

VIRUS IS a LANGUAGE

COVID-19 and the New Abnormal

Chris Hables Gray

Abstract To understand 2020's pandemic is to see virus as a language we can use. By drawing on viral principles—viruses are infections through information, viruses can be understood only through percentages and exponentials, and viruses are zombies from outer space—the dynamics of our twenty-first-century virus crisis can be discerned, even influenced. The crisis isn't just biological, it is about ideas and how they propagate through, for example, conspiracy theories and inflammatory actions. Viral emotions are integral to what is happening, as attention to both the virus of fascism and fear-based reactions to COVID-19 make clear. The opposite of fear, or perhaps the product of fear sometimes, is bravery. Hope is beyond that. Viruses spread because of their intrinsic properties and the relevant vectors, catalysts, growth mediums, and controls. Our future will be shaped by a wide range of viruses. We know it will be abnormal, but viruses will not act alone. Much of nature, and thus human culture, is beyond the viral. The key issue is control and just what mix of authoritarian control, self-control, and out-of-control (in both senses) we will end up living with.

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Viral Principles

Paradise is exactly like
Where you are right now
Only much much better
(It's a shipwreck)
(It's a job)
You know?
I don't believe there's such a thing as TV

I mean—they just keep showing
 The same pictures over and over
 And when they talk they just make sounds
 That more or less synch up
 With their lips
 That's what I think
 Language
 It's a virus
 Language
 It's a virus
 Language
 It's a Virus
 —Laurie Anderson, "Language Is a Virus . . ."

It isn't just that language is a virus, these days Virus is a language. Virus has told us to constantly remake our world and therefore to accept the latest abnormal. Virus is not just what we talk about, it is how we talk about it. COVID-19 is caused by a virus (SARS-CoV-2), fear is a virus, fake news and scientific findings can spread as viruses, and, yes, in a certain light (looking out the windows of where we might be isolating?) almost everything seems . . . viral.

Is this just the Year of the Virus or is it an age? Is it a metaphor or an explanation? We can't know yet, but clearly we need to think more about viruses and to go deeper: to use Virus as our language. It is a language used across all the natural domains where cybernetics rule, from the not-alive/not-dead of biological beasts such as the fearsome SARS-CoV-2, to the bodies of the bats and humans it infects. It defines the techno-organic systems of high-tech medical research that fights COVID-19, and it makes up the distilled digital nuggets of fake news and scientific reports and all the rest (spread in person, by modern media, or digitally) that infest our brains, becoming part of us.

Sure, Virus isn't the only language we

need to know these days, but it seems particularly relevant to speak it now. So let us start with the origin story. *Virus* is from the Latin, *slimy, poisonous*, as in *venom*. It moved into English in the 1500s, and while first describing biological infections, within a few hundred years a virus could be a poisonous idea as well.

Biological viruses are, to quote Wikipedia, a "tiny infectious agent that reproduces inside the cells of living hosts."¹ They do not have cells themselves, merely a protein coat (maybe with spikes!) around some DNA or RNA, which is injected into the cells of organisms to hijack them into replicating itself. This is all they are, an organic nano-machine, and all they do, replicate. Some scientists say they are not alive, others that they are "existing on the border between chemistry and life," "more like a chemistry set than an organism " or living "a kind of borrowed life" (Villarreal 2004: 101–2).

Computer viruses are clearly not alive, but they are getting closer. They work just as biological viruses do, but with digital algorithms instead of organic nano-machines. Unlike other malware (Trojan horses, trapdoors, etc.), computer viruses are just infection written real, nothing more, nothing less.

Cultural viruses are actually the most complicated of all because the replication processes of culture are so much more involved than those of organic nano-machines or algorithms. But *virus* is still the right term for the spread of simple infectious ideas in commerce and politics.

Whatever the mode, viruses are always about information transfers. And just as cybernetics is about the rules of all nontrivial systems, organic, machinic, digital, or hybrid, the language of virus has principles that are true across all viral domains. Some of the most salient:

Viruses are infection through information; infection is information. They are a distillation of the normal processes of information spread; they are the simplest form of infectious information. Sadly, many human decisions are based on viral ideas and emotions, not reason or a consistent morality.

Humans are the viral measure(ers).

Whether it is biological viruses, computer viruses, or lies or truths or information or emotions spreading, humans are doing the measuring. Even if the virus impacts domesticated creatures (our favorite nootropic vectors the pigs and chickens, to name two) or wild ones (the bats, the pangolins).

And we are flawed knowing instruments. Peer pressure, anchoring effects, social and political biases, and manipulation driven by ambition and fostered by cognitive dissonance have played a major role in the failure of the US response to COVID-19, for example (Aronson and Tavis 2020).

Viruses are about percentages, not absolutes. From the virus point of view, that is. We humans can get absolutely dead.

Viruses manifest exponential growth. The mathematician Keith Devin (2020) says, "Exponential growth is something that the evolutionary development of our brains did not prepare us for." It takes work to think clearly about exponential growth, and it goes beyond solving the lily pond or chess-board-with-rice-grain problems.

All models of viruses are wrong. Because they are models. Because the spread of viruses, and viral ideas and emotions such as fear, also depends on how those models influence the human behaviors that impact the spread

of viruses, understandings of those viruses, and feelings about the viruses and their spread. There is a Heisenberg Uncertainty effect between models and viral spread that impacts humans. As Louisa Cockbill (2020) explains in her article on the COVID-19 epidemic in *Physics World*, uncertainty is intrinsic to the exponential life cycle of viruses.

Viruses need interconnection to survive.

This is not always a symbiotic relationship. When human civilization destroys wild nature, unleashing novel zoonotic viruses on *Homo sapien* immune systems, it is an act of mutually assured destruction, with one exploitive relationship fostering another, in an almost karmic cycle. And ironic, as humans now desperately hunt the parasite SARS-CoV-2 we unleashed so carelessly.

Human understandings, from the scientific to the pathologically illogical, mainly spread today through digitized networks, competing for human attention and succeeding by how well their information can infect the consciousnesses of individual bodies and the body politic.

Viruses are ontologically political. Plagues trump politics.

Viruses are zombies, they are living dead.

They exist only by infecting living or digital cells with their replication machinery and by turning them into a simple army that wants one thing—more brains!

Or more cells to hijack to spawn more viruses to . . . and so on.

Language is a virus from outside space.

As William Burroughs ([1962] 1967) warned, "Language is a virus from outer space." Language, like all other viruses, comes from outside the target system. There were early humans long before there was language. Maybe

language is what makes us *Homo sapiens*. We are symbionts, after all, as are all complex organisms. Since language comes from outside us, it is a prosthesis that vastly increases our ability to expand outward, to extend the human throughout the biosphere, not just human bodies, but our microplastics, the heat of us (global warming), and our hungers (mass domestications and extinctions).

Before language developed in a small band of modern humans and infected the rest of the species, it was not possible to worry about viruses and their principles at all. Language creates a particular model of reality, but it is not reality. Or perhaps it is better to say it is only a slice of reality that particularly interests humans. Even with the magic of story, poetry, and song, words do turn back from many great truths. Still, it is the tool we have here to examine the types of viruses we need to understand most. Not SARS-CoV-2 and its ilk, crucial as it is to know them to defeat them, but the viral ideas that often determine just what we can know, and therefore do.

Viral Ideas

The books were burning badly.

—Manual Rivas, *Books Burn Badly*

As many biological viruses produce burning fevers, cultural viruses can produce the overheated thinking that leads to actual burnings, of books, minds, and bodies. In the case of COVID-19, one snippet of reified fear argues that 5G towers are the actual source of the infection, so across the world they have been put to the torch, with dozens attacked in Europe and over sixty in the United Kingdom as of May 18,

2020. There isn't just one theory behind this. Some attackers claim the virus itself comes from the towers (hard to explain), or the 5G rays weaken us for the viruses, or that the towers are killing us and there is no SARS-CoV-2 at all. And how do they know? Well, on the new £20 note there is a 5G tower! Or is it the lighthouse in Margate, so beloved by the painter M. W. Turner, whose face graces the note? It doesn't matter really. The fear trumps evidence (Subramanian 2020).

This is the kind of nutty thinking that has given conspiracy theories a bad name. But really, aren't most human projects conspiracies? *Con spirare* means to breathe together, and humans are profoundly social creatures. Black Lives Matter is a conspiracy. Fascism was (still is!) a conspiracy. Conspiracy is what humans do. Breathe together. Demand justice, together. Burn books, together. Raise barns, together. Tell lies, together. Do science, together. Commit genocide together. The hard part is choosing the right conspiracies to join, which means choosing the ideas we will propagate and act on. And it is a choice, even if we often default to the simplistic viruses that match our prejudices, mirror the beliefs of our friends, and don't generate unbearable cognitive dissonance.

In his novel about Galicia under fascism, focused on a massive book burning on La Coruña's docks in 1937, Manuel Rivas (1988) tracks the lives of a number of people involved in resisting, or perpetuating, the book auto-de-fé, literally, an "act of faith." Such burnings, of heretics and their books, are about viral ideas, not just eradicating dissident viewpoints, but also spreading fear of the other and fear-into-love for the incendiary authority.

While fascism is a virulent infection indeed, it does not spread easily. As Rivas explains, the infection still lingers

in La Coruña, but it is no longer raging: “The book fires are not part of the city’s memory. They’re happening now. So this burning of books isn’t taking place in some distant past or in secret. Nor is it a fictional nightmare thought up by some apocalyptic. It’s not a novel. This is why the fire progresses slowly, because it has to overcome resistance, the arsonists’ incompetence, the unusualness of burning books” (34). Some biological viruses, on the other hand, spread very easily. Because SARS-CoV-2 is so infectious among humans, civilization worldwide was transformed in 2020. That is what a pandemic does. This transformation has been so great that for some people it requires someone to blame.

So, inevitably, there are many conspiracy theories around the origins of COVID-19. Most involve confusing the occasion with the cause. The shooting of Archduke Ferdinand did not cause World War I, it was the occasion for starting it. Even if this virus escaped from a lab doing animal passage/gain-of-function research (see below), that was not the cause of the pandemic, merely the occasion. The pandemic has been overdetermined for some time because of the proliferation of people, the exploitation of the wild, capitalism, and scientific practice. Civilization produced the COVID-19 pandemic.

If we are to avoid a worse pandemic in the future, we should note some of the major factors behind the danger. In many parts of the world, especially Africa, Asia, South America, and the Pacific, the last remnants of wilderness are being relentlessly consumed by a rapacious quest for wealth, creating an interchange between wild animals, domesticated animals, and humans that inevitably generates new pathogens. Thus the most likely vector for COVID-19 is the wet market in Wuhan, a

product of this dynamic. It is clear from the genetics of SARS-CoV-2 that it is not an artificial virus, it has not been weaponized, it was not engineered.

But it is also possible that it is an accidental release from a Wuhan lab that pursued what is known as animal passage/gain-of-function research. This involves modifying a virus so it can live in a different creature than where it was found. It is common in labs around the world that are seeking to understand and control (as in make vaccines for and, in some cases, weaponize) new xenoviruses. This work happens in Wuhan’s lab, funded in part by the World Health Organization, as it goes on in dozens of labs around the world (Gutlerl, Jamali, and O’Connor 2020). If it were a lab accident, it could just as easily have been a US lab. Will it be a US lab when it inevitably happens next? We can’t know. Systems are not perfect, especially with humans involved. All labs make mistakes eventually.

Gain-of-function work is controversial. A number of scientists have argued that it is too dangerous to do (Duprex et al. 2015). But their colleagues who support this approach claim that it is the best way to develop the understandings that would allow us to fight pandemics such as COVID-19, up to and including producing vaccines.

So the very subculture many of us trust most to help society through this crisis, to help us and our families negotiate the next few years, may have played a role in unleashing it on the world.

In another irony, the success of China’s response to COVID-19 is grounded in their bio-surveillance regime (Hester 2020), which has been under development for years to control dissidents and ethnic minorities, especially the Uyghurs. It includes facial recognition, fingerprints,

and DNA in massive databases that also have been tracking legal and credit information, and even the loyalty (“social credit”) of Chinese citizens.

China is not alone in having in place institutions that will use this pandemic to expand their surveillance. In the West, just as powerful as the Chinese government projects, we have surveillance capitalism (Zuboff 2019; Gray 2019).

Wet market or lab mistake, twenty-first-century human culture produced the virus, which lives in us. It is only natural. So who is to blame for COVID-19? We are. The very civilization the pandemic has disrupted spreads it. After all, spread is what viruses do.

Viral Spread

A pandemic isn't a collection of viruses, but is a social relation among people, mediated by viruses.
—Ian Alan Paul, “Ten Premises for a Pandemic”

All viruses are spread by vectors through growth mediums (hosts) and driven by catalysts. The specifics vary by the type of virus. Knowing this, one can accelerate or resist viral spread. For example, the vectors of SARS-CoV-2 are human transportation systems, gathering spaces (rallies, restaurants, protests, clubs, and contact networks), and person-to-person interactions. The host medium is bodies, mainly humans but also bats, pangolins, and a small number of cats and dogs. Catalysts accelerate the spread of viruses, and they are often human predispositions (habits), emotions, and actions.

With COVID-19, fear, skepticism, and politicized idiocy lead to denial and the failure to follow the social beliefs and technological practices (mask wearing, for example) that can slow its spread. Computer viruses exist in digital systems (their

host) and are spread through emails and social media (vectors) because of human choices (clicking on that unknown link; “1,2,3” as a password). Viral ideas only really live in human consciousness. They vector to it through human interactions, empowered by networks of various types: family, friendship, television, social (digital). Clearly, viruses are crucial in that natural realm that pretends it isn't, culture: fads, marketing, politics.

Ideas, many definable as viral, are certainly one of the major forces that change culture. But they aren't the only shaper, of course.

Many systems are “out-of,” regulated through their own homeostatic dynamics. These include economies, complex human-machine systems (such as factory farms or corporations), and wild nature (Kelly 1992).

Nonhuman nature certainly changes culture: climate, disease, animals, and plants. But most other drivers of change can be traced back to humans. Technology, for example, starts with inventors (who love knowledge or want to cash in), is catalyzed through investors (with an insatiable hunger for profit), and then is promulgated by “super spreader” vectors (early adopters and the early adapters who take up and then mutate the tech for their advantage). We are all trapped in the ecosystem of the semicapitalist political economy of the world today, where competition dances uncomfortably with the massive corruption of parties, be they (once-upon-a-time) communist or (some-day justice) socialist or Republican or Colorado or Democratic or populist or Green.

Capitalism, never pure, is all about accelerating profit, often through new technologies and institutions that destroy old ways of life. “Creative destruction is necessary,” the conservative economists

proclaim, sounding somewhat like Mikhail Bakunin. But anarchists long for justice and sustainability, a certain stability within the chaos of real democracy. Capitalists want (indeed believe they need) exponential growth. Yet on the deepest level, both are emotional commitments.

When it comes to cultural viruses, emotions are an incredibly powerful catalyst. Media interacts with emotions and intensifies their impact (Boler and Davis 2018). Emotions are the power driving fake news (because it certainly isn't logic or evidence), but not just any emotions. Fear seems more powerful than empathy when it comes to reality-free believing. On one level fear can be relatively harmless, if pathetic. Peer pressure, sexual insecurities, smelly bodily recesses are all weaponized to sell things. This is marketing (now using neuroscience to better infect our thinking). Sometimes fads arise out of the chaos of society and aren't even linked to sales.

But fear can be much more powerful. It can paralyze a person, but just as often it turns into aggression. In the United States, terrified gangs of white men with big guns often confront Black Lives Matter and other unarmed protesters. Their fear is palpable. There is always fear, it is infectious. But the unarmed protesters take of their fear and control it, turning it into courage.

Along with hosts, vectors, and catalysts, there are always controls. Controls block infections from hosts, they cut vectors, they repress or even counteract catalysts. Examples include courage, violence, legal systems, vaccinations, quarantine and isolation, and surveillance. Collective self-control is called community, even democracy. Thought control can be self-control, or it can be external, so-called mind control, or its weaker cousins:

manipulation, seduction, selling. If we can manage our fears, we can pursue our dreams, we can valorize our better angels. We can decide to follow the advice of scientists and doctors. It doesn't have to be others controlling us—demons or angels, demagogues or heroes.

In themselves, viruses are not good or evil. A virus can be a control or a catalyst or a vector for another virus. Sometimes viruses are best for controlling viruses, as with vaccines. We judge viruses from our human perspective: good, bad, or indifferent. Even biological viruses can be positive, they can be good for us and the rest of nature. They aren't just parasitical, as the definition claims: "Viruses are simply nonliving parasites of living metabolic systems" (Villarreal 2004: 103). They can be symbiotic as well.

Viruses as vectors play a major role in genetic engineering, allowing us to rewrite ourselves. As symbionts they play a key role in the carbon cycle of the oceans and the life cycle of parasitic wasps. They are also a driver of evolutionary change. Viruses help spread genes between bacteria and vertebras, for example (Villarreal 2004).

Since computer viruses are made by people, some people must want them to exist. Most are criminal (parts of ransomware, for example) or playful. But Stuxnet, which targets uranium enrichment centrifuges, is a pretty popular virus among a wide range of soldiers and pacifists.

When it comes to viral ideas, many are quite defensible: "Wear a mask!" "Black Lives Matter!" And many are not. The competition between viral ideas is a central part of how culture works. Their struggle will play a large role in determining our future.

Viral Futures—The New Abnormal

I think that loss is real and accelerating, and there will be no *status quo ante*. There will be no going back to a prior state. The new equilibrium points will be different, and they will be worse in all kinds of describable ways. I'm talking biologically right now. So I think that extinction is real and accelerating, and anyone who thinks that there's a techno fix is in a state of abstract denialism.

—Donna Haraway, "The Best Possible Now"

The new normal is there is no normal. It is all abnormal from now on!

Stop whining, it's postmodernity. Even the "normal" of modernism was relentless change. And yes (with apologies to Heraclitus), we can never step into the same pile of dog shit twice . . . Each time it is a different pile of dog shit, in that the life in it (yes, cute little bacteria and undigested worms and . . .) keeps changing, maybe dying since you stepped on some of it, and so on and so on . . .

Sure, the only constant is change, after all. But this is different. Humans have taken our own little corner of reality, massively messed with it, called it culture (or even civilization), and it turns out it is a change machine. Yes, life is based on change, circle of life and death, cue the Lion King theme, but biological evolution has a leisurely pace. A little natural selection here, a little natural selection there, and in a million years you've got something.

But what if it is some clever naked apes, tinkering with life like they do leather, wood, and stone? Artificial selection is so much quicker. Twenty thousand years and you've made of noble wolves toy dogs fit only for the purses of the rich. And that is only biological evolution.

Cultural evolution is much faster. And it has made it possible to have

participatory evolution, as in yummy genetic engineering, now even CRISPR! And as humans metastasize across the planet, we've opened our overextended selves to new beasties that live in the flesh of wild and domesticated creatures. So, our new abnormal.

Which isn't normal at all. And it won't get back to the normal 2019 ever. And was 2019 normal? In what way was it normal? No new transforming technologies, no crazy never-seen-before politics? No records set in climate change, mass extinctions, energy consumption, information processing, human population?

The concept of the "new normal" was first put forward in 1995 in Oklahoma City to describe what it was like in the aftermath of the bombing of the federal office building by right-wing terrorists that killed 168 people. It was revived after 9/11 to address how it felt to live in a world where such things happen. But, of course, such things have been happening for millennium, just not lately in Oklahoma City or Manhattan. These "new normal" experiences for Americans were not new for most of the world. Terror bombings, high security, epidemics, medical crises, mass extinctions, relentless technological change . . . This is the world we live in. This is the world we have always lived in.

So no more longing for the old normal or a new normal. Time to focus on what new abnormal we want. After all, it could be better than anything we've ever had.

Or it could be worse. Five years before COVID-19 began seeping through humanity, RHDV2 emerged among domestic rabbits in Europe. Seventy percent of infected rabbits die within a few weeks, from internal bleeding and liver failure. It has killed millions of rabbits, and hundreds of thousands of their predators have also

died from starvation. There is no treatment; there is no vaccine. Not only is it quite deadly, but it has high transmissibility and hardiness (Gammon 2020).

COVID-19 is very transmissible, and it is debilitating across a wide range of body systems, but it isn't as deadly as RHDV2. But we are no better than bunnies. A potentially much more deadly pandemic is almost inevitable, and even if we learn enough from fighting COVID-19 to avoid the fate of the rabbits, it isn't the only ultimate crisis humanity faces as fallout from our own great success. There are at least two others: general nuclear or biological war and global warming/the sixth great extinction.

Both are driven fundamentally by exponential dynamics. Apocalyptic war is only possible because of the tremendous growth of weapon lethality, based on the continued expansion of science and technology. And as for global warming/sixth extinction, we have only our own reproductive and lifestyle successes to blame, also fostered by our ever-more powerful sciences and technologies.

Some people bristle at the ubiquitous pandemic claim that "we are all in this together." "No we aren't," they say. And they have a point. Those who have to work, the poor, the homeless, people of color, all suffer disproportionately. Still, in the final analysis, we are all in it, even if the 1 percent might actually believe they aren't with us (despite saying it all the time through their corporations and sinecures up on the commanding heights of society). But while some can hide for some period of time from most of the direct consequences of this pandemic, and even of its underlying causes, in the long run, none of us can hide from the pandemic, from total war, from ecosystem collapse.

Viruses are agents, but their agency is limited to replication. We have much more interesting agency. We can make viruses, change viruses, and transform the context and criteria that allow viruses to thrive or that make them die. Because viruses do propagate, and they do die out within systems: biological, digital, social. It is a problem of cybernetics. It is an issue of control and just what mix of authoritarian control, self-control, and out-of-control (in both senses) we will end up living with. The many can end the authoritarian control of the few if we control ourselves, while at the same time no longer pretending that we are in absolute control of the vast natural out-of-control systems we are part of. We have to control the velocity of the changes we provoke.

Exponential growth is at the heart of the danger; exponential growth is part of the hope. Just as we fear the speed of the virus, we hope for speedy vaccine development and a massive growth in vaccine production. But we also need to slow down. Yes, Virus is a language, and we need to know it, but we need to speak a more complex tongue, one more beautiful than the simple verb/object sentences of Virus. Humanity needs a common language that isn't just about infection and reproduction, that doesn't focus on relentless growth. We need a lingua franca that reflects the complexity of life and the diversity of nature. It needs to be sustainable, just, and self-correcting. Science is certainly part of this, but it isn't enough alone. We also need to draw on ancient discourses, in religions and philosophies, for community and love. We all die alone, but we must live together. We'll live longer and better if we accept this and learn to trust, even love, those who are with us on that singular journey we call life.

Note

1. *Wikipedia*, s.v. "virus," accessed November 2, 2020, en.wikipedia.org/wiki/Virus.

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