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COMMENTARY:

**THE NEW CORONAVIRUS COVID-19:
A mixed bag of questions, impressions and suggestions**

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COMMENTARY:**THE NEW CORONAVIRUS COVID-19:
A mixed bag of questions, impressions and suggestions****OLEG K.T. STANKEVIČ****CornerstonesWORLD.com, Rupniecības, LV1010, Riga, LATVIA**Email: oleg@cornerstonesWORLD.com*Submitted: February 2021; Accepted: March 2021*

Have we learned a lot or have we lost the battle? It has been a year of trial-and-(t)error, pseudo-science, superstition and panic. It has been a year of discovery, wonder and despair. It's time to take stock and answer this murky question, as few rational people would subscribe to the view that the current state of affairs can count as a win over the virus.

Indeed, the New Coronavirus {"Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2)", "2019 novel Coronavirus (2019-nCoV)", "Coronavirus disease 2019 (COVID-19)" COVID-19} is a stern wake-up call for humanity. Had we risen to the occasion and faced Nature's challenge together, with the single purpose of survival, we would not have landed in the "year the Earth stood still", grimly remembered as 2020. Alas! Instead of acting as a sensible, civilised species, we frivolously engaged in our favourite sport — blame tossing and scoring political "touchdowns". While our postmodernism-intoxicated leaders bickered and curried political favour, the virus, which is

not hampered by the vices of human stupidity, permeated every stratum of society and the pandemic quickly engulfed the planet.

People have tried denial, refusing to adapt to our new "normal", scoffing at basic safety instructions... but as the old adage goes: "The Nile is a river in Egypt". The virus does not care whether you believe in it or not; however, if it did have a preference, it would much rather that you didn't. Ostriches hiding their heads in the sand make for an easy hunt. We were quick to label the "it-will-never-happen-to-me" crowd as "Covidiot" but, sadly, we were not quick enough to educate them — for everyone's sake. People nursing the reckless belief that prayer alone, youth or luck is their immunity shield, are at least as dangerous as the "anti-vaxxer" crowd. They need to understand the severe risk they are running by playing the "COVID Roulette," and choose the, yes, mildly discomforting measures, such as wearing a face mask over running the risk of breathing and excreting through a tube for weeks on end, and ending up with life-changing

complications or even death. Why risk a potentially crippling aftermath and a ruined life? The COVID complications can, indeed, be extremely dire. A number of studies suggest that COVID-19 affects the central nervous system, potentially causing clotting and micro-contusions which may lead to stroke, Acute Disseminated Encephalo-Myelitis (ADEM) and bleeding within the brain and spinal cord. Recent studies suggest that this may result in the so called Long-tail COVID. Long-haulers are people who, months after having been cleared from the active virus, still experience aftershocks of acute symptoms of the disease. A recent hypothesis postulates that the damage done to the brain tissue results in the brain perceiving intermittent “echo” distress signals, as though the body is still under siege, causing the brain to send out energy conservation or even shut-down protocols.

I am a firm believer in the axiom that the truth will set us free. I believe that the crisis could have been averted at the outset, had we been administered a comprehensive dose of truth, with responsible journalists advocating public awareness, safety and discipline, rather than engaging in the media circus mongering fear, panic and sowing division.

Today society faces a lockdown fatigue and a rising tide of cynicism, pseudoscience, as well as misguided people fighting for their “right” to refuse vaccination and yet travel freely, i.e. their “right” to act as vectors for the virus. We are fighting a battle against ignorance on two fronts

at once—the mainstream media bombards us with mind-numbing platitudes, while social media assails our consciousness with an endless torrent of dubious, uncorroborated hearsay. The truth is out there, but amid the cacophony of speculation, driven by ulterior motives, and the cynical cancel-culture of political correctness, few dare delve beneath the familiar veneer of the obvious and confront the devil hiding in the details. Let us roll up our sleeves and drag the miscreant into the light. For only by dissecting the problem and through free, open discourse, will we be able to contend with its complex nature. Speculation about origins and crystal balls aside, the responsible, constructive approach at this point in time is to examine the evolving challenges based on the current situation. We cannot change what came before, but we can change our attitude towards it and join the battle for public awareness now.

Best practices and personal hygiene questions:

In my mind, the most important thing is public awareness. Many people still believe that COVID-19 is similar to a common cold — a bit of coughing and fever and you get over it in a couple of weeks. This is nonsense. As mentioned, even asymptomatic COVID-19 can leave effects lasting for months (loss of taste/smell, fatigue, headaches, and others). If the population acts responsibly, the virus will be brought to heel and contained, just as it has been in China.

Thus, people must take hygiene very seriously. Some things are common sense — wash your hands before picking up your food, do not bite your fingernails, do not walk in your home with shoes you wear on the street (you would be amazed how many people have this filthy habit). Other disciplines such as washing every single thing that comes from the shop are harder to live by. Since the beginning of the pandemic, every time I come back from the shop, I leave the bags by the door, prepare a vinegar-salt-detergent solution, put on a pair of gloves and spend an hour or even two wiping every crevice of every product before putting them away. Yes, this method is not for the faint of heart, as it is difficult and time-consuming, but my grandmother is over 90 years old and I cannot risk anything. However, even if you are not supporting an elderly person, you should still at least rinse everything that comes from the shop with some soap and warm water. Since the onset of the pandemic, I have not seen this stressed through any public campaign. It is common sense, as we all know that the virus can survive for over 48 hours on plastic and many times longer if kept cool in your refrigerator or freezer.

Most of us (me included) find throwing out disposable facemasks after each use to be an expensive waste. But if masks are to be reused, they must be disinfected properly, so as not to act like petri dishes for some very nasty bacteria. I find that lining the mask with a disposable tissue (discarded about every half hour), applying a light coat of tiger balm around my

mouth and nose and spraying the masks liberally with a sanitiser after use, keeps the masks safe for multiple uses. Cloth masks may be more difficult to breathe through, but they are washable, and I keep some 10 masks on rotation to avoid using the same mask more often than once per week.

A number of impressive innovations have been made in mask design, both from the aesthetic and comfort and practicability perspectives (e.g., stopping glasses from fogging over, wash-ability, and even self-disinfection, and others). A fine example of such innovation is this high-end woollen Latvian offering, which utilises German Silver-plus microfiber technology to ensure that the virus is dead on arrival (DOA), before it can penetrate any unprotected cell. These appear to be impressive strides in combating the virus, but the science is not yet all in to back some of the claims.

COVID can clearly survive saliva, but can it survive saliva with mouthwash in it — or ginger juice? Another measure I take is to chew on a finger-nail sized chunk of ginger root, when I am in public places. It is perhaps a placebo, but empowering, as it makes me feel like I am doing my best to stay safe. Furthermore, I highly doubt that the virus could possibly survive coming into contact with mouthwash or raw ginger, but I would appreciate some scientific feedback.

How long does the virus stay in the air? Well, this largely depends on how still the air is, but in ideal circumstances, if a COVID patient coughs or sneezes in a stagnant environment (e.g. in a

lift), how large do the droplets have to be to infect a person? Can they enter through the eyes? A Japanese study demonstrated last year that water droplets after loud speech or a burst of laughter (not to mention a sneeze or a cough) can hang in a poorly-ventilated space for up to 40 minutes. But surely, the droplets large enough to carry the virus settle to the floor within about 30 seconds... then again, the virus is very small, so perhaps not? Ten micrometres may be plenty of space for a virus to inhabit. To be on the safe side, whenever possible, I spray my sanitiser at head-height into a lift before entering; avoid walking behind people on the street and wait 20-30 seconds before occupying the same space in shops. Are these measures prudent or unnecessary?

As a side-note, I think a YouTube channel showing footage from a microscope where the virus is destroyed by various agents, from vinegar and soap to hot water, to cola, to sea water, would garner millions of views and go viral very quickly. We all want to be inspired by watching the invisible enemy, which has ravaged our ranks, being easily defeated over and over again by means within our control! With my background in copywriting and marketing, I am certain that such a public campaign would quickly gain traction, go viral and inspire people to observe the rules of hygiene religiously. By backing such initiatives and promoting vaccination education, governments could turn the tide of infections.

Campaigns to keep up one's immunity with exercise and sufficient sunlight are also in order, in my opinion. When people sit indoors, especially in the winter months, they could develop vitamin D deficiency.

Vindicating vaccines:

Here I am out of my depth, but I am fortunate enough to have a life-long scientist as my father. However, I realise that relatively few people enjoy the privilege of being able to directly ask a relative or close friend about the science behind the scenes and receive a coherent and above all—accurate answer. In order to wholeheartedly believe that vaccines are the cures to the opportunistic ail that haunts and stalks us all, the layperson needs to better comprehend, in simple terms, what makes the virus tick.

Errors during replication are the way new strains are formed. Rapid evolution is, indeed, an ingenious defence mechanism. But what constitutes an actual new strain? If there are mistakes in virtually all copies can they be considered to be a set?

Let us examine some of the challenges that lie in the path to vaccination and demystify some of the misconceptions about vaccines. There are two primary culprits: ignorance and incompetence. Both can be cured with proper planning. My country, Latvia, is a proud, nearly two-decades-old member of the EU (a supranational entity with a combined GDP larger than that of China... though not for long after losing the United Kingdom). It makes for a good

case study due to the relatively low population and, hence, low infection rate (in August 2020 there were many days of zero cases and, in winter 2021, an average of about 700-800 cases per day). Although Latvia secured sufficient doses of a COVID vaccine at the dawn of 2021, the process of administration and distribution has been extremely slow. Apart from stepping up efforts to educate the general public, governments must learn to be efficient in the logistics of vaccine distribution and administration.

China, on the other hand, prioritised distribution and therefore has made impressive strides in containing the virus. In early March 2021, as I write these words, over 22 million Chinese citizens have been inoculated against COVID 19. To put this number into perspective, that is [over](#) 10 times the entire population of Latvia, but in my country, they are only now completing the protection of frontline workers and my 93-year-old grandmother will only receive her vaccine next week... as for my, just “over-the-hill” age group, we have been told vaccines will only become available to the 40-50 year-olds in June-July 2021. Furthermore, China has donated a significant portion of its vaccines in a gracious effort to support other developing countries. We should all learn from China’s altruistic example, as capitalism is most certainly NOT the cure. By allowing ourselves to be driven by avarice and petty politics we become agents of the pandemic, abetting it in taking a grim toll on human lives. Standing shoulder-to-

shoulder in this crisis is the only way to rein in the virus.

In fact, China, originally hit the hardest, has been at the forefront of combating the virus ever since. Decoding the virus genome and freely sharing invaluable data with the world back in January 2020, in a sincere effort to overcome our common threat. Even the head of the Wellcome Trust in London commended China in a Tweet: *“Potentially really important moment in global public health - must be celebrated, everyone involved in Wuhan, in China & beyond acknowledged, thanked & get all the credit. Sharing of data good for public health, is great for those who did the work. Just needs those incentives & trust”*.

Vaccines are finally trickling in, but we face many questions about their composition and efficacy. Is it true that vaccines supplied by certain manufactures, such as AstraZeneca (AZ), are dangerous or ineffective when administered to seniors? The consensus is that if one is fortunate enough to get the call to be vaccinated by a formula from any legitimate supplier, one should jump at the opportunity (it goes without saying that you should always check and never seek to buy vaccines from unauthorised sources). But how much do we really know about the vaccines developed and rushed through approval in record time? It stands to reason that a placebo is more dangerous than no protection at all, because the person would be convinced that they are at least partially protected, while in reality they are just

as vulnerable as unvaccinated people. I recently learned that a prominent German politician declined a dose of the AZ vaccine, as it is not recommended for the over 65 age group. Most of us are not world-leaders who can afford to indulge in whimsical caprice, but... as a thought experiment, let us imagine that we are.

During the course of compilation of this article, however, Germany, closely followed by Sweden, approved the AZ jab for the 65+ population segment. Nonetheless, let's say, we also throw supply and demand out of the window, and focus on the essence of vaccines. For the sake of argument, imagine you have access to full doses of every vaccine available on the market. Which would be your vaccine of choice and would you be satisfied with just the one flavour — assuming you were offered to try others?

We are told that all the vaccines are equally good. Surely, this is a myth for the unenlightened masses and falls apart in the light of reason. Each vaccine was developed by a different company in a different geo-location (governed by diverse regulatory standards), where different strains of the virus have been prioritized. Furthermore, to top it all off, the vaccines were developed at different stages in the pandemic (i.e. at different times and research phases, as the threat mutates and evolves). There are so many vaccine formulas out there, many of which are only conditionally approved for emergency or early use. Since each vaccine is registered as a separate formula, its composition and *modus operandi* must differ.

Since the principles and circumstances behind each vaccine differ, their effects cannot be identical, ergo: all vaccines have their strengths and shortcomings. Thus, we might surmise that, although any legitimate vaccine is better than no vaccine, it stands to reason that some vaccines are more effective than others and in an ideal scenario, if one could make an educated selection, one would most likely choose Sputnik V (91.6% efficacy, 2 doses 21 days apart, can be stored at 4 to 8 degrees Celsius) over the conditionally approved single-dose Johnson & Johnson vaccine (which offers about 85% protection) or the AstraZeneca vaccine (which must be stored at extremely low temperature). According to Pfizer-BioNTech, the efficacy is about 95% provided that the second, booster shot is administered within 21 days.

We are told that vaccines are perfectly safe. Since vaccines are clearly not uniform and protect against different 'bouquets' of virus strains, do you advocate for cumulative protection of vaccines, i.e. take the AZ vaccine once available, then a month later take the Moderna vaccine, a month after that Sputnik V and so on? If vaccines are perfectly safe, but protect only against certain strains and for limited periods, I believe that we are on the cusp of witnessing the rise of vaccine tourism, whereby wealthy folks hop around the globe collecting vaccines like stamps.

Since vaccines are essentially a way to trigger the detection of the virus and, consequently, the appropriate immune response, i.e. earmark this

particular protein as a severe threat, which triggers defences, is having been inoculated similar to having survived the disease? My (perhaps overly simplistic) view is that vaccination introduces a weakened virus into the body as a potential, albeit controlled, threat and teaches the immune system about the potential risk and to defend the body against similar threats - for a time. On the other hand, having faced and beaten the onslaught of the unmitigated, out-of-control disease, should have given the immune system a trial-by-fire, so the body should also recognize the virus as a clear and present danger for at least the duration of the average inoculation. Is this a reasonable deduction? So, after a patient has survived the disease and is declared negative, how long (if at all) does the immunity last? Most likely post-COVID immunity depends on the specific strain of the virus. Surely, it is not the same as having been vaccinated, right? Also, is post-COVID immunity good for just the one strain of the virus the patient has had or to the virus in general?

Are vaccines in perpetual refinement (to keep up with the virus' perpetual mutation)? In other words, are we engaged in an unending game of catch-up - just like with computer viruses, are 'patches' and 'updates' expected every season? Will a vaccine taken today be less effective/up-to-date than one produced a few months later? I wonder if the flu vaccines are updated every year, or is that virus more stable/ predictable? Will vaccines against the New Coronavirus, which are produced later, be effective against

more strains, or is a vaccine's formula set, approved once for production and, hence, immutable, pending the next version's testing, registration and approval? This brings us back to the question of potential stack-ability of the benefits--if supply would allow, would it be a good idea to take full doses of several vaccines from different suppliers? Not in one giant concoction, of course, but with the minimal interval of, say a couple of weeks or a month in between?

Even after we have weathered the immediate crisis and have all been vaccinated, it will be prudent to continue to wear face masks in public places and when travelling. The ranks of the virus are ever being replenished with new, possibly more dangerous strains; most vaccines are certified to have just around 90% efficacy, while none of them may work at all against some mutated strains, right? With the world demand being so high, I doubt that the manufacturers give any guarantees (I understand that in the US they are not liable, even if their product causes harm to the people taking it). Wearing a mask seems to be a good rule-of-thumb in any case, as one has no idea which other threats are swirling in the ether...

"Researchers in the UK have also recently noticed a mutation called E484K – which is thought to reduce the virus's vulnerability to antibodies in the South African and Brazilian variants – has appeared in some samples of the British variant B117. Although only in a handful of cases so far, it is raising concerns that the

faster spreading British variant may also now pick up some ability to escape the immune systems of those who have been vaccinated or already infected."

How quickly after the injection does one develop relative immunity? This is like asking "how long is a piece of string", right? It all depends on the manufacturer, which only bolsters my argument that not all vaccines are created equal and in ideal circumstances one would opt to receive a vaccine developed as close as possible to one's home, so it best-suits the individual's specific circumstances (physiology, climate, as well as predominant COVID 19 strain). After all, it would be of little comfort to the people living in South Africa to have a high resistance to the virus strain running rampant in Brazil or the United Kingdom and vice-versa.

Is there a simple blood or saliva test that can be taken AFTER vaccination to check for the adequate presence of antibodies, i.e. to gauge the body's resistance to COVID? Such a test would be an invaluable tool in stemming the flow of infections, as individuals would be able to keep track of their factual resistance, rather than navigate these uncharted waters guided by "guesstimations", standardised averages and arbitrarily-chosen figures. We would also be able to know when it is time for a repeat-inoculation, but most crucially, confirm that the vaccine one received is compatible with one's unique physiology and effective against the threat present in one's environment. Developing such a quick and

accurate self-assessment test would be an invaluable contribution to science and public wellbeing as a whole. It would also greatly reduce the ignorance-induced anxiety which ravages our society at large. As we now understand, mental health has also been severely impacted by the state-of-emergency measures around the world; many people are fearful and confused, despite having never contracted the disease. Mental health and happiness is intertwined with the integrity of our immune and nervous systems.

Finally, perhaps a hereto unforeseen 'side-effect' of the lock-down stratagem could be a sharp decline in the immunity of the general population once the restrictions are lifted, due to the fact that most people (like me) are now hygiene-obsessed. Our bodies may become unaccustomed to dealing with mild threats we took for granted in the pre-COVID-19 era. We are all incessantly wearing masks, washing our hands compulsively and as a result, taking in a lot fewer germs — COVID-19 (and its nasty 'siblings') is not the only danger out there, of course. Or... will the opposite scenario come to pass? In other words, could our immune systems rebound and become stronger with this 'COVID holiday'? We are all trying to eat healthier, home-cooked meals, have more time for exercise (those of us inclined to partake in home fitness routines), rest more and try to take additional vitamins... so maybe the opposite is true and our immune systems will be elevated and restored?

It is amazing what humanity can accomplish in a short period of time, when the incentive is a severe economic threat. I am sure that there are many families touched over the past 4 decades by HIV/AIDS who are wondering why that threat was allowed to fester and endure. But, I guess, just like with curing cancer, treating AIDS is a cash-cow for the 'Big Pharma' industry. Like eradicating war in far-away-lands, there is no real appetite in the upper echelons of power to slay the goose that is so prolific in laying golden eggs... Or perhaps it is the stigma that is associated with becoming HIV positive, society tends to act like it is the patient's fault for having contracted the disease through questionable life choices. Or perhaps it is like Ebola, considered to be lower priority because it is not air-borne and thus less volatile/easier to ignore and contain. If these pathogens ever mutate enough to spread like COVID (or become even more virulent), the people who have made bank on the misfortunes of others will also find themselves in an identical world of hurt. Although most of us are incapable of influencing world-scale events and no one can change the self-centred callousness ingrained into human nature, the avarice-driven status-quo of the world, the thought that if things ever get out of hand, those playing with fire will also get burned with the rest of us, is vaguely comforting... 'Vaccine diplomacy', now played by certain prominent vaccine producing countries is beneath abhorrent. Surely, the morally bankrupt strategy of allowing the threat

to endure and evolve in less-developed nations will backfire in the long run.

Yes, COVID 19 has been a wakeup call and a stern stress-test for all of humanity. In these trying times, we have been confronted with the best and worst aspects of humanity and, collectively, we have failed to rise to the occasion of Nature's challenge. But, as Nelson Mandela once said, "I never lose—I either win, or I learn." Judging by the way the pandemic was handled (or, rather, *mishandled*) we can easily surmise that had this been a Great Filter (a civilisation-ending event), the lack of preparation around the world would have resulted in a catastrophic loss of life. Yes, the world was thrown into disarray and the crisis exposed numerous systemic failures, but not all is lost. One can only hope that our leaders have learned from their colossal blunders, our heroes (frontline medical workers) know what is at stake, and our scientific minds will be better prepared in the future. It is my sincere hope that, when the next threat arises to face humanity—and arise it will — we come together as a single, sentient species with the single purpose of survival, rather than allow ourselves to be fettered by the artificial constraints of political and financial gain. If we don't learn from this pandemic, the next one could turn out to be the Great Filter and we will learn that Homo sapiens have much more in common with the T-Rex than we originally imagined. Now that Pandora's Box has been opened and the virus unleashed (or rather has been allowed to run rampant while we wallow in

the quagmire of bureaucracy), it would be irresponsible and downright naïve to expect the virus to just wither and disappear. Eventually, we will get tired of counting waves and just accept the 'new normal': for your own protection, wear masks when travelling or visiting crowded places. Just like no one counts the ocean waves crashing on the shore, we will soon lose interest in counting COVID waves. What matters is not the number of waves, but that we learn and adapt with each wave to make their effects ever less devastating.

There is still so much for us to discover, as the Latin saying goes: "*Vita brevis, ars longa, occasio praeceps, experimentum periculōsum, iudicium difficile.*" ("Life is short and art long, opportunity fleeting, experimentations perilous, and judgment difficult.") However, by closing ranks to work together in sincere collaboration we shall solve the common challenges we face. There is an elegant Chinese idiom to sum up my efforts at this juncture: **抛砖引玉** (lit. "I throw a brick, hoping to dislodge jade", fig. to attract feedback from others by putting forward one's own modest ideas to get the ball rolling) and so, I look forward to reading the thoughts from others or answers to my many questions.

Stay sane, stay safe and truth be with you!

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