

LaRouche's Discoveries: Educating a New Generation

by Megan Beets and Jason Ross

Megan Beets and Jason Ross are members of LaRouche's "Basement" Science Team. We present here their edited remarks as prepared for presentation on Nov. 16, 2019 at the Schiller Institute Conference, "The Future of Humanity as a Creative Species in the Universe," in Bad Soden, Germany.

Introduction by Jason Ross

Lyndon LaRouche, who passed away earlier this year, engaged in significant work in many fields, as we have heard and will hear at this conference. In this presentation, Megan Beets and I will treat LaRouche's work in science, with specific focus on a scientific research project in which we both collaborated with him—the "Basement."



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Megan Beets and Jason Ross, members of LaRouche's "Basement" Science Team.

We will talk about LaRouche's work in science and science policy, discuss some of the scientific topics he considered most important, address their relevance to

economics, take up how they were used to recruit young people to his outlook, and discuss the relevance of the issues he posed to science today.

LaRouche showed that economic improvement required an increase in what he termed energy flux density—the intensity of energy flow as measured with respect to power production, industrial application, and the economy as a whole. Because of the tremendously higher levels of power involved in nuclear bonds than chemical bonds, the next level of human economy must be based on the power of the atom, and the greatest technology on the horizon for improving the energy flux density of human economy is nuclear fusion.

LaRouche was a tireless champion of research and research funding to make the new scientific discoveries in plasma physics, directed energy, and nuclear science required to achieve this power source of the future. He directed the founding, in 1974, of the Fusion Energy Foundation, whose U.S. magazine *Fusion* reached a subscriber base in the tens of thousands before being shut down through a government bankruptcy process that was itself later declared illegal.

In his work with scientists in the fields of nuclear fusion, plasma physics, and space exploration, LaRouche was adamant on several topics:

- Truth does not come from the senses: it is not determined by modeling observations. It comes from hypothesizing *causes*. Plato is right, in opposition to Aristotle. Kepler's discoveries are a key example.
- The human mind cannot be comprehended either as a purely biological process or as a complex computing system. G.W. Leibniz is right, and Yuval Noah Harari is wrong. Cusa is right, in opposition to Norbert Wiener.
- Quantum physics is not the final word; it is not complete. Einstein is right, in opposition to Heisenberg and Bohr.

The shutdown of *Fusion* magazine, and other LaRouche publications, was part of a process culminating in the fraudulent conviction and imprisonment of LaRouche, in 1989. After his 1994 parole from prison, which was achieved through an outstanding effort involving the signatures of hundreds of elected officials and thousands of community, religious, business and other leaders, and the 1999 conclusion of his parole conditions, LaRouche was free to recruit a new generation of thinkers to his ideas.

This he did by recruiting young people to a process

of political action and of discovery itself, to forge a cadre of competent political leadership among the then-rising generation. As part of this process, he created an educational program that far exceeded what could be achieved in typical university approaches, through a process he termed the “Basement.”

These are the topics of our joint presentation. I'll now turn things over to Megan Beets.

Mind Per Se, by Megan Beets

LaRouche audio clip from December 14, 2011
Weekly Report:

Our functional form, the creative powers of mankind, are completely different! They're not based on what biology teaches us! This has nothing to do with biology the way it's understood! The human brain is *not* the source of human intelligence: It's the human mind! The brain is a tool, used by the human mind!

But we believe in what we see! We believe in what we can touch and see, by our standard. We don't consider the fact that there's a process going on of a much higher order, which is actually the function of the human mind. And the function of the human mind can be defined, precisely. But it can not be defined by the ordinary biological terms of life. Show me human creativity in a biological system, in a human brain system. Creativity, as such, does not exist. No animal has creativity, hmm? They have only biological development.

Only the human being, of all creatures we know, has the voluntary capability of transforming the functional nature of the human being! This change in the functional nature of the human being is located in the concept of mind, *not* the brain! The brain is a tool, used by the mind! It's a necessary tool, used by the mind, but it is not the location of the mind. And it's precisely that problem of failing to distinguish the brain from the mind: The mind is the essential element, the brain is a necessary tool of the mind. Creativity is in the universe, true human creativity is in the universe. It's expressed by the function of the brain, the mind, and so forth, in the individual.

What you just heard Lyn discuss is, in my view, one



EIRNS/Delonte Bess

Lyndon LaRouche meeting with some LaRouche Youth Movement cadre at his home near Round Hill, Virginia on April 11, 2007.

of his most important contributions to science and to human thought, generally: the subject of the human mind, *per se*. This concept is one into which he developed increasing insight over the course of his life, and one on which he placed great importance in his work with the Basement.

The human mind is not produced by the brain. It is not replicable by computer systems, no matter how complex. There is a *function* of the human mind which cannot be accounted for by or located within either of these lower domains.

Lyn was convinced of this very early on, as we see in his 1950s opposition to the views of Norbert Wiener, whose theory of cybernetics claimed that all human and biological communication could be replicated by computer systems. LaRouche writes of this in a 1993 [paper](#), “On LaRouche’s Discovery”:

Any idea, in its guise either as an original discovery, or in its transmission *de novo* as it might have been an original discovery, cannot be transmitted as a literal intent of the language-medium employed, but only as the intent which reposes in the individual user of that language. The idea

cannot be addressed by any formal analysis of the language-medium employed. This predicament is a consequence of the fact that any true discovery corresponds to a formally absolute discontinuity in any system of deductive representation previously employed. Relative to language as such, true ideas lie only in the individual, creative mental processes of each person participating in the communication.

By that statement, Lyn placed himself in, and perhaps at the head of a long line of great minds from Plato, to Nicholas of Cusa, Johannes Kepler, Gauss, Riemann, Bach, Beethoven, Planck and Einstein. All of these important thinkers maintained, explicitly or implicitly, that it is the nature of the human mind to generate thoughts, creative hypotheses, that are not and could not have been derived from the experience of the senses, but come rather from our own inner conviction, our own imagination. The “miracle,” to borrow words from Einstein, is that in some cases these thoughts of ours have a correspondence to the way the universe actually works. They become the basis of scientific progress.

On the other hand, what our senses show us, Lyn asserted, are mere shadows. The seemingly concrete objects that we see, or hear, or touch—are they real? Well, yes, in that our senses are reacting to something real, a process, which is really affecting them. But is the object that our brains conjure up in response really an image of the principle itself? Perhaps a different way to ask that is: What is more real—the *fact that*, or the *reason why*?

Let's examine this a bit. A principle of nature is a type of "object," so to speak, which lies beyond that to which our brains—our senses—have direct access. It has neither size, shape, color, nor mass—and yet, it has a power to cast shadows, to shape processes of change throughout the entire universe. How, then, can we come to "see," to know, a principle itself?

Lyn's philosophical enemies—Aristotle, Sarpi, Newton, Decartes, D'Alembert, Laplace, Euler, Russell—said that you can't! That it's meaningless to ask such a question, because the human mind is an epiphenomenon of the brain; it is nothing but a blank slate, which, over time, is written upon by sense impressions. All that we can do, therefore, is use logic, mathematics, to describe the relations among these sense perceptions, and sometimes if these relations are consistent, we set them down in laws. (Like the 2nd Law of Thermodynamics, which Lyn had such fun attacking throughout his life.) This evil view is one which relegates man to the level of a clever beast.

As Lyn insisted, the human mind *does* have a power to know principles—not via our senses, or logic, but through leaps of hypothesis, prompted by the *contradiction* between sense impressions. I'll give you an example that Lyn used often, especially around the Kepler project, which he assigned the first two Basement teams: sight and sound.

Johannes Kepler's first hypothesis, in 1596, of the universal principle governing the Solar system was that the structure of the planetary orbits—or, the reason each took its particular distances from the sun and not other ones—was coherent with the principle expressed in geometry in the five platonic solids. This is a principle of the organization of space accessible to our sense of sight. Here you see a nested series of the five solids, which create a unique set of distances from the common center, represented here by the spheres which inscribe and circumscribe each solid.

Kepler, who was 25 at the time, knew that although

the proportion of the planets' distances matched those dictated by this geometric principle very closely, they were not a perfect match. There were discrepancies. He also knew that his idea of the Sun *causing* the planets' motions needed further refinement. It took nearly 25 years to solve the paradox.

In Kepler's last major work, *The Harmony of the World*, he demonstrated that the distances of the planets—while still reflecting a geometric ordering principle—are not the primary parameter. Rather, the distances are a function of their motions, and the reason the planets take the particular motions they do, is because as a system the planets' motions reflect the same tempered ratios as those found in the developed major-minor musical system, a tempered system later demanded by the compositions of Johann Sebastian Bach.

That is, each planet's changing motion corresponds to a pair of notes of the major or minor musical scale—a principle of the organization of space accessible to our sense of hearing. The planet sings its notes in harmony with itself and its neighbors, making slight adjustments to its tuning, just as a choral singer must, in order to be in tune with the whole ensemble. This is a physical process, which cannot be represented in a fixed mathematical way, but ask any choral singer, or orchestra musician, and they'll tell you it has a definite, knowable existence.

What do these two incommensurable but overlapping domains of sight (geometry) and sound (musical harmonics) tell us? Is the Solar system a geometric system? Is it, rather, a musical system? Perhaps the best answer is that the Solar system is reflective of both, but *is* neither. The way Kepler resolves this contradiction is by putting himself—and hence also you and me—in the shoes of the Creator. Can I conceive of the single creative action, or thought, that would of necessity unfold into this set of planetary motions? Can I think the thought of God, something which cannot be seen but only experienced in the mind, that must be casting this shadow into the physical universe?

Kepler's new hypothesis which we today name universal gravitation has given mankind incredible new powers in and over the physical universe. The human mind, as a unique category of creative process which uses the brain as its infrastructure, can develop new ideas which resonate with the universe in such a way that we increase our abilities within it. This, upon which

Lyn put primary importance, is the basis of science, of poetry—and of economics, as we will now hear from Jason.

LaRouche-Riemann Method: Senses vs. Discovery, by Jason Ross

Science is the key to our human ability to improve our living from one generation to the next. LaRouche understood the implications of this in a new way.

In the 1993 article Megan quoted from, in which LaRouche described his central economic discovery and his creation of what he termed the LaRouche-Riemann method, he wrote:

The central feature of my original contribution to the Leibniz science of physical economy, is the provision of a method for addressing the causal relationship between, on the one side, individuals' contributions to axiomatically revolutionary advances in scientific and analogous forms of knowledge, and, on the other side, consequent increases in the potential population-density of corresponding societies. . . .

These discoveries were initially the outgrowth of 1948-1952 objections to the inappropriateness of Norbert Wiener's application of statistical information theory to describing both the characteristic distinctions of living processes and of communication of ideas. I countered with a contrary, non-statistical definition of negentropy. . . .

That was the initial core of my discovery, up to the year 1952. Yet, up to that point, the appropriate mathematical representation of such a form of physical-economic negentropy was still wanted. The third step, taken through an intensive 1952 study of Georg Cantor's 1897 *Contributions to the Founding of the Theory of Transfinite Numbers (Beiträge)*, opened the doors of the transfinite domain upon a fresh insight into relevant features of Bernhard Riemann's contributions. Thence, the applied form of my definition of physical-economic negentropy acquired the title of "LaRouche-Riemann Method."

So what was Norbert Wiener—the author of *Cybernetics*—so wrong about? How did LaRouche's disagreements pave the way to his reconceptualization of economy from the standpoint of Riemann?

Wiener considered communication of messages to be a key to understanding the behavior of mechanical systems, of biological systems, and of human society and thought. But "information" absolutely does not apply to the creative discovery process, or to the measurement of economic value! Let's consider the nature of an *idea* embodying a new, creative discovery of principle.

We begin with a chart of human population over historical time. There is no animal species whose population has changed in this way, and none whose population has changed by its own self-generated change in behavior and relationship to nature. And that's a good thing! Anyone who thinks we shouldn't change and improve our relationship to nature is an idiot.

LaRouche: We have to get rid of all these characters; all people greenies, who say they're scientists, must be expelled from the profession.

Because they're committing a fraud! Any greenie who says he's a scientist, *per se* is committing a fraud by his mere existence.

Ross: Because we know that we have a basis of science, that has to include human development. So if you excluded that, or said that's an evil thing, then you can't be a scientist.

LaRouche: No, you're not, you're a faker. If you believe in the green policy, you're a faker as a scientist. Anybody who believes in the green policy is a faker, if they claim to have scientific capabilities. If they want to say they're stupid, well, fine, say, you are stupid, that's true.

Bill Jones: Well, they claim to say they're trying to maintain and continue existence in a universe which they deny has a principle of continued existence in it.

LaRouche: It's all gibberish! It's all just plain gibberish. No truth to it—they're idiots! To any professor, you say, "Oh, no! You mean, you're Professor Idiot. You got a professorship in idiocy."

Sorry, greenies—we are not animals: we *are* able to develop conceptions that go beyond the senses: concepts/theories which themselves embody something of the unseen causes of natural phenomena, rewarding us with the power to bring about new physical states, new processes.

Let's hear from LaRouche on this:

LaRouche: But, then we realize that these senses are not really truthful. They're not dishonest, they're not false; but they're not truthful to the sense that we believe in them. Because what we actually do, as is beautifully illustrated by the work of Kepler, both with the whole idea of the "vicarious hypothesis," but then, the application of that same principle to the discovery of gravitation. Because you take two sensations—one, principally sight; the other music, harmonics—and you contrast them. Now, what's the relationship of gravitation as a concept to these two sense-perceptions that you employ to define gravitation? And what is the genius, now, of Kepler? Because there is no deductive relationship between sense-perception and gravitation.

So these kinds of aspects of fundamental scientific discovery indicate that the human mind is located in solving the problems which are represented by sense-perception. The principles that you discover are not located in sense-perception. But it's like a shadow—sense-perceptions are like a shadow-like reflection of reality.

And my thesis, the whole thesis is essentially that core point. That we exist—that is to the extent that we, who represent the mind—not the shadow—we, who represent the mind, find our identity in what we call "scientific discovery," as contrary to sense experience. And so it's the same function by which we discover a principle, as such, as a principle: Which is the location, or should be, the location of our sense of personal identity, is the act of discovery, as typified by Kepler's discoveries, which is a perfectly good example of this, because he was so extensively painstaking, in dealing with this question, this question of gravitation; so extensive, that you actually, with him, you are re-living his process of discovery! And this process of discovery, say, "That's him!" That's his identity, that's his personal identity, is this discovery.

And there is where the truth lies. Where we slob, who don't think like that, we assume that

the sense objects *per se* are us; that our direct experience, as with a sense object, as such, is us, is our knowledge. Whereas if you think in terms of science, as typified by this case of Kepler's discoveries, first the question—the very idea of the vicarious hypothesis poses a question! And the answer is applied in the concept of the discovery of gravitation. The discovery of gravitation typifies his person, rather than the shadows of mere sense-perception.

And my point is, that if we want to understand ourselves and understand society, we have to think in those terms of reference; think, not in terms of sense-certainty, but think in terms of sense-uncertainty: That what we call "sense-perceptions" are what? Well, we know what they are. Biologically, we know what they are; chemically and biologically, we know what sense-perceptions are. But that's not us.

It's the insight into different, contrasting kinds of sense-perceptions which show you the presence of the universe as an active principle. So therefore, who are you? If you are real, you are the person who is experienced in discovery. And therefore, scientific discovery, in principle, is the essence of human nature, of actually human nature.

Ross: Yeah, and then you say, so, we're going to measure ourselves then, not against, compared to other life currently present, only; we have to measure ourselves against where are we supposed to be going?

LaRouche: Well, which is what are we discovering?

Ross: Yeah.

LaRouche: In the sense of Kepler's discovery is a good example, because, I mean, the extent of his dealing with this aspect of his work, is so rich and so elaborated; I mean, he comments on himself constantly! He's correcting himself constantly. He's conscious of his process of discovery, constantly. He's locating his personality, his actually existing personality, in this, this activity of discovery. Not sense-perception, but saying, "What are these tracks that are being left by this animal?"

It's the process of discovery that is the source of the true sense of human identity. It's that

meeting of creativity, is the definition of man as a creative creature. And when people going around measuring things in terms of sense-perception, and saying sense-perception is sense-certainty, is where the great error occurs. It's how people stupefy themselves.

When you take the case of Kepler's discovery of gravitation, and then you take all these shitheads, who—you know—take Newton or some other crap artists, or that collection of crap artists, and you're seeing what the problem is. It's a moral problem, essentially. It's a loss of access to a true sense of human identity.

Your nature is not sense-perception. Sense-perception is the footprints of the animal; it is not the animal.

And that's the point of the whole thing, the whole argument, the core point. And then look at this from various phases, to try to make it clear by taking various phases of that question. It's like on the fourth principle, it is actually that. That's the thing you have to—you have these three different senses which are wrong. But then, how do you find the truth? You don't find another sense, you find something which replaces sense-perception, which is the solution of the acronym that's in sense-perception. So the sense-perception's—the three categories of typical sense-perception are false, as information. They're shadows, they're not things, they're not real.

But then, there's the fourth thing, which is, again, in the Kepler case, is his discovery of gravitation in particular. And Einstein's understanding of Kepler's discovery is typical of the same thing: How does Einstein identify a universe, which is finite but not bounded? What the hell does this come from? This is an existential statement, that the universe is finite, but not bounded. The same thing.

As we develop this greater understanding, we require the development of a new language, capable of communicating concepts that cannot be expressed in terms of the previous language. Consider these examples:

- Arithmetic consists in adding, subtracting, multiplying, and dividing. Yet no combination of these procedures is capable of creating a square with double

the area of a given square. The language of arithmetic is insufficient and must be expanded, in a way that recognizes the earlier impossibility. The new concept, $\sqrt{2}$, $\sqrt{2}$ acknowledges the impossibility of expression in simpler terms.

- The language of physics—of mass, speed, density, color, hardness, and so on—creates its own limitations in the field of chemistry. Lavoisier's goal of improving the language of chemistry led him to redefine chemistry itself, in a way leading to Mendeleev's redefinition of the language. While charcoal, graphite, and diamonds all have colors, densities, hardnesses, etc., the language of chemistry allows us to say that these very different substances consist of a single *element*, carbon.

Carbon itself has no color, density, hardness, or any other physical characteristic. It has certain susceptibilities of entering into combinations with other elements, and it has, in common with other elements, entirely new properties which do not exist for any compound or material whatsoever. These properties include valence, ionization energy, and atomic mass.

- Once a new physical discovery is made, its communication to others requires a process in many ways identical to that by which the discovery was originally made. Those steps include the recognition of a paradox, the hypothesis of a *required* new principle, and the experimental validation of that new principle.

This process of creating necessary additions to knowledge (and language) through resolutions of otherwise insoluble paradoxes is the method of Nicolaus of Cusa (the creator of the foundations of the European Renaissance), of Johannes Kepler (the first modern scientist), of Pierre de Fermat, of G.W. Leibniz, of Carl Gauss, of Bernhard Riemann. It is also the musical compositional approach of the great composers, emphatically including the founder of the well-tempered musical system: J.S. Bach.

It is emphatically not the communication of "information" as Wiener claimed. Discoveries of this sort require hypotheses, not kissing someone's ass:

Sense-certainty is not truth, it's a phenomenon, not truth. Just the way that Riemann, in front of his friend, his teacher, his mentor, Gauss, was very happy with what he did with his habilitation dissertation. Because it *destroyed everything!* And these idiots, every one of these idiots, and none of these idiots—practically all opponents



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Lyndon LaRouche speaks with young attendees at the Schiller Institute's Presidents' Day Conference, held in Reston, Virginia, February 16-18, 2003.

of Riemann—were systemically idiots! But intentionally so!

Because they wanted to be “approved of.” And they lied, in order to get approval from given authority. They’re still doing it in universities today. It’s a little more shameless today than it had ever been before, that’s all.

Application to Economics

What similarities arise between the challenge of communicating a discovery of principle and the challenges of expressing the economic implications of such new discoveries?

Economists enjoy assigning value to things. A ton of steel has a certain value, as might a container of food or clothing.

But the greatest creation of value comes from the creation of new ideas that expand our abilities. What is the value of the invention of the steam engine, not a *specific* steam engine, but the concept itself? How valuable was the development of metallurgy in the Bronze Age, the development by Mendeleev of chemistry, or the nuclear physics that unlocked nuclear power?

An attempt to express the value in terms of the previous economy necessarily fails, since a society equipped with the new knowledge can create *more than* (not *more of*) what the previous economy could pro-

duce.

This means that economic value lies not in objects themselves, but in the process of improvement of the productive powers of mankind as a whole, in the rate of increase of the potential human population density. *Yes, more people!*

Seeking a mathematics adequate to represent the anti-entropic nature of the change effected by human development, LaRouche found a step forward in the physical mathematical work of Bernhard Riemann.

For time reasons, I’ll only say two things about this:

First, Riemann developed a means by which to look at a series of transcendentals, each going beyond what came before. This mirrors the changes in language associated with the development of new principles and new branches of science.

Second, Riemann furthered the study of what is today called topology, by which it is possible to discuss changes that are absolutely non-localizable and can only be considered in terms of a change to the entire space of action *as a whole*.

From these considerations, the LaRouche-Riemann method was developed.

Seeing Science from Within

But, this cannot be an armchair exercise!

LaRouche insisted that to truly understand economics, one must have an internal experience of the process of discovery itself. He built a social process to ensure that his young collaborators would be able to develop such an internal experience. Megan will say more about this.

Educating a New Generation, by Megan Beets

LaRouche: [audio clip] So, we’re getting into a new generation, a new generation of a new generation; a new generation of the young adult generation, in which we are attacking, by this

method, beginning with the case of Kepler, which is what we're doing essentially: We're replicating the core of Kepler's discoveries as something to be reexperienced, rather than described. And the team of four-odd, here, are working through the *New Astronomy* for this particular purpose.

What we're trying to make conscious is that the universe is not run by mathematical formulas. A mathematical formulation may be useful, but it's only a crude approximation of the shadow of an actual scientific idea.

One of the problems we have in modern reductionist thinking, especially since the 1920s, increasingly, but even more emphatically since the end of World War II, science has been destroyed—scientists typified by the best people in the Fusion Energy Foundation. Science died out, not only in the United States, but around the world. The people we worked with, the people we were in touch with, or their corresponding people we weren't directly in touch with, but indirectly in touch with, in the Fusion Energy Foundation, represented the last competent generation in practical scientific work and conclusions which we've had so far.

The Baby-Boomer generation, which was brainwashed in the theories of Norbert Wiener, John von Neumann—actually all coming from Bertrand Russell—this generation is intrinsically, with a few personal exceptions, incompetent in science. They no longer believe in a scientific principle, a physical principle, they believe in a mathematical formula. And a mathematical formula is never more than a descriptive approximation of the effect of a principle, rather than a representation of the principle itself.

That is, people believe that you can derive scientific principles by deduction, or similar kinds of methods. They do not understand that you can discover a scientific principle, *only* by experimental methods. And experimental methods which show a discontinuity, which show the existence of a principle which is contrary to how you believe the universe worked before then. That's our problem.

So therefore, what we're doing, rather than allowing people to try to *learn* what they might learn in a university today, including a so-called

advanced one, we're telling them to go through the experience of *rediscovering* the essential foundations, in an experimental approach, of modern physical science today, to bypass what is taught as merely mathematics, and to look at mathematics from the standpoint of physical principles, rather than trying to mis-define physical principles as mathematical description.

That's the essence of the matter. Because this new generation, which many of you represent, the generation between 18 and 30 approximately, now, you are the future. The present world system is going to disintegrate—now! In these coming weeks and months, it will disintegrate. And the question is, what is the new system which will replace it? Will it be Hell? Will it be chaos? Or will it be something viable. So the trick is to skip the failed generations on this account, to go back to the fundamentals of the founding of modern European civilization, and to its more ancient Classical Greek origins, and to develop a generation which can lead in putting humanity back on track.

In the early 2000s, Lyn began recruiting a youth movement among my and Jason's generation. This was a period when the world was going through a series of dramatic shocks: the monetary crises of the late 1990s were followed by the election of George W. Bush as President in the U.S., followed by the 9/11 attacks, and the dropping of American bombs on Afghanistan and Iraq. Youth across the globe began responding to the clear voice of leadership that Lyn was providing in an increasingly chaotic world, one seemingly driven by responses to events rather than an outlook for the future.

However, Lyn quickly identified that if this generation was not to make the same mistakes as their parents' generation, they would need an education. He said that there had to be "a different culture developing in the leadership of this generation, . . . a culture which is intrinsically superior to that of the general culture of the earlier generations."

And so, Lyn's 2004 presidential campaign, and the decade that followed were run as what LaRouche once called "a combat university on wheels." Early morning campaign distributions were followed by mid-morning chorus rehearsals, and evening phone out-



EIRNS/Dan Sturman

Lyndon LaRouche and Brian McAndrews of the LaRouche Youth Movement Animations team, in the basement of LaRouche's home near Round Hill, Virginia on July 28, 2006. On left, Will Mederski.

reach was followed by late evening readings of Plato, work on Gauss's *Fundamental Theorem of Algebra*, and on constructive geometry. The challenge was always: How do you *know* something? Not, What facts have you memorized? Or, What do the authorities on this subject say? But can you prove it for yourself—can you make it your *own*] *discovery, and can you educate others?*

In 2006, a team of four youth movement members (including Jason) began working under Lyn's direct supervision on creating animations of processes within the economy, economic cycles. In short order, that team was given a new assignment: master Kepler's *New Astronomy* and create a series of pedagogies and classes to teach it to others. This team deployment came to be nicknamed "The Basement," for the simple reason that our office space was in LaRouche's basement. After several months, a new team of which I was a part was brought in to master Kepler's *Harmony of the World*, followed by another focusing on Gauss's discovery of the orbit of the asteroid Ceres. Another team followed, initially focused on the work of Bernhard Riemann, which had been so central to Lyn's own contributions to economic science. This eventually branched out into

broader areas of investigation, with Jason and me both returning to the Basement.

With Lyn, and prompted by Lyn, we had the privilege of participating in projects investigating the work of any number of great geniuses—including, beyond those already mentioned, Leibniz, Fermat, Vernadsky, Pasteur, Einstein, Robert Moon, Schiller, and Bach. The Basement worked with Lyn on projects exploring the principles of the evolution of life on Earth in relationship to the galaxy; the principles of the well-tempered musical system; new economic platforms for water management and weather modification, as it relates to cosmic radiation; the defense of Earth from asteroids and comets; and

physical economy as mankind's increasing mastery of physical chemistry. And there are many other investigations that could be added to that list.

Lyn looked to bring out the potential in each person. He looked for that person's strengths, and pushed them to take leadership and do important, breakthrough work that would not only upshift the person, but make a contribution to the progress of humanity as a whole. At the same time, he emphasized the importance of the social process—the discussion process, which would often yield much more than the sum of its parts. Our discussions were more often than not prompted by Lyn's prolific paper writing. One of the most wonderful things was arriving to the basement office early in the morning, to find that Lyn had only recently gone to bed, and that copies of the paper he had been up all night writing were waiting for us on our desks, for our consideration.

Under Lyn's leadership, the "Basement" process, which was by no means limited to the individuals working out of that basement office, produced numerous pedagogical websites and led classes and workshops around the country on subjects from the work of Kepler, Gauss, Riemann, and Einstein; to the paradoxes of evo-

lution; to the sensory domain versus the mind. We attended and intervened into scientific conferences on space, fusion, asteroid defense, and space weather, and formed relationships with scientists in various fields. Through this process, Lyn shaped politics and science in the United States and internationally in such a way as to demand that political discussion rise above the level of “current events,” and take place on the stage of real history and the ideas that shape it.

As important as that was then, it is urgent today; and with Lyn no longer here in person, this places a great challenge and responsibility on all of our shoulders.

Future of LaRouche’s Basement Project, by Jason Ross

I’d like to interject a personal note about working with LaRouche on Riemann. When I returned to the Basement as part of an expanded Riemann project, I was going through a tough time in my life. Having the opportunity for personal chats with Lyn, sometimes getting feedback on a movie script or animation, sometimes discussing music or the evil of Bertrand Russell, or sometimes just talking about personal life, was tremendously important to me. Lyn was definitely demanding, but he was also a very loving human being, with a real concern for people’s well-being and able to offer unlimited encouragement—sometimes of the butt-kicking variety! It was a true honor and privilege to be able to work directly with him.

Now, some thoughts on the future of the Basement.

The challenges laid down by LaRouche take on increasing relevance today. While resources are directed towards such fields as artificial intelligence, machine learning, and “green” technologies, the most fertile fields of inquiry are largely fallow:

- Nuclear fusion funding has been far below the level known already during the heyday of the Fusion Energy Foundation, to be insufficient to ever achieve commercial fusion. This great power source of the future is effectively being denied through under-investment.

- The very term “science” has been perverted to mean its direct opposite—*popular opinion*—in the propaganda offensive towards collective suicide through green policies to dramatically reduce emissions of CO₂, with large groups of children, who clearly are not experts on world climate—or much of any-

thing—being presented as respected, admired agents of change.

- Fakers or simpletons, like Yuval Noah Harari, Richard Dawkins, Sam Harris, Greta Thunberg, and Neil deGrasse Tyson, assault our minds with religious-like conclusions about the evil or mechanical nature of man, conclusions draped, immodestly, in supposedly scientific reasoning.

The beautiful birthright of all people—the incredible, inspiring history of adventure and discovery that has brought us to the present world of possibility—must be reclaimed.

Making Things Right

Helga and Lyn have fought for a global renaissance, and this absolutely must include a revival of scientific thinking! We must make Lyn’s method—which is also the method of the greatest scientific geniuses before him—hegemonic. The errors in policy making plaguing us today are not temporary; they are not cyclical; they are *systemic*!

What must be our strategy to uplift the discussion and decision-making process—the means by which we reach policy conclusions—to a level that considers the progress and direction of civilization? What axioms must be uprooted?

- The Second Law of Thermodynamics—the idea that the whole universe is going to run out of steam.
- Human actions, especially those that change our surroundings, are often “unnatural,” and therefore bad.
- The human mind is, ultimately, explainable in terms of physical processes.
- Reductionism.
- Positivism.
- Environmentalism.

To identify and uproot these axioms, let’s do the following:

- Engage in a committed, organized working-through of major works by LaRouche and the primary sources he cites.
- Create a rapid growth of a new generation of young leaders and thinkers, committed to encountering and internalizing the process of scientific discovery itself.
- Coordinate work on these educational processes, and on planning the infrastructure, scientific, and cultural goals for the next great Renaissance!

We encourage everyone to participate in this process, and we conclude with an excerpt of a [talk](#) Lyn

had with a gathering of young people in 2007, which is still valid today:

LaRouche: And the problem that you have, in your generation: You are young adults, where an older adult generation has failed, existentially. There may be individuals in the older generation who have not failed, but the generation as a whole, especially the white-collar generation has failed. They've failed catastrophically.

Your job, because you are receptive to these

ideas of principle, to the notion of the individual as immortal, an immortal personality, despite the death of the mortal body, is your destiny, and your responsibility to guide the changes which must occur in society, if society itself is to survive. And therefore, your generation has a unique historical role, in the existence of mankind as a whole.

And to understand this in yourself, and to see your identity as so situated, is my mission for you.

In Defense of African Sovereignty

by Henda Diogène Senny

Mr. Henda Diogène Senny is the President of the Pan-African League movement UMOJA, based in France. We present here a report on his presentation on Nov. 16, 2019 at the Schiller Institute Conference, "The Future of Humanity as a Creative Species in the Universe," in Bad Soden, Germany.

Mr. Senny began his speech by referring to the recent commemoration of the 30th anniversary of the fall of the Berlin Wall, and what the implications of this event are for the world situation today.

This indeed "historic" event, said Mr. Senny, did not live up to the expectations of most of the so-called political experts of those days. And in particular, not to the pronouncements of the core neoliberal establishment, epitomized by Francis Fukuyama, who predicted that this event signaled "the end of history," i.e., the "ideological and definite victory of democracy and liberalism over all other political ideologies."

The Cancer of Geopolitics

"Today we must recognize that the fall of the Berlin Wall did not bring to an end the cancer which gangrenes all the modern states today, i.e., geopolitics," Senny said. Even though the building of the Berlin Wall was the result of the geopolitics which led to the Cold War,



EIRNS/Johanna Clarc

Henda Diogène Senny

today, 30 years after its fall, all the "ancient geopolitics" have been recycled. "The world has never been so strife with conflict."

"For us Africans, the end of the Cold War led to new historic ruses," he said. "In the decade of the '90s, our salvation was supposed to come from 'free and transparent elections,' without ever posing the right questions relative to sovereignty. Elections without sovereignty [were] always contested... [and] chaos and war were never far, with all the social destruction that they entail."

Whatever the political conflict, "the political actors, once in power, all applied the latest neoliberal, end-of-history recipes cherished by Fukuyama: the Washington consensus, the only program accepted by the IMF and the World Bank." This meant the rapid elimination of all state regulations or others; the rapid and total liberalization of all markets of goods, capital, and services; and the establishing of a totally deregulated world market—to the detriment of all public investments in infrastructure, education, and development.

Africa's Just Ambitions

"Despite this difficult situation, Africa has justified ambitions in the domain of space technologies, which could solve some of the problems of telephone, televi-