got to get a 'proper job'. My father did it to me. The last time I saw him was at the Opera House in Port Elizabeth. It is a big building, and it was packed to the rafters for our play. My dad said to me, "Are you alright, do you need a bit of help?"

I have a request to make: we have a habit of going to theatre, I know your faces. But we have lost that habit because we feel too old to go out at night, drive in the dark without streetlights. We've lost the habit which is a big thing as habit is very hard to create. Please start going back to the theatre! Most theatres spend over

30% of their budget creating audiences. We must contribute to the recovery. We can't depend on Dutch and German tourists. Please go back. That is all I have to say but I hope that we will have the debate.

Impacts on informal education and the environment, by Owl Mike Bruton

Informal education: Worldwide, museums and science centres were forced to close during the pandemic, which resulted in the loss of revenue, laying off of staff and the disruption of educational programmes. The reaction of these institutions differed widely, from using the pandemic as an excuse to enjoy a long, paid 'holiday' to intense activity involving the refurbishment of displays, staff training, and the development of new, online educational programmes. Some institutions emerged strongly from the pandemic, others lost ground but survived, yet others went bankrupt and never re-opened.

The Cape Town Science Centre (CTSC) was one of the institutions that responded positively. As computer coding is widely regarded as an essential 21st century skill, the CTSC became a founder member of the continent-wide online 'Africa Code Week' initiative and eventually served as the global coordinator. The project gained strength during the pandemic and, by 2022, it had reached youths and teachers in 41 African countries, with 48% participation by girls.

In addition, during Covid, the CTSC also served as the coordinator for the EQUALS Global Partnership for Gender Equality in the Digital Age project, developed online Matric Masterclasses, launched successful 'Zoom Online Science' programmes, and contributed 'Spark Talks' to the Leadership for Conservation in Africa's online service.

Further afield, the Fun and Education Global Network (FEGN) was established in Nairobi to provide free online lessons for home-based science learning to help alleviate the schooling crisis in Kenya. FEGN's services soon reached into other African countries and linked learners to other learners and mentors in Africa and the USA in a way that had never been achieved before. FEGN eventually created hundreds of home-maker spaces and mentorship and award programmes that involved educators and international aid agencies, including the United Nations.

Globally, the bounce back of museums has been strong. The recent annual conference of the American Alliance of Museums, the largest meeting of museum

professionals in the world, was attended by a record number of delegates and many highly innovative new exhibitions and cutting-edge digital immersive experiences were showcased, all developed during the pandemic. Most leading museums have adopted a hybrid post-Covid operational model that restores their live programmes but is strongly enhanced by their newly developed virtual programmes.

Environment: As was the case after 9/11, greatly reduced industrial activity and the ban on air flights during the pandemic resulted in sharp decreases in levels of air pollution by CO₂, carbon monoxide and nitrogen dioxide, the most harmful greenhouse gases, with levels dipping over 50% in some cities. Interestingly, greenhouse gas emissions post-COVID have increased steadily but are still about 3% below pre-COVID levels.

The measures taken to control the spread of the virus, and the slowdown of economic activities, has also resulted in less water pollution and a reduction of pressure on ecotourism destinations. Conversely, tens of millions of discarded face masks and disposable plastic gloves, as well as disinfectants and other medical waste, have entered rivers and oceans and pose a new environmental threat.

Another interesting impact is related to the likely source of the coronavirus, i.e., bushmeat imported from Africa and sold in markets in China. In February 2020 the Chinese authorities, in response to intense international pressure, banned sectors of the trade in wildlife from Africa and then banned the sale of bushmeat at their wet markets. These bans closed about 20 000 captive breeding stations involving 54 species of wildlife, including pangolins, snakes, guinea fowls, civets, porcupines, bats and monkeys, that had been imported from Africa and elsewhere.

Soon, investigations by international agencies revealed the full scale of the Chinese bushmeat trade. In 2020 it was estimated that the illegal trade was valued at between US\$7 and 23 billion annually. These statistics made us realize that this trade is not only an environmental issue but also a serious public health issue. As a result of COVID, the Chinese bushmeat trade will never reach the same levels again.

Of course, this development had consequences for those rural Africans who depend on bushmeat hunting for a livelihood. In response, international aid

agencies have poured funds into the development of alternative sources of income for them, including craft making, vegetable farming, beekeeping, fish farming and small livestock farming.

There was widespread anticipation that the internationally collaborative programmes that were developed to combat COVID would translate, post-COVID, into an equally collaborative international campaign to confront an even greater challenge, the environmental crisis, from which no-one is immune and for which there is no vaccination.

Sadly, this has not happened. Recent environmental summits have failed to reach consensus on key issues and the implementation of the United Nation's Sustainable Development Goals is behind schedule. Budgets for biodiversity conservation have been drastically cut due to the diversion of funds to health issues. The environmental outlook therefore remains grim.

Perhaps, most importantly, the pandemic has made us realize that we are still an integral part of Nature. Although we arose from and survive through a biological process, most of us are no longer part of wild Nature, but this does not mean that we are free from her checks and balances. Through the ecological disruptions that we have caused, we are more susceptible than ever to what Nature can throw at us. Despite our superior intellect and advanced technologies, a simple but highly effective virus brought our societies and their economic systems to their knees.

We need to recognize that we are not just passengers on Spaceship Earth but also crew. We must become a species that has re-found its ecological niche and plays a constructive role in ensuring that ecosystems can continue to function naturally.

Second discussion session

Owl David Muller: With regard to what Nicholas said, there is a lot happening because of COVID. A production created by the University of Johannesburg during the pandemic has won many awards, which is testimony to how the COVID pandemic created opportunities in our field. This success highlighted the need to fund university performing arts programmes and ensure that the funding is well managed. Unfortunately, arts festivals slumped as businesses are not keen to fund them in an uncertain climate. The Hilton Arts Festival had to operate on one-quarter of its normal budget. The journey forward has been filled with uncertainty,

but this is how it has always been with acting. Even the art of performance is one of risk and uncertainty. Some actors have had a few savings and a roof over their heads, but others had none. The danger is that fear of the future might be the force that drives us to be creative but being creative requires a softer unfolding. How we recover post-COVID is unknown but we need to remember that it is still our mandate, as actors, to be alert to what is happening to us, to what has happened to us.

Owl President Geoff Ashmead: After the physical manifestation of the lockdown we, as Owls, were very conscious of its threat. Another society to which I belong suffered during the lockdown and was not able to resuscitate itself afterwards. In Owldom we managed, through technological developments, to carry on, and we are still here.

We have looked at the balance sheet of the lockdown, where we were before and where we are afterwards. The lockdown was dramatic. It destroyed many people and industries, clubs were lost, and tourism is now dragging its way up again. But has any lasting benefit come from the way that our government has handled this plague that has attacked the world? Is the world in a better way? Great change can lead to careful consideration after the event.

In 1994, when South Africa handed over to the ANC, there was the opportunity for society to become more equal as a result. Has that happened? I don't want to venture an answer. We have gone through the trauma of lockdown but most of us don't realize how traumatic it has been. With terrible diseases, when you recover, you forget that phase and get on with your life. The Owl Club has done so. We are here and we are enlarging our activities to include colloquia, thanks to Mike Bruton, and other activities.

Conclusion, by Owl Mike Bruton

While there is no doubt that the COVID pandemic was a disaster for humankind and for our socio-economic well-being, it did bring about some lasting changes to the ways in which we live, work and play, many of them advantageous in relation to the other big challenge that we currently face, i.e., the environmental crisis. The short-term balance sheet is in the red, but the long-term prospect is far brighter.

In terms of reactions to the pandemic, those individuals or institutions which regarded themselves as victims and which did not adjust to the new, post-COVID reality are not doing as well as those survivors who saw the pandemic as an opportunity to do things differently. The reality is that, post-COVID, the world will never be the same again, not only because of the pandemic but because of all the other major interventions that are taking place simultaneously, such as the escalating environmental crisis, increased international tensions, the introduction of AI, quantum computing and the metaverse, and, in South Africa, the energy crisis, load shedding and corruption.

To end, I would like to thank the speakers for the consistently high standard of their presentations, the Owls who helped to organize this colloquium, the videographers, sound engineers and rapporteurs, and especially you, the audience, for your lively participation. I trust that you enjoyed the event and benefitted from it. I now invite the convenor of the next Owl Club Colloquium, Bill Coetzee, to say a few words.

Owl Bill Coetzee: I think that it is rather fitting to end with a poem. I will read it, with apologies to the actors present.

'The virus came and swept the world

With lockdowns, masks and fear

The businesses and jobs were lost

The livelihoods were dear

The rich got richer, the poor got poorer

The gap became more wide

The stimulus and relief were scarce

The debts were hard to hide

The people struggled to survive

*With hunger, stress and pain
The hopes and dreams were shattered
The future was uncertain*

*But some found ways to cope and adapt
With creativity and skill
They started new ventures and projects
They helped each other with goodwill*

*The virus is not quite over yet
The challenges remain
But maybe there is a silver lining
A lesson to be gained*

*That life is more than money and things
That we are all connected
That we can overcome the crisis
If we are united and respected.'*

This poem was generated by ChatGPT, which I prompted to write about the impact of COVID on society - it illustrates the power of this exciting new technology. The next Owl Club colloquium, to be held on 23rd November 2023, will address the theme, 'Beyond the Hype: Examining the Real-world Benefits and Dangers of AI'. Following the success of today's colloquium, we hope that you will be able to join us for the next one.
