



104. Coronavirus Update

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Future Sense is a podcast edited from the radio show of the same name, broadcast on BayFM in Byron Bay, Australia, at www.bayfm.org. Hosted by Nyck Jeanes and well-known international futurist, Steve McDonald, Future Sense provides a fresh, deep analysis of global trends and emerging technologies. How can we identify the layers of growth personally, socially and globally? What are the signs missed; the truths being denied? Political science, history, politics, psychology, ancient civilisations, alien contact, the new psychedelic revolution, cryptocurrency and other disruptive and distributed technologies, and much more.

This is Future Sense.

Nyck: You're tuned to BayFM 99.9 here on the easternmost point of Australia. You are tuned now to *Future Sense* with myself, Nyck Jeanes and my co-host, Steve McDonald, futurist. Good morning.

Steve: Good morning, Nyck.

Nyck: How are you?

Steve: I'm well, thank you.

Nyck: That's good. We're going to be talking about, as usual, a couple of major topics today, starting off again with an update on the coronavirus.

Steve: Yes, it continues to create a lot of news and is having a growing impact, both from a health perspective and also from an economic perspective, so we'll just give an update on that.

Nyck: And also, we've become very interested in the concept of 'moral outrage', of which there is much, both in terms of individual people taking action against the many issues that we have on this planet at the moment, but also in social media, of course; and the whole notion of moral outrage as opposed to anger, even, there's a difference there. Interesting topic, I find.

Steve: It is. What's it all about? Why are people so upset, and why is there so much emotional expression going on and, as we say, moral outrage? It seems to be growing, doesn't it?

Nyck: It does indeed, and it has an effect. Some researchers claimed that moral outrage itself is actually a part of the moral evolution of humanity, in fact—that we need that compulsion to move forward by actually complaining loudly about what we see as a transgression of our value systems.

Steve: Yes, so we'll have a look at that. We'll have a look at human evolution and how moral outrage might be related to the fact that we're shifting values at the moment and, ah, we'll try not to complain too much!

Nyck: You are tuned to *Future Sense* here with Steve McDonald and myself, Nyck Jeanes; and tuning in all around the world, thanks for listening. If you're listening live here in the Shire or nearby, or possibly online on www.BayFM.org, or a day or two after—or sometime in the future here—listening to the podcast, which you can find on www.future sense.it or through your favourite podcast platform. You can also text in, as you probably know, and engage with us directly on what we are talking about.

The coronavirus has now been what people are talking about: pandemic. It's not a pandemic yet because it hasn't reached the continent of South America, but it has reached pretty well all the other continents in the world, and as you may already know, South Korea, Iran and Italy are the latest countries which are in some sort of lockdown mode with cases increasing. In Italy, for example, a third person who has been infected with the coronavirus has died. A regional official said there's 130 cases in the north of the country, and clearly we are on a bit of an edge here with the coronavirus.

Steve: Yes, Italy seems to be more of a hotspot than most other countries around the world. Still, by far, the majority of people infected with the virus are within China, and China seems to have done a good job of containing it, along with other countries, of course, that have restricted travel to and from China or put people into quarantine.

Nyck: They have 70,000 or so cases in China. That's a lot to contain, so they are doing a fairly good job, one could argue. Let's hope so.

Steve: That's right. I'm just looking at a very recent report from an hour ago posted on *Al Jazeera* about the latest figures. They're talking about Iran reporting 43 infections and 8 deaths, which is an unusually high number of deaths (20%) if there's only 43 infections

there; but a recent radio report I listened to this morning suggested that Iran may have been underreporting—not revealing all of their cases. Turkey, Pakistan and Armenia have closed their borders with Iran as a result of that report, and Afghanistan has introduced travel restrictions. This page I'm looking at, www.aljazeera.com has a great global map, and I'll post a link to this site after the show (<https://www.aljazeera.com/news/2020/2/23/china-coronavirus-outbreak-all-the-latest-updates-22>). It's showing countries that have reported cases now, and as you say, it is mostly in China, but we've got Japan, Thailand, Vietnam, India and Russia. Russia, only 2 cases; Iran, as I mentioned; 1 in Egypt; a few scattered through Europe; 13 in the U.K. now; 16 in Germany; 12 in France; 2 in Spain; quite a lot in Italy, unusually—144; and 9 in Canada; 35 in the US; 22 here in Australia; and a couple of other small countries on the map as well that you can have a look at when I post a link later on.

Nyck: Pakistan has also closed its border with Iran, and it's pretty clear that everybody is in lockdown, and a lot of fear. We're going to be talking about fear today as part of this equation anyway.

Steve: We are indeed. A senior hospital director from Wuhan, who was one of the earliest doctors to report the disease, has died; and Chinese tech giants are deploying tracking maps.

Nyck: Yes, that's fascinating. How are they actually doing that? That's a pretty interesting thing, isn't it?

Steve: Yes. They're available on *Tencent maps*, *WeChat* and several other online platforms such as *Qihoo360* and *Sogou*, and now people in more than 170 Chinese cities can check whether there are infected patients around them simply by scrolling on their phones. Rather than disclosing names and other personal details of the patients, the maps use data sourced from China's health authorities and feature the user's distance from other infected patients, and I guess this is just a result of China's extensive surveillance programme that they have in place now.

Nyck: It's called a 'close contact detector'.

Steve: Yes, and clearly they're making the data freely available for these other companies to put onto their platforms. Very interesting indeed; very useful in many ways, but also a little concerning in terms of human rights, although they aren't revealing the identities of patients, they're just showing the locations on maps.

Nyck: But there is some concern by human rights experts about the lack of transparency and the Chinese government having credibility issues when it came to handling such data, which is a fairly obvious thing to say for sure.

Steve: It is, and that's been an ongoing discussion about the rise of surveillance within China, including public face tracking cameras and all those sorts of things.

Wuhan has now been in lockdown for a month, and about 60 million people are under unprecedented lockdown in Wuhan in China's Hubei province. Reports are leaking through about what people are doing, mostly confined to their homes. There's a report about shopping plans where groups of 10 families are being permitted to pool their shopping needs and go for supplies occasionally, but other people are reporting that they're running low on supplies and are obviously either too afraid to go out or having trouble getting out to buy food.

Nyck: Yes, 60 million people altogether in China have been placed under some form of lockdown or other in Hubei province since the coronavirus broke through in Wuhan, and it's only a month on, so that's a lot of people who are locked down there; and, of course, around the world more and more in these countries, just as we're seeing. Some 2,000 people are believed to have died as a result of the strain and about 70,000, as I said before, in China itself, according to the World Health Organisation.

Steve: Also reports in South Korea where they have confirmed 73 new cases, 42 of which were connected to a Christian sect in the country.

Nyck: That's interesting.

Steve: Yes, and the mayor of the Central Korean city of Daegu, where that sect is based, has urged its 2.5 million people to refrain from going outside as new cases are spiking there. Very interesting.

Of course, the economic impact is growing globally, and maybe we'll come back and talk about that.

Nyck: Yes, well that's the biggest thing, and I think that, besides the obvious issue, is the biggest issue on the planet right now, and it has implications, we might suggest.

Steve: Certainly the biggest implication that's obvious right now is the effect on economies around the world and the supply chains and trading everywhere, so we'll come back and talk about that.

Nyck: You are tuned to *Future Sense* here on BayFM, 99.9 or via the Web www.bayfm.org or on the podcasts, which are edited in within 24 hours, usually, each week. We do take out the great music we play, and also the various announcements, so you get a couple of tight little segments of half an hour or more for your listening pleasure; and thanks to all of you out there in the world who are listening to this podcast.

I was just in Melbourne over the weekend on Friday, waiting for a couple of our associates down there who've been on the show before—Ross Hill, in particular—and we were sitting in a cafe in Collingwood and a woman walks in and said 'oh, Nyck Jeanes!' And I said, 'oh, hello, who are you?' and she told us her name and all of a sudden she said 'I love your podcast, *Future Sense*! It's the best thing on the radio; the best thing I listen to!' I thought it was fantastic: there I was in Melbourne and it was completely out of the blue, so we're sort of seeping into people's consciousness out there.

Steve: What lovely news. Thanks for all the support out there.

So we're just talking about the coronavirus and we're going to have a skip through a few stories about the economic impact because it's going to be huge. It's still early days because there's a lag time in terms of the shipment of equipment from China, etc., and a lot of stuff is getting shut down there. The earthmoving manufacturer in the UK called JCB is cutting production working hours as it faces a shortage of components from China due to the coronavirus outbreak, and it's thought to be the first time a major UK manufacturer has warned about the epidemic's impact on its output. They are reducing working hours for their 4,000 staff, and more than 25% of their suppliers in China are closed at this stage.

There's a story from India, which is one of the world's major steel producers—not as large as China, though—and they're predicting that the coronavirus outbreak will impact the steel industry globally for the next two to three years, which is very interesting.

Nyck: Yes, at the moment, Australian iron ore exports to China are still going ahead—they're not being so disrupted yet—for two reasons, I think: one, because that sort of industry is not so engaged with the direct populace as much as many other industries; but particularly because the Australian dollar is quite low, so there's a bit of a buffer there—about a 5% buffer—for those exports and the money that's coming into Australia from those. So in terms of some of the mineral exports at the moment, they're not so affected yet ... but ...

Steve: Yes, but China is one of our largest trading partners here in Australia and there are more reports now coming out about the economic impact here, which is expected to cost our economy billions of Australian dollars, according to the *ABC* [Australian Broadcasting Corporation].

Nyck: Up to 12 billion, in fact. With all the different minerals, exports alone could cost 4 billion once that kicks in, if it keeps going; and, of course, Australia's top 10 universities are especially vulnerable, with an analysis by *The Australian* [newspaper] revealing they stand to lose 1.2 billion in fees from about 65,800 Chinese students who are at risk of cancelling their first semester courses.

Steve: Our *ABC News* here in Australia is reporting that the first wave of economic disruption hit airports, airlines, travel agencies, casinos, hotels, and, as you say, Nyck, educational institutions. Now, as further factories are remaining closed in China, the virus is having a second wave of impact here in Australia, disrupting business supply chains, Australian listed companies, and major global retailers that rely on stock from China, or operate in China, are feeling the impact and warning that it could worsen in the coming months. Some of our major retailers, including *Harvey Norman* and *JB Hi-Fi*, are saying that there are supply shortages and the real impact will be seen within four to six weeks from now.

Nyck: The fascinating thing here is the disruption to supply chains. That's not a comfortable thing for the current structure of politics, culture, society and economics, in particular, in the world. What do we think about that? I mean, it's fascinating how that's shaping up to influence the direction of everything, potentially, on the planet in terms of having to pull back locally to a more resilient local economy, perhaps.

Steve: It is very interesting, and let's not forget that the US and China are engaged in a trade war which continues; and with things like this, there's a lot to learn from in terms of understanding how interconnected the world is and how we really rely on each other quite a lot. Ideas that we can have these trade wars and not get impacted by them ourselves are simply false, and hopefully we'll learn a lot from this experience without getting hurt too much.

Nyck: Yes. *Apple Australia* has talked about 42 retail closures of their stores in China until February the 15th. That's already passed, but basically it's touched into every industry, really, in one way or the other.

Steve: Yes, and things that you wouldn't expect. For example, there's a report here saying that it's estimated to cost the tourism industry in Western Australia about AU\$250 million. There's a story specifically about a beekeeper who relies a lot on the tourist trade to sell his honey and just hasn't got the people coming through with restrictions on travel from China at the moment. Also, there's a small fishing village that relies on trade with China for its lobsters—Port MacDonnell, it's called, in South Australia—and they are stockpiling live lobsters at the moment. In this story, it says they've got about half a million dollars-worth of lobsters swimming in tanks there at the moment with nowhere to send them, so one would expect that the lobster price might be coming down in Australia.

Nyck: Good time to get your lobster, folks, if you're not a vegan, of course..

Of course, Chinese economy accounts for 16% of the global economy and in the wake of the coronavirus outbreak so far, oil prices have tumbled, international travel to and from China, obviously, as we know, has drastically fallen, and multinational companies have scaled back operations there. This report from the *ABC* also talks about China already drowning in debt, with the *Institute of International Finance* saying the rising superpower's debt topped 300% of its GDP in 2019. As you said before, the trade war between China and the US—all of this factors into a very shaky time for the Chinese economy through this. Many people could say many things about that.

Steve: That's right. China's in a very, very difficult position where it's got to decide whether to continue the lockdown that it's created, which is having a massive impact on its economy, and, I guess, tossing up the financial cost versus the potential health cost once they loosen to lockdown.

Here in Australia, the federal government has extended its coronavirus travel ban for another week through to February 29th. At the moment, any foreign nationals who are coming in who've been to mainland China are not being allowed into Australia for 14 days from the time they left China, and any Australian citizens and permanent residents are able to enter Australia, but they need to isolate themselves for a fortnight once they get here.

Nyck: It's actually good that there is a February the 29th this year.

Steve: Exactly.

Maybe we'll take a break and we'll come back. There's still a bit of sketchy information going on in the background about potential espionage and those sorts of things that we'll come back to.

Nyck: Yes, some interesting threads that don't quite tie up together and yet seem to point to something there.

Nyck: You're tuned to *Future Sense* here on BayFM and on the Net via podcast, or wherever you're listening—hello to you out there. You can tune in and you can also text in if you're listening live.

A quick hello to Texas, to our good friends in Austin there: the Texan Elf, Mitch Shultz, and to Whitney The Wise, who's also listening in from over there. G'day to you, and I hope you're coming back soon.

Steve: Exactly.

We're just finishing our coronavirus update this week. As well as the well-known health and economic impact, there's some strange reports that have been going on that are seemingly being buried by the mainstream media. One that we mentioned on the show a couple of weeks ago was about a Chinese scientist who had been working at the *Canadian National Microbiology Laboratory* (NML) in Winnipeg and allegedly involved in helping the Wuhan Chinese virus lab upgrade their security there to a P4 standard. Their security had been criticised in the past, with concerns that viruses could escape from the lab in Wuhan, but we don't have any confirmed information to suggest that the coronavirus did escape from there. However, it's interesting to note these stories and wonder whether that sometime in the future, these different threads might be woven together with further information.

I came across an article written in August last year called *Weaponising Medicine: China's Latest Theft a Potential Biological Weapon* (<https://news.clearancejobs.com/2019/08/15/weaponizing-medicine-chinas-latest-theft-a-potential-biological-weapon/>). This was reported on a website called News.ClearanceJobs.com. It's a website about job search and jobs for people who work in the US, it appears, seeking jobs requiring security clearances such as intelligence or military jobs. The article is actually written by former CIA agent who, according to his bio, spent 30 plus years with CIA and now is a freelancer and an author. In this article, which was written on August the 15th—so it's interesting because it was written before this outbreak happened and before the other stories hit the media—and it's talking about the Chinese scientist from the NML laboratory in Winnipeg being dismissed. We reported previously, that we saw a mainstream media article saying that a scientist was under investigation, but we didn't have any detail around that, but this is saying that she was dismissed and her ties cut from the University of Manitoba. The person is recognised globally as one of the leading researchers on infectious diseases and credited with being instrumental in creating a new drug for treating the Ebola virus, and despite her accomplishments, the *CBC* reports that her and her husband and her students were forcibly dispatched from the facility on July 5th last year.

Nyck: I believe she went straight to Wuhan, too, I think.

Steve: She had allegedly been travelling backwards and forwards to Wuhan, involved with helping them upgrade the security at the lab there. The *Royal Canadian Mounted Police*, according to this story I'm reading here, are investigating the sharing of the Ebola virus, as well as the second pathogen called a henipavirus, "which in real life kills 100% of those infected. While the lab in Canada claims it's normal to share these viruses between labs globally as part of their global research programme, the potential transfer of knowledge", obviously, according to this author, "may be advancing the Chinese biological weapons program."

Nyck: You came up with another piece which is from a month ago, and it's interesting because there's not a lot of other information out of here. This is from *CNN*, in fact, and a Harvard professor who is among three charged with lying about Chinese government ties (<https://edition.cnn.com/2020/01/28/politics/harvard-professor-chinese-nationals-arrest-espionage/index.html>). "Two other Chinese nationals within were federally indicted in three separate cases for allegedly lying to the US" about that, and they're reporting that it "highlights the 'ongoing threat' posed by China using 'nontraditional collectors' like academics and researchers to steal American research and technology", in particular in these areas of biology. "The complaint alleges that Lieber had lied about his affiliation with the Wuhan University of Technology (WUT) in China and a contract he had with a Chinese talent recruitment plan", as you were saying, about recruitment job search there, "to attract high level scientists to the country." Some of his associates—one chap called Yanqing Ye, a 29-year-old Chinese national—was charged with visa fraud, making false statements, conspiracy and being an unregistered agent", but more than that, also of taking some biological material out of the US to China. A cancer researcher, Zaosong Zheng, smuggled "21 vials of biological material out of the US to China and lied about it to federal investigators." So there are some strange threads here, and I was particularly interested in the fact that there's not a lot of reporting beyond this article from month ago about this.

Steve: What makes it quite interesting, is that these things seem to be being buried. I went back looking for the article that we quoted on the show a couple of weeks ago and couldn't find it. I also noted another article which was published in our *ABC News* here in Australia, which initially quoted very specific figures about the SARS virus casualties, and since then, those specific figures have been removed from the article for whatever reason.

Just getting back to the US-Canadian-Chinese related stories, it's perfectly understandable that given what has happened now, that the US might go looking for other links with Wuhan and perhaps tighten up anything that needs to be tightened up, so that the story that you just quoted there doesn't surprise me. One thing that is quite unusual and interesting, though, is that a Canadian scientist has died in unclear circumstances in Kenya. This story is from February the 6th. His name was Frank Plummer and he was formerly the head of the NML laboratory in Winnipeg.

Nyck: That's the one P4 laboratory in Canada, isn't it?

Steve: Yes, this is the one that was related to the previous connection with Wuhan that we spoke about.

"Mr Plummer, 67 years old, was in Kenya, where he was a keynote speaker at an annual meeting of the University of Nairobi's collaborative centre for research and training in HIV/AIDS/STIs." Dr. Gelmon, who helped set up that meeting, said Plummer collapsed and was taken to a hospital in Nairobi where he was pronounced dead on arrival and no confirmed cause of death has been released. He was born and raised in Winnipeg, where he headed up Canada's national microbiology lab for several years, and he helped identify one

of the key factors involved in HIV transmission in the early days. There was a report by *CBC* about his death in Kenya but no mention of the link to the lab in Winnipeg where the Chinese person was expelled. So very mysterious circumstances, and again, there are no clear links here; there's no definitive evidence pointing to any kind of connection with the release of the coronavirus, but it's unusual that these links are showing up and they're not showing up in the mainstream media, mostly.

Nyck: And you can go to, of course, fact check websites, some of which are dubious anyway, so it's hard to know if the fact check websites need to be fact checked themselves, but www.factcheck.org, which we're a bit suspicious of anyway, has said that with regard to Charles Lieber, the professor from Harvard University, no link between the Harvard scientist Charles Lieber and coronavirus can be found, so that that's what they say. Nevertheless, it sounds a little bit suspicious.

Steve: Yes, it points to the fact that there may be something going on in the background there: the sharing of viruses between Canada and the lab in Wuhan, the involvement of Chinese scientists who are now alleged to have stolen viruses from Canada and taken them to Wuhan, and then the unexplained death of this Canadian scientist who has connections to the Winnipeg lab in Africa.

Nyck: In fact, the US government, in a report from a couple of weeks ago, isn't prosecuting Charles Lieber, but it's because he's a world-renowned inorganic chemist at Harvard University, says the US attorney, who last week drew headlines by charging Lieber with making false statements about his ties to Chinese research institutions. Nor does the Department of Justice think for one minute that Lieber is a spy, but that doesn't necessarily mean anything.

Steve: Glad they cleared that up then.

Nyck: Absolutely. That's what I was thinking.

Steve: Anyway, maybe we'll see in time; maybe more information will come out and explain whether these things are related or not.

Nyck: Indeed.

Steve: That's our coronavirus wrap-up for this week. We're going to have a bit of a rant about moral outrage next.

Nyck: Yeah, let's go for it; let's get angry. And you can, of course, join the conversation via text. Do you have moral outrage? What do you consider about that? How do you define that? We'll be talking about some very interesting studies about the nature of moral outrage.

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