
III. Discovering Real Human Potential

Schiller Institute International Youth Conference

The World Has a Choice: Extinction, or Era of LaRouche

September 26, 2020

PANEL 2

The Science, Culture, and Great Projects of A Global Renaissance

We present here edited transcripts of two of the speakers at the second of two panels of the Schiller Institute conference. A report on the conference, and edited transcripts of the keynote by Helga Zepp-LaRouche and two other speakers on the first panel, “The World Needs the Exoneration of Lyndon LaRouche,” was published in our last issue. The videos of the conference are available [here](#).

Chérine Sultan

Creativity in the Age of Artificial Intelligence

The following has been adapted from a speech delivered at the Schiller Institute’s International Youth Conference, September 26, 2020. Ms. Sultan is a youth organizer in France with the LaRouche movement there.

What is next-generation addiction?

Neuroscience experts have succeeded in removing our “stop button”: our ability to stop ourselves and change what we’re doing—to combine our *will* with our *action*. For example, young people spend hours on TikTok watching videos that are less than a minute long! There’s an irony here: after inventing the application, we had to add an option to block it after 45 minutes of use.

People are able to spend whole days (and nights) in



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front of the television watching TV series that don’t provide any satisfaction. “It sucks, but I’m going to watch the next one”—how many times have you heard that? We fall into the trap because the script and the editing do everything possible to put salt on our tongues and create the desire to see what’s next. The definition of an addiction is to continue to practice an activity or consume a product to the point where, though we no longer feel pleasure when we consume it, we suffer when we cease to consume it.

The feeling of *cultural* suffering comes from our inability to regain control over ourselves. It is expressed by the victims of digital technology who recognize very well that they can no longer restrain themselves from giving in to the temptation to connect to a screen: “We

know it's not good for us. We know, but we do it anyway.”

We are less creative when we fall into this addiction, and that's exactly the intention of the oligarchy. Here we'll examine how consistent the digital giants are in using an anti-creative means for an anti-creative purpose. That, however, was not invented with the digital world and screens; the ancient theater already used this weakness to distract and entertain the Romans, which is the origin of the expression “bread and circuses.”

Reactivating the ‘Stop Button’

How can we break out of this? Moralizing is, in itself, useless, because the “stop button” is no longer controlled by our will, that inner moral sense which says, “I *know* it is not good.” The external moral pressure of a friend who compassionately advises us to “turn off the screen” will therefore also fail to be effective.

However, sometimes, to love one's neighbor is to give him or her a friendly kick in the ass. Do you know the story of Alypius, Saint Augustine's friend? He always refused to go to see gladiatorial fights—until one day a group of friends dragged him, almost by force, to the colosseum. His hands, which were hiding his eyes in the hope of sparing him from this horror, were not enough to protect his soul. Once he looked upon this terrible spectacle, he joined in with the bloodthirsty crowd. Afterwards, his mind was incessantly brought back to recollection of this circus, making it difficult to focus on his studies with Saint Augustine. Having given up all hope of changing Alypius, Saint Augustine mocked the spectators by comparing them to slaves—and the young man's stop button started working again.

In the case of Alypius, reason eventually regained the upper hand because he had previously had access to something other than the circus. Therefore, for children—beings whose emotions are on a roller coaster and for whom a relaxation valve is needed—their level of autonomy and intellectual experience requires that their parents offer them activities and leisure time which are enriching and regulate the duration of their entertainment.

After a certain age, the solution is different; it is more demanding and difficult to implement. The emotions of young adults may still be on a roller coaster, but their intellect begins to exceed the limits it had in childhood. The intellect no longer asks to be relaxed—it asks, more and more, to be developed and challenged. That is why the duration and type of entertainment that satisfies a child no longer satisfies an adult: We want our entertainment to feed us intellectually as well. For example, many people love Netflix because it offers enriching stories.

The issue of popular culture among both young adults and adults today is in line with what many recognize as the harmful effects of consumer society: the desire to enrich oneself personally while doing nothing for others. In the realm of culture, however, it is much clearer that we will not enrich others by reducing our own consumption. Therefore, we must re-examine and rethink the *production* of entertainment culture.

Indeed, what seem to be the more intellectual parts of our culture are also traps, capturing many of those who claim to think outside the box because they read “alternative” authors and watch “dissident” channels. They do not question the way of thinking that is induced by both of these cultures, popular culture and dissident culture. Namely, pessimism. We will come back to this, but we can already say that the alternative to “addiction 2.0,” to restore this “stop button,” is *engagement*.



Painting by Benozzo Gozzoli

The Conversion of Augustine of Hippo shows him reading the Letter of St. Paul to the Romans. The figure at right is probably Alypius.

Activating the Mind

Do you know how much of the world's electricity consumption is used by the digital sector? Ten percent! In terms of greenhouse gases that is equivalent to the aviation sector. Therefore, when I hear people say that the pandemic lockdown is a godsend for the planet, I laugh, because all of people's activities have now been transferred to their screens—both for work and for leisure. Many young people have even told me, “You know, Netflix has been very useful to us during quarantine.”

How is all of this electricity used? Primarily for data transfer and storage on servers.

A few figures to illustrate my point:

- Online videos, across all platforms, account for 75% of internet traffic (estimated to become 82% in two years).
- Netflix is 13%, YouTube 9%, Facebook 3%.
- A 10-hour HD video (a 1- or 2-day conference) requires as much data as the entire English-language Wikipedia.
- In France, four companies account for half of the data flow, including Netflix, which accounts for as much as the 3 others—Google, Facebook, and Akamai Technologies, which hosts many websites.

How is all of the data sent by these platforms, used? Their profits come from advertising. Advertising targets the individual user, which means advertisers need to know the user’s tastes. So, the more videos viewed, the more data on the digital preferences of users is analyzed, and the more power there is to display relevant advertising. This leads to more views, which leads to greater need for advertising funding. It’s a dog chasing its own tail!

Reed Hastings, the founder of Netflix, admits: “We are competing with sleep.” Their street campaign, “Metro–Work–Netflix,” was well thought out. This expression replaces the refrain, “Metro–Work–Sleep,” that dulls the worker. This is not about to stop, since the traffic increases by 25% per year—that is to say it doubles in three years and triples in five. We have entered the era of Dataism.

Social Control: ‘To Govern’

Advertising, however, is not enough. How do digital platforms work to get you hooked? Do you know the names of the weapons that destroyed your “stop button”? There are two techniques, which work together:

The infinite: The infinite thread that runs along your wall on Facebook, as well as the auto-play function in YouTube or Google that automatically launches the next video.

Similarity: Notifications and recommendations of similar content that lock you into what you already know and like, although by calling them “suggestions,” they make you think you are going to discover something new.

Similar; this last word, is important. It was taken from the anti-creative principles of John Locke’s ideas

of “contact, similarity, and cause and effect.” Similarity, combined with infinity, is the key to the success of cybernetics.

Have you ever heard the term cybernetics? It comes from the team of Norbert Wiener, the character to whom LaRouche gave his first fundamental refutation. I encourage you to study this story, which raises the question of human creativity with great scientific rigor.

Simply put, Wiener sought to create a program that could predict human behavior in situations he called “non-linear.” By non-linear he meant that unlike repetitive mechanical systems, humans make decisions according to their free will. So far, so good.

In the case of free will, by definition, a choice must be made. In terms of communication, this new choice corresponds to a lack of information. It must be translated into information in order to be able to make a prediction, and must be verified by feedback.

To demonstrate his case, Wiener uses the argument of statistical gas theory, which leads to entropy. Entropy is equated with disorder, i.e., a lack of information.

I’m sure I have lost you because these notions are a bit abstract and complicated. Perhaps you are content to stick with what you understand—namely, the notion of free will, a concept that was challenged in the middle of the 20th century when

our friend Wiener was writing. So, you are satisfied, because we have a program that recognizes free will and takes it into account in its predictions, and this program was created by very high-level researchers, at that. This is the pinnacle of democracy and progress!

But wait a second. I would like to make a point about free will. In cybernetics, free will is actually limited by the programmer, who integrates limited and pre-existing types of decisions into his analysis. How could it be otherwise? Eventually, you have to create a program with what you know.

The program’s output is then made by the theory of probability and statistics. Which decision is more likely to be chosen over the other? In order to have ever more accurate results, the machine must integrate an increasing amount of data. If there is an error, the programmer will conclude that the data is insufficient. Once again, the dog is chasing its own tail. A type of sub-employ-



Public domain

Norbert Wiener, who sought in vain for a computer program that could predict human behavior.

ment has been created for this: the clickers, who have to correct the machine to help it learn better (in what is called “deep learning”). There are plenty of other digitally related under-jobs like picking up someone else’s takeout order, or delivery people, which are depicted in movies like Ken Loach’s *Sorry We Missed You*—and the irony is that you can stream it, or order it on Amazon.¹

In your opinion, what are the goals of cybernetics? Cybernetics comes from the Greek word *Kubernetes*, which means to govern.

We’ve already discussed the commercial motivation: selling products is nothing new.

However, another admitted aim of Netflix has a political effect: putting people to sleep, diverting their attention. Yet another aspect is social control. This includes surveillance, which doesn’t worry everyone. Some think, “Yes, but I have nothing to hide. Watch me, watch what I do. I attend protests, you must know that.” I sympathize with this state of mind, but beware—social control means more than surveillance; it means also orientation, the act of inducing people to think a certain way.

In advertising, they don’t just want to monitor your tastes to sell you what you already like, but they also predict what you *will* like before you know it yourself. Likewise, with pop culture, they don’t just want to know which TV series will keep you glued to the screen and distract you from resistance and political action; they’re also going to convince you to have certain opinions, even before you formulate them—giving you no opportunity to understand how you will have arrived at that sort of conclusion.

The Spirit of Creative Hypothesis

What is the oligarchy’s favorite target for inducing us to think a certain way? Destroying optimism! It is your vision of the world that determines whether or not you are driven to take action. More fundamentally, at

1. By way of an aside on the problem of data and quantity, one can imagine a reason why the Trump administration wants to ban TikTok and WeChat: Beyond the fear of espionage and interference, there is, above all, the fear of giving China access to an ocean of data that could allow it to make breakthroughs in artificial intelligence.

what level will we intervene: on the level of causes, or their effects? Yes, the consequences of the pandemic are catastrophic. Yes, man destroys and does harm. Yes, the *effects* are bad, and we must act on the consequences to reduce the negative effects.

But is this the level at which we can act *sustainably*?

Act, if you have the physical and moral energy to do so, in the humanitarian and social fields—yes! But can you imagine that one day you will feel frustrated, because your actions, even if they are multiplied tenfold by the commitment of several people, will never be enough

to stop the machine of destruction, and your energy will no longer be enough? To really change things, you must focus on the *causes*—and don’t give up. This is the mission Lyndon LaRouche gave us. Act on this level—three thousand times, yes!

The true role of science is to understand the causes of the phenomena of our universe. From this point of view, because of Norbert Wiener, the neurosciences are anti-scientific because they seek to interpret human phenomena by observing them electrically and translating them into digital language. Is this how creativity works?

The astronomer Johannes Kepler (1571–1630) did some-

thing unimaginable in his time: He proved that planetary motion is not in a circular orbit—despite the circle being the perfect shape, and the popular belief that the heavens must be perfect because they were created by God. Kepler revolutionized science, and he did this using a very small number of measurements. Three points give a circle, and any set of three points gives a unique circle. It took Kepler only a fourth measurement from a different circle to prove that the motion produced by the planet can absolutely not be a circle—the alternative being that the planet’s orbit would be constantly changing circles!

Kepler’s contemporary, the prominent astronomer Tycho Brahe, knew that his data, his observations of the planets, could not be reduced into one or another system among the existing orbital hypotheses. Brahe was forced to tinker to hide the apparent anomalies in the data. However, the “anomalies” were not really anoma-



Johannes Kepler proved that the orbits of the planets are not circular.

lies: Rather, it was the way of thinking that was an anomaly! Once the true path of the planet was understood, the “anomalies” became very coherent.

It is the spirit of hypothesis that allows every human being to have an approach, an intention, in gathering data and sorting through existing measurements. This allows us to save calculation time and to compose a crucial demonstration of a principle. A computer is devoid of this capacity. It may have an immeasurable computing capacity compared to humans, but its method of calculation will never unlock a demonstration of principle.

In fact, it is futile to try to prove anything with a computer, since the very principle of demonstration is the search for truth. Do you think that a computer has the slightest idea of what truth is? Does it have the idea of an idea? What is a circle? Is a circle a set of points? No, because between two points there will always be a space, whereas a circle is an unbroken line. It is a motion, something that has no meaning in the world of the computer. For such a system of calculation, even a circle doesn't mean anything; all that makes sense are points defined by coordinates.

By extension, the human mind will never be understandable by a machine. This is the strategy to flank the digital giants—Apple, Amazon, Google, Microsoft, and Facebook—whose aim is to divert us from creativity. Creativity is incompatible with statistical and probabilistic systems. This is how LaRouche refuted Wiener.

In the period 1948-52, while studying mathematical biophysics, LaRouche noted paradoxes in models of living processes.

I quote LaRouche from his [autobiography](#), *The Power of Reason: 1988*:

The living process continues to function beyond the point at which ordinary mathematical analysis ceases to be able to follow development. Thus, I reasoned, there must be a higher order of function, in which ordinary mathematical functions are special cases.

From his work, LaRouche concluded the following:

The fact that I understood Wiener's error is the key to my discoveries in economics and consequently to everything that has made me influential internationally.

The joke in all of this occurs when a principle is discovered even before having observed the data corresponding to it. This is what Albert Einstein did with general relativity: He hypothesized a phenomenon that could only be observed a century later, with gravitational waves. A machine could never have achieved this. Here is the other joke: Do you know who imagined the first calculating machine? Johannes Kepler and his friends.