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The Future Shall Define The Present



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The Future Shall Define The Present

And Now, We Build Our Way Out of This, Conquering Space, Or We Keep Our Chains in a New Civil War

by Barbara Boyd

Today, May 30, the United States successfully resumed manned space exploration. Those who know their economics know that space exploration and discovery are central to full-bore economic progress. It produces the new intellectual capital and excites the creativity that causes huge leaps in human progress. And, now is the time to build, and build, and build. New cities, new infrastructure, a modern manufacturing economy where the majority of our citizens, condemned to grinding poverty by the presidencies of the last 50 years, can visualize an actual, prosperous future, can live a life which means something for humanity's future. LaRouche PAC has just released an economic [prospectus](#) that outlines how we can begin to do that, right now.

But then, on Memorial Day, Monday, May 25, 2020 a black man, George Floyd, handcuffed and lying face down on the ground, not resisting arrest in any fashion, was murdered in Minneapolis by a white cop who pressed his knee into his neck for a full eight minutes. George Floyd can be heard on the video of the incident pleading, several times "I can't breathe."

The video recording of Floyd's lynching was played over and over again by the national news media, and riots are now widespread throughout this nation's cities. In Minneapolis, and elsewhere, black and immigrant businesses are being burned to the ground. On Friday night, rioters attempted to scale the fence at the White House, barely avoiding the moment when a Secret Service agent would obey standing orders. The U.S. military is now being called out to quell the rioting, including in Martin Luther King's hometown, Atlanta.

This nation is now experiencing the type of shocks that previously destroyed an entire generation in the

1960s, making them, in Lyndon LaRouche's view, incapable of rational scientific thought and deliberate progress. We have had now, a sequence of similar shocks.

There is an ongoing coup against an elected president, in which everything the president says or does is distorted through a malevolent partisan political lens and madness. We have had a virus rampage through our population and populations throughout the world. The

primary victims of the virus are the economically dispossessed. The healthcare system designed by Wall Street's profiteers and predators, the

just-in-time lack of planning and chiseling of the general welfare, persistent for 50 years, has taken a horrible toll in the black and Hispanic populations and on our nation's seniors. And now, our cities are aflame and Antifa and other paid operatives seek to fan those flames.

Lyndon LaRouche, in his [article](#), "Shrunken Heads in America Today," noted that:

It is a fair rule-of-thumb that until he thinks of himself as just another victim of the situation which the legacy of Richard Nixon's "Southern Strategy" has re-imposed upon those fellow Americans considered to be of African descent, no citizen of the U.S. is capable of seeing reality, that his own rights as a human being are impaired by the systemic defects in our nation's present culture.

The truth of this matter, does not lie in the situation seen as the usual individual victim views it, as if with eyes in shrunken heads, from inside-out, and bottom up. Instead of the usually expressed, "TV talk-show" view of the issues, the individual must develop a scientifically effi-

EDITORIAL

cient grasp of the centuries-long, even millenia-long historical process which has placed the victim, whoever you are, in that position.

From the Top Up

So, George Floyd was not just another faceless black man killed by a white cop in the scripted national narratives. As recounted by his friends to the Associated Press, Floyd moved to Minneapolis from his native Houston several years ago in hopes of finding work and starting a new life. He had lost his job as a bouncer at a bistro due to Minnesota's COVID-19 stay-at-home order. In Texas he had played football, and then got hit with a robbery charge and, under a plea deal, spent time in prison. Determined to turn his life around and get a new start, he moved to Minnesota where other Houston friends had gone before. He worked at the Salvation Army store, drove trucks, and worked as a bouncer at the bistro where he was known as "Big Floyd."

Floyd's horrible death was immediately taken advantage of by the shock troops of Antifa, white college kids with skateboards, and the Black Lives Matter crowd, all funded by the Democratic National Committee, Silicon Valley, and George Soros. The actual black population in Minneapolis already in grief, unfunded by anyone, watched helplessly as these professional rioters, bent on creating their own new green order out of the economic destruction wrought by COVID-19, burnt black neighborhoods to the ground.

When Martin Luther King was killed in 1968 in Memphis, Bobby Kennedy stood on a flatbed truck in Indianapolis and implored that the human spirit and reason must prevail over immediate rage and emotion. Here is part of what he said:

For those of you who are black and are tempted to be filled with hatred and distrust at the injustice of such an act, against all white people, I can only say that I feel in my own heart the same kind of feeling. I had a member of my family killed, but he was killed by a white man. But we have to make an effort in the United States, we have to make an effort to understand, to go beyond these rather difficult times.

My favorite—poet was Aeschylus.

He wrote:

"In our sleep, pain which cannot forget
falls drop by drop upon the heart,
until, in our own despair,
against our will,

comes wisdom through the awful grace of God."

What we need in the United States is not division; what we need in the United States is not hatred; what we need in the United States is not violence or lawlessness; but love and wisdom, and compassion toward one another, and a feeling of justice toward those who still suffer within our country, whether they be white or they be black....

Let us dedicate ourselves to what the Greeks wrote so many years ago: to tame the savageness of man and make gentle the life of this world.

Let us dedicate ourselves to that, and say a prayer for our country and for our people.

It is the space launch today which gives us the essential path for getting out of the intellectual and emotional strait jackets that the actual enemies of humanity, the would-be colonial masters of the modern British Empire, seek to place on all of us. It is a path first forged by such as Katherine Johnson, the African American math genius who was essential to the success of the Apollo program. It is the Earth, as viewed from space, which should dominate our earthly perspectives.

How can you not see that the rawest emotions in our history are now being manipulated in an effort to drown and destroy the sheer optimism and hope embodied in this launch?

We are monitoring this situation and its actors and we will keep you apprised of our counterintelligence analysis. In the 1960s, history proved, a hand then largely invisible was guiding events—a financial oligarchy housed in the modern British Empire. Its objective, and intent, was to destroy the American idea of fundamental scientific and technological progress. The same is at issue in the here and now. But, the simple answer in the present, is to build, and build, and build, and to do it right now.

Cover This Week

For the first time in nine years, American astronauts were launched into space from American soil in an American-built rocket. The SpaceX Falcon 9 rocket is shown here lifting off from the Kennedy Space Center, Cape Canaveral, Florida on May 30, 2020.



NASA

THE FUTURE SHALL DEFINE THE PRESENT

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May 28, 2002

I. The Pioneering Spirit

The *Endeavour*— To Inspire and Unify Nations!

by Kesha Rogers

June 1—On May 30, 2020, America, once again, has done something astonishingly great! We have reignited the dream of space! American Astronauts have launched again from American soil, after having been grounded for the last nine years. NASA Astronauts Col. Douglas Hurley and Col. Robert Behnken launched aboard the SpaceX Falcon 9 commercial rocket and Crew Dragon Spacecraft, on a 19-hour mission to the International Space Station from the Kennedy Space Center's Cape Canaveral launch pad 39A. This was a truly inspiring achievement, not only for every American, but for every human being on the planet.

During a briefing after the Astronauts had successfully docked with the International Space Station, NASA Administrator Jim Bridenstine was asked to explain how Americans could be expected to have any excitement about a space launch at a time of civil unrest across the nation, and of the other challenges the nation was undergoing. Reflecting on the unrest in the nation—the events unfolding in the aftermath of the brutal murder of George Floyd by a Minneapolis Police officer—and the coronavirus pandemic raging around the globe, Bridenstine said, “We’ve been through tough times before and in tough times America has the ability of accomplishing astonishingly great achievements.”

As SpaceX founder Elon Musk enthusiastically exclaimed during the launch events, “We want to inspire kids to say that one day they want to wear that space suit, and get them fired up to say, ‘I want to be an astro-

naut. I want to work on aerospace engineering. I want to advance space flight.’” Musk spoke about the achievements of the launch being about “reigniting the dream of space.” This is exactly what is required to inspire the youth of our nation, and young people throughout the world. We are reigniting the dream of space, from a dream that has for too long been deferred, through decades of attacks on our space program, by corrupt political leaders, budget cuts, and geopolitics.

Prior to their monumental launch, Bob Behnken and Doug Hurley were given the honor of naming the space capsule they were to fly, as has been a tradition going all the way back to the Mercury spacecraft. Col. Hurley announced to everyone, “We would like to welcome you aboard capsule *Endeavour*!” He explained the choice of the name *Endeavour*, “in honor of the ‘incredible endeavor NASA, SpaceX, and the United States has been on since the end of the Space Shuttle program back in 2011.’” He added that the name had personal meaning for both of them, in that they both had their first



NASA/Bill Ingalls

The SpaceX Falcon 9 rocket lifting off from the Kennedy Space Center, carrying the two U.S. astronauts aboard the Endeavour capsule, which later docked at the International Space Station.

flights on Shuttle *Endeavour*. In July 2011, Col. Hurley had flown aboard the last shuttle mission to launch from Pad 39A, after the Shuttle program had come under attack under the George W. Bush Administration.

The Space Shuttle program was permanently ended during the reign of President Obama, delivering another great blow to the optimism of our nation—the optimism which has been increasingly under attack since the Apollo Moon mission.

America is now making a great comeback in its human spaceflight program. Now, with great pride, Col. Hurley and Col. Behnken have been assigned the proud honor of launching America to the International Space Station from American soil once again, paving the way for even greater missions to come. For the first time in nearly a decade, after 19 hours of orbiting the Earth, and testing the new spacecraft's control and life support systems, the astronauts, launched from America, docked with the International space station at 9:30 a.m. Central Time, on Sunday morning, May 31. How exciting it will be to see Astronaut Behnken visit the beautiful seven-window Cupola that so many other astronauts and cosmonauts have enjoyed, since he launched the structure on his STS-130 mission in 2010.

A Dream Not To Be Deferred

What made this moment and this weekend's successful mission possible? Determination and leadership, despite all obstacles. After nearly a decade of stagnation in the American human spaceflight program—when the launch pads of Cape Canaveral had seen little action, and had become overgrown with high grasses for years—President Donald Trump, in the early days of his Presidency, vowed to restore America's leadership in space.

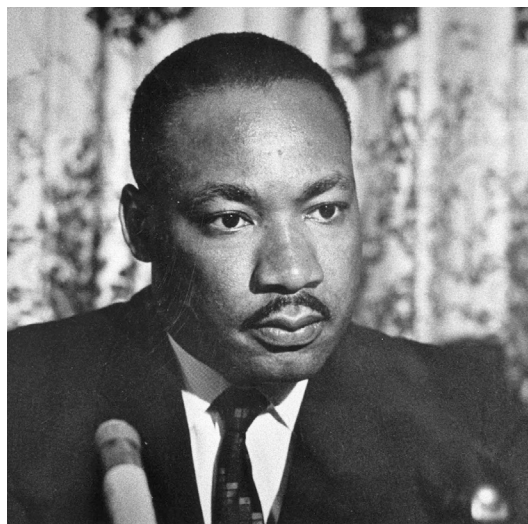
In December 2017, President Trump signed Space Policy Directive 1. During the signing ceremony the President declared, "The directive I'm signing today will refocus America's space program on human ex-

ploration and discovery. It marks an important step to returning American astronauts to the Moon for the first time since 1972 for long-term exploration and use." He then rekindled the commitment to the pioneering spirit that has always defined America, declaring, "Today, the same spirit beckons us to begin new journeys of exploration and discovery, to lift our eyes all the way up to the heavens, and once again imagine the possibilities waiting in those big beautiful stars if we dare to dream big."

In 2019, the name Artemis was given to the program that will return American astronauts to the Moon, taking

up the first woman and the next man, in 2024, to build toward a permanent presence there and a base of support for launching humans to Mars.

The successful launch of the two astronauts from Cape Canaveral's Pad 39 to the International Space Station was a stepping stone toward achieving that higher goal. We have learned that neither NASA alone, nor America alone, will get us there. It will be done with the support of commercial and international partners. America received congratulations for the launch from na-



LOC

Dr. Martin Luther King, Jr.

tions around the world.

NASA Astronaut Nicole Mann relayed a conversation she had with her eight-year-old son prior to a pre-launch press briefing, in which he asked her if the flight that was about to be launched by Bob and Doug was our first flight back to the Moon, and she replied to him, "not technically, but it is the first big step on our roadmap to the Moon for the Artemis mission and eventually to Mars."

The Artemis program has brought forth a new vision, rekindling the pioneering spirit of space exploration, which has the power to unify not only the people of our nation through astonishingly great achievement, but to inspire and unify nations throughout the world through shared discoveries and cooperative efforts.

Just as Dr. Martin Luther King had a dream, this too is a dream that can no longer be deferred. The inalien-

able rights of life, liberty, and the pursuit of happiness are not just expressions in our Declaration of Independence. They are God-given rights, written into the natural laws of the Universe. They are the rights of every man, woman and child throughout the planet, to par-

ticipate in that which is truly human, to advance the creativity of every human being, to overcome every challenge and every obstacle, and to look to the stars for the solutions to overcome that which has made us to behave too often as victims or underlings.

Remarks by President Donald Trump at the Kennedy Space Center

May 30, 2020

We present here excerpts from President Trump's speech.

Those of us who saw the spectacular and unforgettable liftoff this afternoon watched more than an act of history; we watched an act of heroism. Every time our astronauts climb aboard a rocket—which is many, many stories of only engine and fuel—and vault across the sky, they display breathtaking valor.

What Colonel Douglas Hurley and Colonel Robert Behnken did this afternoon was pure American genius and courage. They joined the ranks of just seven prior American astronauts who have made the perilous maiden voyage to test a new class of spacecraft.

The names of Hurley and Behnken will stand in the history books alongside those of legends like Alan Shepard, Gus Grissom, John Young. Now these brave and selfless astronauts will continue their mission to advance the cause of human knowledge as they proceed to the International Space Station before returning to Earth. We wish them Godspeed on their journey and as one proud nation, we salute their fearless service....

For every citizen who has eagerly waited for America to reignite those engines of will, confidence and imagination that put a man on the Moon, I stand before you to say you need wait no longer.

Through NASA's Artemis program, the United States is preparing for a crewed mission to Mars. Earlier this week, I saw the Orion capsules being worked on in this building. As part of the Artemis Moon-to-Mars program, those capsules will soon return Americans to lunar orbit for the first time in over 50 years—half a century.

By 2024, our astronauts will return to the lunar surface to establish a permanent presence and the launching pad to Mars. And the first woman on the Moon will be an American woman. And the first nation to land on Mars will be the United States of America....

Exploration is a test of our values and of our faith. America is a nation defined by its commitment to discovery—to solve mysteries, to chart the unknown, to press the limits, to achieve the fullest expression of life's potential, and to ensure that America is the nation that always leads the way, and especially in space.

This evening, I am more confident than ever before that America stands poised to thrive in this grand undertaking. It's incredible. We are a nation of pioneers. We are the people who crossed the ocean, carved out a foothold on a vast continent, settled a great wilderness, and then set our eyes upon the stars. This is our history and this is our destiny.

Now, like our ancestors before us, we are venturing out to explore a new, magnificent frontier. It's called: space. Our most daring feats, our most epic journeys, our biggest adventures, and our finest days are just beginning. America's proudest moments are still ahead. We are on the verge of our most exciting years, and next year may be the most exciting of all. You just watch.

So today as our brave American astronauts shake the Earth and blaze a trail of fire and steel into the heavens, we proclaim for all to hear that we have not yet tested the full strength of the American character, and the world has not yet seen the full glory of the American spirit. For our country, for our children, and for humanity's march into the stars, the best is yet to come.

It was a great honor for me to deliver this speech. God bless our brave astronauts now soaring through the heavens. God bless the men and women of NASA and God bless America. Thank you very much.

Voyager and Solar Probe Missions Beckon Mankind: ‘Reach for the Stars!’

by Janet G. West

No pessimist ever discovered the secrets of the stars, or sailed to an uncharted island, or opened a new heaven to the human spirit.

—Helen Keller

May 29—For the first time in human history, mankind’s reach extends across and beyond the solar system: With the Parker Solar Probe (see **Figure 1**), we are at the very closest that a spacecraft has ever approached to the Sun, and in Voyager, humanity has crossed the threshold into interstellar space, about 122 AU from Earth, or some

engineers and explorers, scientifically and culturally?

The intellectual effort and mission-orientation of the engineers, technicians, researchers and scientists who designed and executed the two missions can show us a pathway by which we can unleash new powers of creativity in our fellow citizens.

The Sun Sneers at Newton

The Parker Solar Probe (PSP) was launched on August 12, 2018 and is on an approximately 7-year mission. It has completed three of its planned 24 orbits of the

FIGURE 1

The Parker Solar Probe



NASA

11,340,608,490 miles away. These missions were developed by some of the best minds in the scientific community (which includes interns and laymen, as well as the PhDs), and, in the case of Voyager—developed over forty years ago.

The dedication and intellectual effort to solve the many problems on space missions is the same quality, intensity and ardor needed to solve the economic, food and health crises we face, which are intertwined. Now, more than ever, humanity would do well to adopt the attitude, “Failure is not an option!” How do we prepare for future missions, on Earth and in space, both manned and unmanned? How do we educate future scientists,

Sun, of which seven will use a gravity assist from Venus. During its final orbit, expected to occur in 2025, it will come within *3.8 million miles* of the Sun; closer than the orbit of Mercury. It is also currently the fastest spacecraft and will approach 430,000 mph in its final orbits. (A detailed [discussion](#) of its instruments and mission can be found *EIR* Vol. 45, No. 44, November 2, 2018.)

The PSP downloads data after every orbit, and the most recent data, made available on April 14, 2020, reveals startling discoveries about the Sun’s behavior and other activity in several areas. The next round of data is expected to be made available to the public in November 2020.

One of the first anomalies noted about the Sun many years ago is that the corona is much hotter (approximately 3 million degrees F) than the surface (a mere 10,000 degrees F). How does that happen? This is one of the questions to be illuminated by the PSP, but is still unanswered. One of the theories under discussion proposes that there are thousands of tiny explosions called “nanoflares,” that can reach temperatures of 18 million degrees Fahrenheit and could be heating the atmosphere. Both spectrographs and X-ray observations have confirmed the presence of super-hot plasma on the surface, but further research will be required.

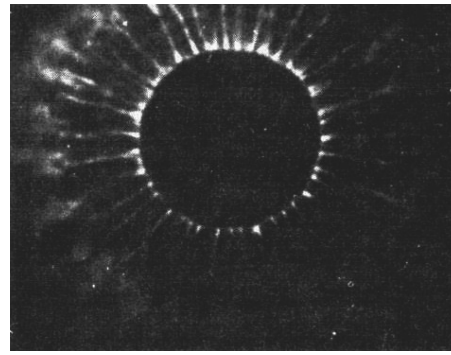
One of the promising missions that could bring us closer to the answer is the [Magnetospheric Multiscale Mission](#) (MMS), launched by NASA in 2015 to study the dynamic magnetic fields surrounding the Earth, and how those fields interact with the Sun’s magnetic fields. That could perhaps show some process that would explain the super-heating of the corona. Some of that interaction is visible in the auro-
ras, also known as the Northern and Southern Lights.

MMS consists of four identical spacecraft that orbit the Earth and pass through its magnetic field area, primarily studying a little-understood event called “magnetic reconnection.” In data recently released, it was revealed that the PSP encountered a similar phenomenon in 2019.

Although you may be familiar with the classic example of “magnetic field lines” using iron filings on a piece of paper placed on top of a bar magnet, there are no “lines” in space; like the use of latitude and longitude lines on a globe, these lines don’t exist in reality, but are used to illustrate action or interactions in the observable universe. When considering this illustration, one should think of these “lines” as extending into three-dimensional space.

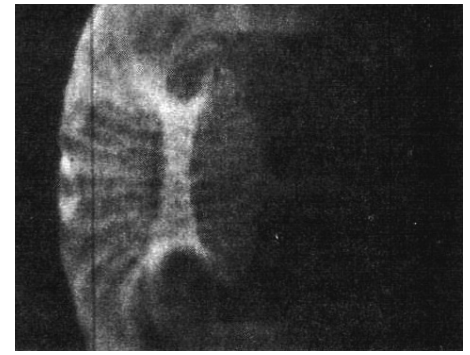
Magnetic reconnection is unique to plasma—plasma

FIGURE 2A



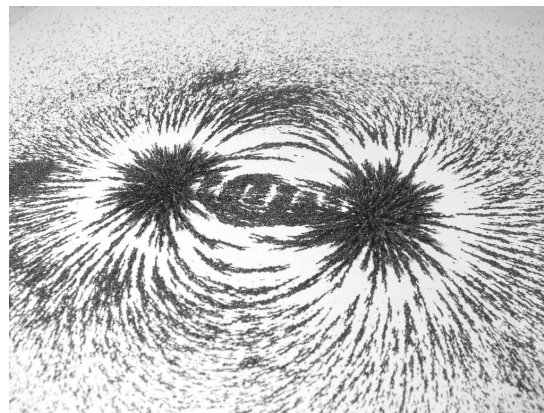
Plasma filaments emerging from the Sun like spokes (2A), revealed by occulting the Sun’s disk at the camera, and filamentary structures in a laboratory-generated plasma (2B).

FIGURE 2B



is the fourth state of matter and consists of ionized (charged) particles; this makes up the stars, fills space and accounts for about 99% of the observable universe. So, understanding plasma’s behavior is not only essential for space travel, but also for mankind to harness it for abundant, clean energy in the form of fusion power:

[Reconnection occurs](#) when magnetic field lines cross and release a gigantic burst of energy. It is a fundamental process throughout the universe that taps energy stored in magnetic fields and



Magnetic field lines are revealed by the bunching and orientation of iron filings on a surface held just above a magnet.

converts it into heat and energy in the form of charged particle acceleration and large-scale flows of matter. However, magnetic reconnection can only be studied in situ in our solar system, and it is most accessible in near-Earth space, where MMS will study it.

Other insights into this process can be viewed through some of the anomalies that occur in a plasma, in trying to achieve fusion. As the plasma is energized by a laser beam, organized, paired filaments begin to appear at the outer edges. These filaments are vortices that rotate in opposite directions, and “... the energy density of the plasma in these filaments is thousands of times greater than the energy density of the initial background plasma.” This action has been observed on the Sun in the solar prominences, See **Figure 2A** and **Figure 2B**.

Now, with the PSP, we can study this process within the solar wind, which might give more clues regarding coronal heating and other dynamics. Some of the other discoveries in the recent data indicate that the solar wind is much more turbulent than previously thought, with some CMEs (coronal mass ejections) and clumps of plasma being pushed far out into space, while other CMEs fall back to the surface of the Sun. Recent data has revealed “switchbacks”—magnetic field lines that doubled back on themselves fully 180 degrees in a matter of seconds; they came in clusters and were in sync with fast-moving plasma particles. Along with that, “island-like” structures were observed within CMEs, which structures would remain stable for some minutes; these CMEs were expelled initially at speeds of 50 km/second, and then sped up!

The reason for this increase in velocity is currently unknown. According to the Second Law of Thermodynamics, an energetic system is supposed to become more and more entropic—more diffused, more chaotic. Instead, what we see is a system becoming more and more organized. According to [Justin Kasper](#), principal investigator for SWEAP—short for Solar Wind Electrons Alphas and Protons—at the University of Michigan in Ann Arbor,

Waves have been seen in the solar wind from the start of the space age, and we assumed that closer to the Sun the waves would get stronger, but we were not expecting to see them organize into these coherent structured velocity spikes. We are detecting remnants of structures from the Sun being hurled into space and violently changing the organization of the flows and magnetic field. This will dramatically change our theories for how the corona and solar wind are being heated.

In a [paper](#) published in *Nature* magazine on December 4, 2019, the authors hypothesized that,

Alfvénic fluctuations are a promising candidate for such a process because they are seen in the corona and solar wind and contain considerable energy ... We find that Alfvén waves organize into structured velocity spikes with duration of up to minutes, which are associated with propagating S-like bends in the magnetic-field lines. We detect an increasing rotational component to the flow velocity of the solar wind around the Sun, peaking at 35 to 50 kilometers per second—

considerably above the amplitude of the waves. These flows exceed classical velocity predictions of a few kilometers per second, challenging models of circulation in the corona and calling into question our understanding of how stars lose angular momentum and spin down as they age.

Another recent discovery was that tiny bursts of fast-moving particles were observed for the first time. These include both electrons and ions, and can be accelerated by the Sun’s activity to nearly the speed of light. These particles carry a great deal of energy and can damage spacecraft electronics and threaten astronauts—especially those outside the protection of Earth’s magnetic field. But, by the time they reach Earth, they can be dispersed enough that the means of identifying the process that accelerated them can be difficult to carry out.

Since the PSP is less than 4 million miles away from the Sun at the perihelion of its closest solar orbit, it can measure these particles just after they’ve left the Sun; already the PSP instruments have measured previously unknown particle events. Its instruments have also measured a rare type of particle burst, which contains a high number of heavier elements. So, the more we understand about these high-energy particles, the better we can protect our space explorers and electronic technology.

[David McComas](#), principal investigator for the Integrated Science Investigation of the Sun suite, or ISOIS (☉ is the astronomical symbol for the Sun), at Princeton University in New Jersey, reports:

It’s amazing—even at solar minimum conditions, the Sun produces many more tiny energetic particle events than we ever thought. These measurements will help us unravel the sources, acceleration, and transport of solar energetic particles and ultimately better protect satellites and astronauts in the future.

One physicist in particular, who works on the PSP mission, when asked during a public webinar what surprised him most about the PSP mission so far, commented, “The solar panels folded back when we needed them to do so, and the heat shield has protected the instruments magnificently!” (Translation: “*It didn’t melt!*”)

Others take a more refined view of the mission.

FIGURE 3



NASA

Voyager 1 is carried aloft by a Titan IIIE rocket.

FIGURE 4



NASA/JPL-Caltech/KSC

The protective launch shroud is lowered onto Voyager 2.

[Nicola Fox](#), director of the Heliophysics Division at NASA Headquarters:

The Sun is the only star we can examine this closely. Getting data at the source is already revolutionizing our understanding of our own star and stars across the universe. Our little spacecraft is soldiering through brutal conditions to send home startling and exciting revelations.

The Voyager Interstellar Mission

Voyager did things no one predicted, found scenes no one expected, and promises to outlive its inventors. Like a great painting or an abiding institution, it has acquired an existence of its own, a destiny beyond the grasp of its handlers.

—Stephen J. Pine, professor emeritus,
School of Life Sciences, Arizona State
University

The Voyager mission was a true “first” in human exploration, equivalent to Magellan’s circumnavigation of the Earth, and Neil Armstrong’s first step of mankind on the Moon.

Voyager 1 and Voyager 2 are now known together as the “Voyager Interstellar Mission.” They were both

launched during the summer of 1977 from Cape Canaveral atop a Titan-Centaur rocket—Voyager 2 on August 20, Voyager 1 on September 5, with a faster and shorter trajectory than Voyager 2. This was the year of the first Apple computer and the maiden flight of the Space Shuttle atop a Boeing 747 airliner; the first CRAY computer was shipped to Los Alamos National Laboratory; and Jimmy Carter was the President of the United States. Ironically, many of the scientists currently tracking Voyager 1 and 2 weren’t even born when the mission began. See **Figure 3**, a Titan-Centaur rocket; and **Figure 4**, the encapsulation of one of the Voyagers.

They are identical spacecraft; each consists of a decahedral bus, about 18 inches in height and nearly six feet across. A 12-foot-diameter parabolic high-gain antenna is mounted on top of the bus. The majority of the scientific instruments were mounted on a science boom extending out from the spacecraft, to prevent magnetic or electronic contamination from the craft itself. They each have a mass of about 1,592 pounds. And, each has three computers—with a total capacity of about 24,000 bytes!

Each is a stunning achievement in technology and engineering:

- They each comprise 63,000 individual parts, many of which (like transistors) contain smaller parts and have extremely complex electronic circuitry.
- Their computers are programmed with seven fault protection routines, each capable of managing a multitude of possible failures; the spacecraft can place themselves in a safe mode in seconds or at most a few minutes.
- They were designed—and are protected—to withstand the massive radiation dose during the fly-by of Jupiter.
- They can point their scientific instruments on the scan platform to an accuracy of better than 1/10 degree.
- The magnetometers are mounted on a 43-foot fi-

berglass boom; the orientation of their sensors was controlled to an accuracy better than two degrees.

- A set of small thruster rockets controls the attitude of the spacecraft and make trajectory corrections; each has a thrust of about three ounces; the rocket that lifted them aloft had a thrust of over 2 million pounds.

- They are powered with a Multi-Hundred Watt Radioisotope Thermoelectric Generator (MHW-RTG), which uses the heat caused by the decay of a radioisotope to generate power for the spacecraft. This gave each craft about 470 watts of power at the time of launch.

The Golden Records

Each carries a Golden Record (see **Figure 5**), a 12-inch gold-plated copper phonograph record, containing greetings in 55 languages, 115 images, sounds of Earth: volcanoes, birds, a chimpanzee, surf, and crickets, as well as of a tractor, Morse code, a Saturn V lift-off; and an eclectic selection of music from around the globe. It also contains written messages from then President Jimmy Carter and UN Secretary General Kurt Waldheim.

What is most notable about the record are the instructions for its use, especially the time scale used for it to be deciphered. The record includes diagrams showing the solar system's position in relation to 14 pulsars, whose precise periods are given.

In the far right bottom corner, there is a diagram showing the simplest and most abundant element in the universe, hydrogen. The drawing shows the hydrogen atom in its two lowest states; a connecting line and the



NASA/JPL

A dish antenna for communicating with the Voyagers is under construction, July 1976.

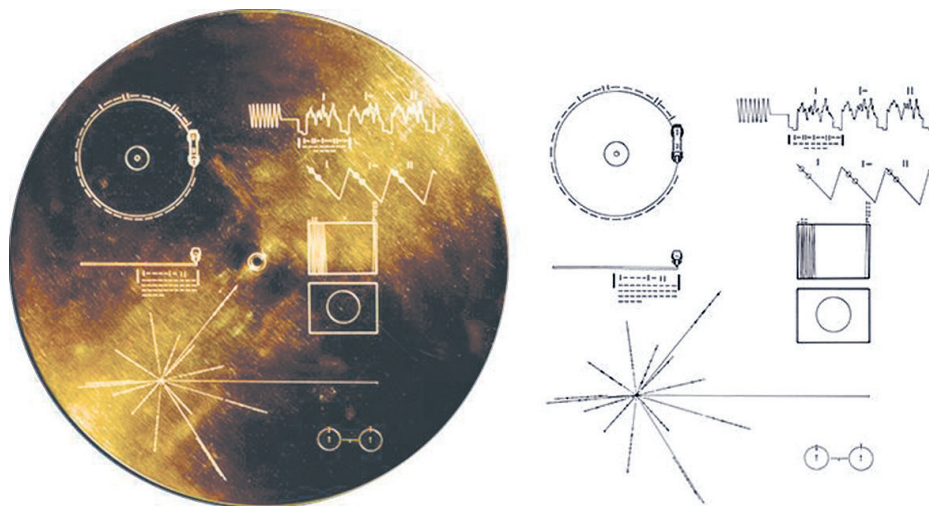
digit 1 indicate that the time interval associated with the transition from one state to the other is to be used as the fundamental time scale needed to play the record and to have the pictures decoded properly. There are other fascinating aspects as to how this record was produced to allow an intelligent form of life to translate it, which the reader is encouraged to investigate further.

But, why use the hydrogen atom for the time scale? Hydrogen is the most abundant element in the universe, having one proton and one electron. Although we conventionally speak of the “spin” of the electron, this is used as a means of visualization; the electron has angular momentum, and responds to a magnetic field. It doesn't spin like a planet might.

As reported in a *Scientific American* [article](#), Morton Tavel, a retired physics professor from Vassar College, explained it this way:

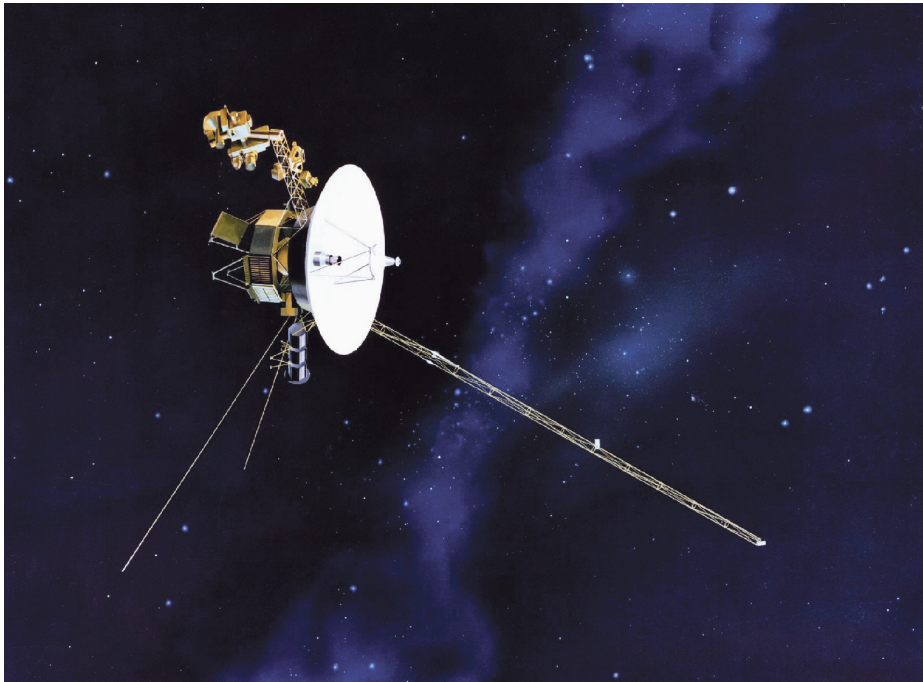
When certain elementary particles move through a magnetic field, they are deflected in a manner that suggests they have the properties of little magnets. In the classical [Newtonian physics] world, a charged, spinning object has magnetic properties that are very much like those exhib-

FIGURE 5



JPL/NASA

The Golden Record, mounted on the exterior of both Voyager spacecraft.



NASA

to be truly “universal” languages.

The Grand Tour

How far away are the Voyager spacecraft now? Voyager 1 was eventually sent on trajectory in a “northerly” direction out of the plane of the solar system and is now more than 11 billion miles from Earth. Or, to put it another way, astronomers use the “Astronomical Unit” (AU), which is the mean distance from Earth to the Sun, or about 93 million miles. Neptune is about 30 AU from Earth; Pluto is a mean distance of about 39 AU. By comparison, Voyager 1 is currently at a distance of about 125 AU and travelling at about 34,500 mph!

An artist's rendition of one of the two identical Voyager spacecraft.

ited by these elementary particles. Physicists love analogies, so they described the elementary particles too in terms of their “spin.”

Unfortunately, the analogy breaks down, and we have come to realize that it is misleading to conjure up an image of the electron as a small spinning object. Instead we have learned simply to accept the observed fact that the electron is deflected by magnetic fields. If one insists on the image of a spinning object, then real paradoxes arise; unlike a tossed softball, for instance, the spin of an electron never changes, and it has only two possible orientations. In addition, the very notion that electrons and protons are solid “objects” that can “rotate” in space is itself difficult to sustain, given what we know about the rules of quantum mechanics. The term “spin,” however, still remains.

So, with that understanding, if we look at events that occur in a hydrogen atom, the electron will sometimes “flip” and reverse its “spin.” This reversal releases electromagnetic energy in a predictable range, at a wavelength of 21 cm, also known as the “hydrogen line” in astronomical spectra. Since this is a known and invariant physical measurement, and given the abundance of hydrogen, any intelligent life-form would also know this measurement. Geometry, physics and music appear

Voyager 2 is about 118 AU away from Earth. To put things into galactic perspective: one light-year is a measure of distance equivalent to about 63,241 AU; the center of our own galaxy is about 25,000 light-years away.

Their [original mission](#) was to conduct close-up studies of Jupiter and Saturn, Saturn’s rings, and the larger moons of the two planets:

Each Voyager had as its major objectives at each planet to: (1) investigate the circulation, dynamics, structure, and composition of the planet’s atmosphere; (2) characterize the morphology, geology, and physical state of the satellites of the planet; (3) provide improved values for the mass, size, and shape of the planet, its satellites, and any rings; and (4) determine the magnetic field structure [of each] and characterize the composition and distribution of energetic trapped particles and plasma therein.

Although originally planned to only investigate Jupiter and Saturn, scientists at NASA’s Jet Propulsion Laboratory (JPL) collaborated in a determined way to take advantage of a rare alignment of the outer planets in the late 1970s and ’80s, which would allow a minimum use of propellant and flight time to tour the planets of Jupiter, Saturn, Uranus and Neptune. This arrange-

ment of the planets occurs about every 175 years.

The Voyager crafts exploited this alignment to obtain a “gravity assist,” a technique first demonstrated in 1973-74 during NASA’s Mariner 10 Venus/Mercury mission; as the craft executed a flyby of each planet, its flight path would be altered by the gravity of a planet, and its velocity increased enough to deliver it to the next destination. This principle allows a spacecraft to swing from one planet to the next without the need for large onboard propulsion systems; it resulted in the reduction of flight time to Neptune from 30 years to twelve!

Researchers and engineers at JPL studied more than 10,000 trajectories before selecting the two that would allow the closest flybys of Jupiter (with a focus on its moon Io) and of Saturn (especially its rings and its moon Titan); the flight path for Voyager 2 was chosen to allow the option to send it on to Uranus and Neptune.

Voyager 1 began its approach to Jupiter in January 1979 and transmitted about 1,500 photographs; it discovered that Jupiter has a very faint ring system. Its atmosphere puzzled scientists as well as amateurs—how could it be so turbulent, and yet maintain stable features, such as the Great Red Spot, over hundreds of years?

It swept past one of Jupiter’s moons, Io, and for the first time we saw another planetary body in our solar system with volcanoes. It began its flyby of Saturn on November 12, 1980 and discovered three new moons. Its trajectory, which was designed to send the spacecraft close to Titan and then behind Saturn’s rings, was bent northward out of the plane of the solar system (the ecliptic plane). As the craft was exiting the plane, at a distance of about 4 billion miles, it was commanded to turn back one more time and snap a photo of Earth, which became known as is the famous “Pale Blue Dot” photo.

Voyager 2 reached Jupiter on July 9, 1979 and Saturn on August 15, 1981. It took photos of some of Jupiter’s other moons, such as the icy Europa, which created more questions regarding the nature of its geology. Voyager 2’s trajectory was aimed towards Uranus, and when it was determined that all of its instruments were operating perfectly, NASA secured additional

funding and authorized JPL to continue on to Uranus, and then Neptune.

It returned stunning photos and other data of both planets, their moons and magnetic fields, and discovered that both of these outer gas planets have rings similar to that of Saturn, only much fainter and more tenuous. Bear in mind that when data was transmitted from the Voyagers, the photo didn’t appear all at once, but like on a television screen, it arrived line by line—it took a long time to download! These are still the only photographic images we have of the outer gas giants.

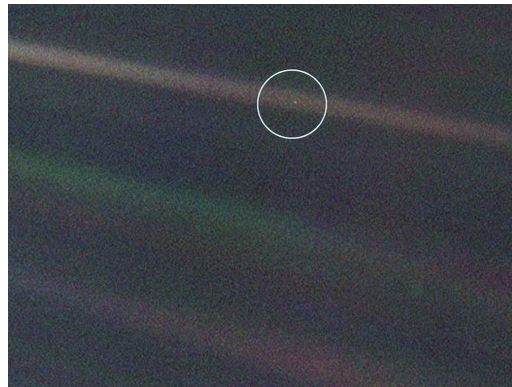
The analysts and mission engineers had an inkling that Neptune had cloud cover, but they were unprepared for its spectacular weather patterns—it has the fastest winds ever detected in our solar system: 1,500 mph (2,400 km per hour)! They also discovered that unlike Earth, its magnetic field was about 47 degrees off from

the rotational axis and rotates independently from the planet and at a faster rate! After Voyager 2’s closest approach to Neptune on August 25, 1989, it flew southward below the ecliptic plane, on a path taking it into interstellar space, crossing the “termination shock” at the boundary between the heliosphere (containing the solar wind) and interstellar space, about 18 years later.

In 2017, some of Voyager 1’s attitude control thrusters—which keep the spacecraft oriented towards Earth for commu-

nications—were noticeably degrading and losing performance. The engineers at JPL decided to try an unusual solution: fire up the back-up thrusters! Amazingly, after 37 years of sitting dormant in the harsh environment of space, the thrusters fired up and performed perfectly, adding a few years to Voyager 1’s lifespan.

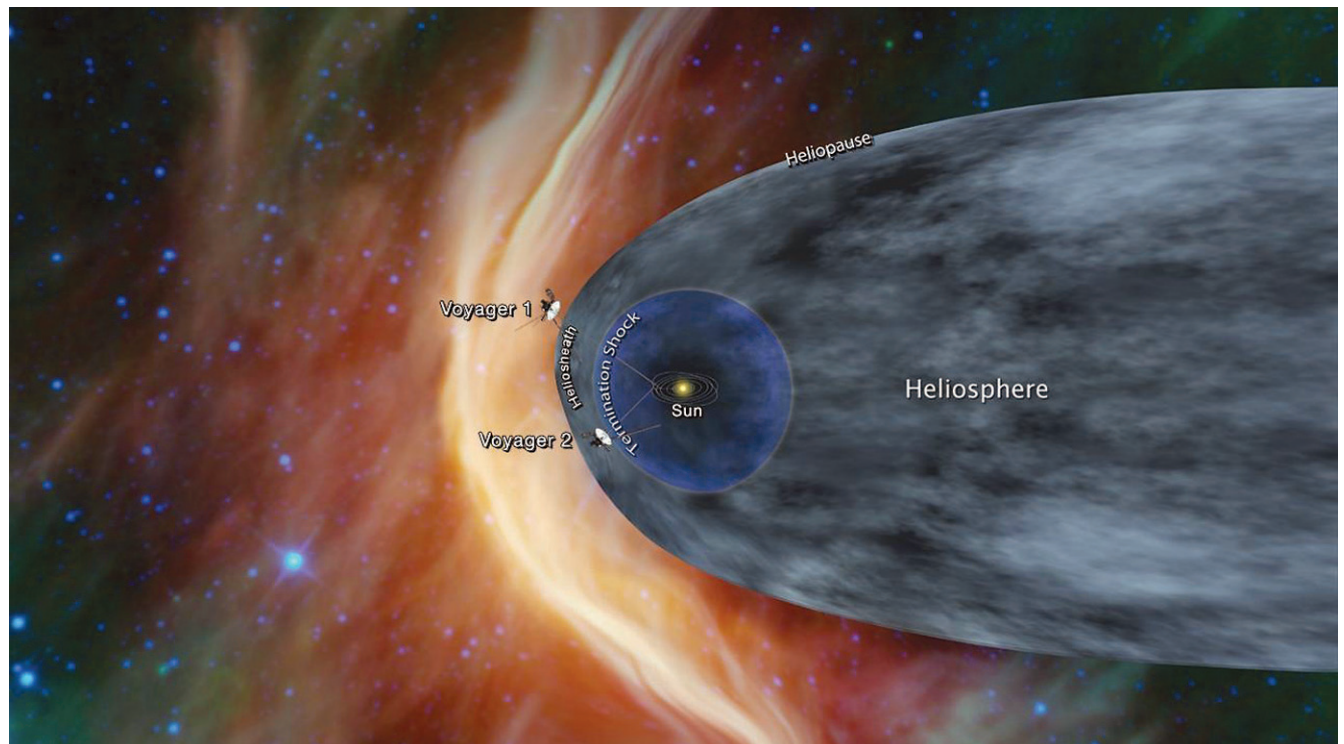
In January 2020, one of Voyager 2’s autonomous systems responded as it was programmed to do, but in the process created unexpected complications. There was an unexplained delay in the execution of a maneuver, which left two systems that consumed high amounts of power operating at the same time; in response, Voyager 2 turned off the power to the scientific instruments. The mission team quickly analyzed the issue, and were able to shut off one of the high-power systems, and turned the science instruments back on; by March 2020, due to the hard work of mission operators and engi-



NASA Astrobiology Institute

The Pale Blue Dot, Planet Earth (in the circle), as photographed from 3.7 billion miles away by Voyager 1 on February 14, 1990.

FIGURE 6



JPL/NASA

An artist's rendition of the heliosphere, showing the Sun, termination shock, heliosheath, and heliopause.

neers, all systems were back on line and functioning normally.

The Solar System Almost *Breathes*

The structure of our solar system and the outer reaches of the Sun's influence are roughly depicted as a huge series of nested bubbles. The solar system is the innermost portion, then the termination shock—the boundary between the influence of the solar wind and the interstellar wind. The heliosheath is the outer region of the heliosphere, just beyond the termination shock—where the solar wind begins to bunch up as it opposes the interstellar wind—but still within the heliosphere. There are different theories as to what shape the heliosphere takes—spherical or egg- or comet-shaped; the heliosphere (see **Figure 6**) is the volume defined by the effects of the solar wind (which does exert a force), and is thought to extend far behind the termination shock.

As the entire bubble system moves through interstellar space, it creates a bow shock in front of it (similar to the wave caused by the bow of a ship moving forward through the water). The theoretical “boundary” of the heliosphere is a narrow region called the “heliopause,” in which the forces of the solar wind and interstellar wind are thought to be in balance. There are still

many unanswered questions as to the dynamics, the magnetic fields, the role of cosmic rays, and the general structure of the entire heliosphere.

Solar activity (sunspots, flares, CMEs) affects the boundaries of the heliopause; these “boundaries” are neither solid nor fixed—they ebb and flow with the Sun's activity, like a bubble or a living organism. The plasma outside of the heliopause is about twenty times denser and is much hotter than within it; the reasons for this are as yet unknown; “conventional physics” would imply that the plasma would become more diffuse. Voyager 1 also measured the magnetic field to be stronger, and of the same polarity as within the heliosphere. This astounded the scientists and technicians working on the mission—they had expected the polarity to be *opposite* that of the heliosphere. They also [found](#) that the pressure from the solar wind changes at the boundary, and that the speed of sound is about one thousand times faster than on Earth.

“Wait a minute,” you say. “*Everyone knows* there's no sound in space! No one can hear you if you scre—!” If you mean sound that can only be heard with the human ear, you're right. Sound does need some kind of medium through which to propagate, and in space, molecules are so distant from one another that sound as we know it can

only carry as far as there is gas or another medium which supports it.

The means by which the speed of sound changes in the area of the heliopause is unknown. The sound that does exist in some interstellar space is at a much lower frequency than is audible. The wavelengths can be extremely long and slow-moving, extending out only as far as interstellar gas and dust can carry them, in the range of *infrasound*. Normal human hearing can extend down to about 20 Hz; there is a black hole about 250 million light years away that drones steadily at about 57 octaves below Middle C.

According to a Gizmodo [posting](#), “There Actually *Is* Sound in Outer Space”:

We know this [sound of the black hole] because in 2003, NASA’s Chandra X-ray space telescope spotted a pattern in the gas that fills the Perseus Cluster: concentric rings of light and dark, like ripples in a pond. Astrophysicists say those ripples are the traces of incredibly low frequency sound waves; the brighter rings are the peaks of waves, where there’s the greatest pressure on the gas. The darker rings are the troughs of the sound waves, where the pressure is lower.

Hot, magnetized gas rotates around the black hole, more or less like water swirling around a drain. All that magnetized material in motion generates a powerful electromagnetic field. The field is strong enough to accelerate material away from the brink of the black hole at nearly the speed of light, in huge bursts called relativistic jets. These relativistic jets force gas in their path out of the way, and that disturbance produces deep cosmic sound waves.

In September 2013, NASA held a [press conference](#) at which it released the first recording made by Voyager 1 of sound in interstellar space. As NASA officials explained,

The sounds are produced by the vibration of dense plasma, or ionized gas; they were captured by the probe’s plasma wave instrument. . . . There were two times the instrument heard these vibrations: October to November 2012 and April to May 2013. Scientists noticed that each occurrence involved a rising tone. The dashed line [on



NASA/CXC/NGST

An artist's illustration of the Chandra X-ray Observatory.

the graph] indicates that the rising tones follow the same slope. This means a continuously increasing density. . . .

At the same press conference, Don Gurnett, principal investigator for the Voyager plasma wave investigation, stated: “When you hear this recording, please recognize that this is an historic event. It’s the first time that we’ve ever made a recording of sounds in interstellar space.”

Additionally, the various space probes zooming through the cosmos can capture radio emissions from various sources, such as the [sound](#) of plasma waves, Jupiter’s magnetic fields, or radio emissions from Saturn. Even Earth generates sounds, especially during particularly strong earthquakes—these can generate infrasound waves that reverberate up into the atmosphere, and which can be detected by satellites. So, perhaps the spheres produce music, after all.

Another form of compression and rarefaction—which is still theoretical—is that of gravitational waves; but unlike other waves, they don’t move physical material—according to the Theory of Relativity, they are thought to compress and expand space-time itself. In 2017, the Laser Interferometer Gravitational-Wave Observatory (LIGO), detected that gravitational waves are produced when two neutron stars which are orbiting one another, begin to merge together due to the decay of their orbits. This effect was consistent with Einstein’s Theory of Relativity, which predicted that gravitational orbits would decay over long periods of time. To find out more, and to hear the sound of two black holes colliding, please visit LIGO’s [website](#).

In December 2004, Voyager 1 crossed the “termina-

tion shock,” the boundary in the heliosphere where the solar wind slows to subsonic speed, causing compression, heating, and changes in the magnetic field; it navigated the turbulent heliosheath, and in August 2012, became the first man-made spacecraft to cross into interstellar space as it crossed the heliopause and on out of the heliosphere; Voyager 2 followed in December 2018. Voyager 1 is still collecting and transmitting data on what it’s detecting in that region, especially on the activity of cosmic rays.

A Boundary of Bubbles

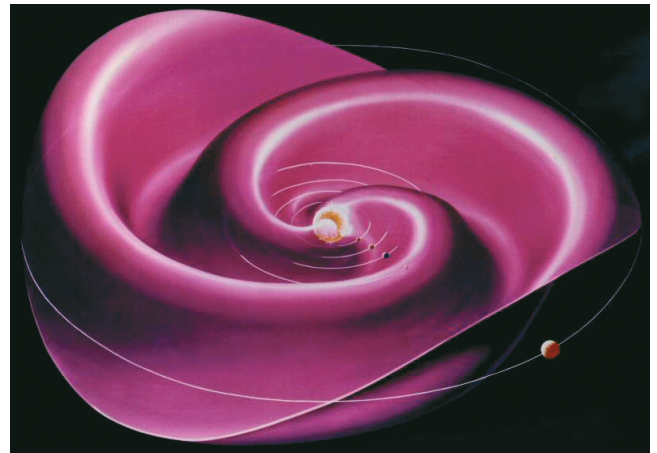
Astronomers and astrophysicists had presumed that the boundary between the heliosphere and the heliopause was “smooth,” a boundary that was essentially unchanging as it enveloped the solar system and functioned very much like a shield to keep out cosmic rays. It was thought that the solar wind and magnetic fields of the Sun would slow and then flow back out evenly across the solar system. But, because Voyager 1 and Voyager 2 not only exited the heliosheath at different locations and trajectories, but also during different phases of the solar maximum/minimum, their instruments detected different thicknesses of the heliosheath, and both detected an anomaly that astonished the cosmologists: the boundary appeared to be “frothy.” This flies in the face of conventional magnetohydrodynamic models.

The magnetic field of the Sun doesn’t extend out across the heliosphere in a smooth arc; it sweeps out three-dimensionally as the Sun rotates, creating a swirl of troughs and crests, like a vortex. (See **Figure 7**.) Of course, the swirls are not static, but in constant motion outward with the Sun’s rotation.

As the waves rotate outwards, as they near the heliopause, they begin to bunch up on each other, and begin to overlap. The two Voyagers detected a huge ocean of magnetic bubbles at the boundary; each bubble appears to be sausage-shaped and is about 100 million miles across (161 million km). Rather than functioning like a hard boundary, this layer of bubbles functions more as a membrane. It appears that some cosmic rays zip right through it towards the solar system, while others are forced to bounce around the magnetic bubbles for some time, before finally moving inward towards the Sun. For the most part, the heliosphere appears to modulate cosmic rays—slowing or deflecting them—before they can reach the inner planets. And, even, once in the region of the inner planets, cosmic rays are further modulated by Earth’s atmosphere and magnetic fields.

Researchers have created different scenarios to ex-

FIGURE 7



NASA/Werner Heil

An artist’s depiction of the heliospheric current sheath (the Parker Spiral).

plain this behavior, but they don’t fully understand it, and must wait for more sensitive and sophisticated instruments to tell more of the story. This is a crucial area for space travel as a whole; we must be able to devise methods to shield a spacecraft and its crew from the most harmful cosmic rays.

Voyager 1 is the first spacecraft to detect the heliopause, which is the boundary between the end of the Sun’s magnetic influence, and the beginning of interstellar space. It is traveling about 320 million miles a year, and Voyager 2 is traveling at about 290 million miles a year. Both spacecraft will continue to study ultraviolet sources among the stars, and the instruments will persevere in exploring the boundary between the Sun’s influence and interstellar space; they are projected to transmit for about another decade. Next encounter for Voyager 1: a star in the constellation *Ursa minor*; for Voyager 2, it will come within about one light-year of a star in the *Andromeda* constellation—both some 40,000 years from now.

Human Nature and the Cosmos

What a piece of work is a man, how noble in reason, how infinite in faculties, in form and moving how express and admirable, in action how like an angel, in apprehension how like a god!

—*Hamlet*, Act II, Scene 2,
by William Shakespeare

Many space explorers who have had the opportunity to view Earth from the vantage point of the Moon, or from the International Space Station (ISS), or from

orbit, have expressed in many ways how this perspective has changed them. It is known as the “over-perspective” or the “overview effect.” (See **Figure 8**.)

Chris Hadfield, a Canadian retired astronaut and engineer, described it this way in a [posting](#) on Pocket:

It sneaks up on you, because you’re busy and you’re doing stuff. Your emotions almost end up somewhere behind you, because things are happening so fast. One of the reasons we take so many pictures is we don’t have time to see what we’re looking at. And you know if you don’t somehow record this right now, you’re going to miss it, and hopefully you’ll have time later to look at it.

So, sometimes when you’re looking back at something you did, you realize what just happened. It was when I took a picture, actually, of Karachi, Pakistan, and I read what I wrote about it the next day, which was: “There are 6 million of us living in Pakistan.” And I realized that that part of the world had become *us* for me.

And, in the same posting, the reflections of former NASA astronaut, Jerry Linenger:

You go through the launch and it’s just chaos—it’s just *power*. You think, “Wow, mankind *built* this thing—it’s incredible! This thing’s getting me to 17,500 miles an hour.” All that part is incredible. So you catch up with everything; you do all the things your brain has to do: switches, make sure everything’s correct, make sure the spacecraft’s working.

But it’s when you have that reflective moment, when you just float over the top of a window. In my five months on the Russian Space Station, I had some opportunities where, for 90 minutes, I would just levitate over a window ...

FIGURE 8



NASA/Harrison Schmitt

Earth, as observed from Apollo 17, December 1972.

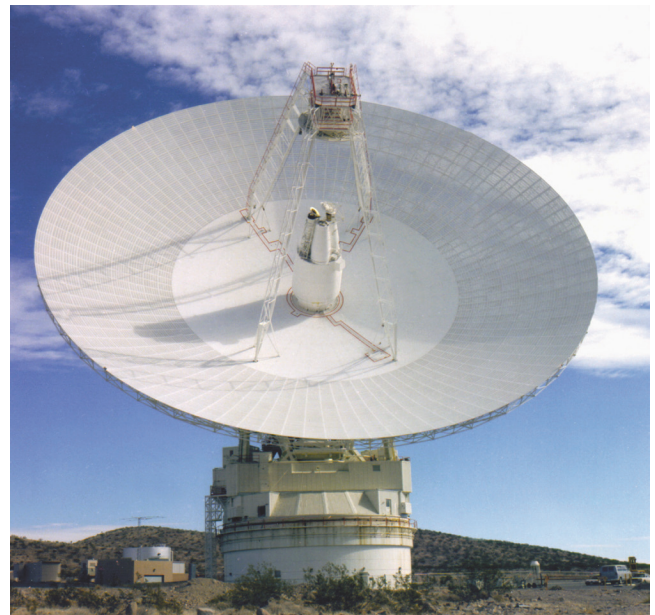
[looking at the Earth and thinking about all civilizations]....

You just have this incredible view of the universe, of Earth, and a little reflection of yourself as a human being, telling yourself, “Wow, I’m in space. What mankind just accomplished is incredible.”

Others in the same posting describe sharing a meal (rehydrated vegetables and meat) on a mission, in which there were Germans, French, African-Americans, Asian-Americans—and the first female commander—all breaking bread at about 17,500 mph

(orbiting every 90 minutes), in which they could all point out their countries, but which left one of them, Leland Marvin, in awe:

That’s when I think I really got my over-perspective. I thought it would be when I did this task of installing the Columbus laboratory, but



NASA

One of the five Goldstone antennas near Barstow, California that form one part of NASA’s worldwide Deep Space Network.

that paled in comparison to the human piece of us sharing and breaking bread and seeing the planet in that way.

Edgar D. Mitchell, Lunar Module Pilot, Apollo 14 [expressed](#) it more forcefully:

You develop an instant global consciousness, a people orientation, an intense dissatisfaction with the state of the world, and a compulsion to do something about it. From out there on the Moon, international politics look so petty. You want to grab a politician by the scruff of the neck and drag him a quarter of a million miles out and say, “Look at that, you son of a bitch!”

Towards a New, More Perfect Paradigm

However, one doesn’t need to go into space to experience this transition in perspective, but rather to expand the space in one’s heart, for all of humanity. A recent international [conference](#) organized by the Schiller Institute on the weekend of April 25-26, 2020 demonstrated how musicians, physicists, diplomats and other representatives from dozens of countries across the planet, could come together under the leadership of Helga Zepp-LaRouche, chairman of the Schiller Institute, to deliberate on the fundamental changes that must take place in the near future in the arena of economics and culture, to shift the world into a new paradigm, if mankind is to survive the current dangerous crises.

Among many other important points, several speakers from different countries and cultures emphasized that the Chinese term for “crisis” contains two meanings: “danger” and “opportunity.” Let us seize the opportunity now, to transform our world for the better.

Starting in March 2020, one of the links in the Deep Space Network, the 230-foot-wide radio antenna in Canberra, Australia, will be upgraded over several months. The Deep Space Network consists of three stations—one each in Australia, California and Spain—

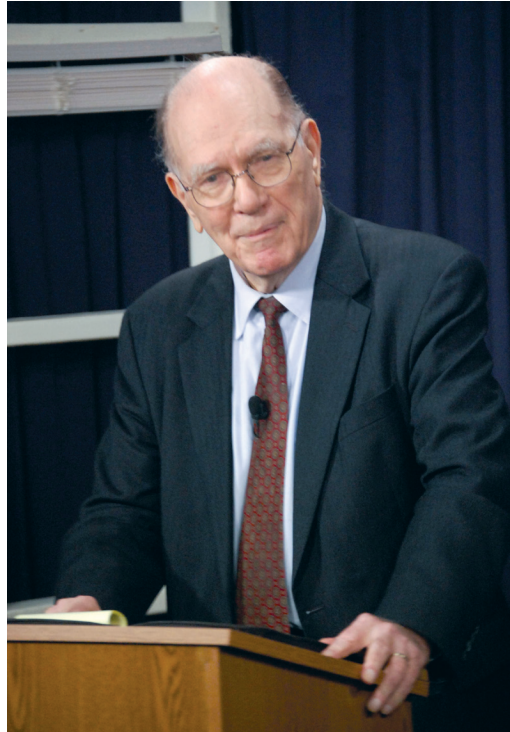
which communicate with various missions 365/24/7. Besides playing a critical role in communicating with the Voyager Mission for several years to come, they’ll provide critical communication and navigation support to future Moon and Mars missions, as well as the planned Artemis missions.

Voyager 1’s transmission—traveling at the speed of light—takes about 19 hours one way, and Voyager 2 about 16 hours. (By comparison, the data from the Rovers on Mars can transmit in 20 minutes.) All unessential equipment on the spacecraft, such as the cameras, have been turned off to save power. As it is, the power supply is at about 20 watts; communications will continue until the power sources can no longer transmit. On that poignant day, even our most powerful instruments will not find any signal as they scan the heavens.

Just as many of the scientists, engineers and technicians associated with the Voyager mission weren’t even alive at the time of its launch, so now, too, there may be newborn babies somewhere in the world—perhaps from Mali, Haiti, or Laos—who will be the next Beethoven, the next Einstein, the next LaRouche. Let us work together to solve the horrific crises of the day, and again lift our eyes and our spacecraft to unexplored horizons. When great minds and hearts collaborate together on a mission, mankind can accom-

plish miracles.

People from across the globe have expressed in many types of media over the last decades how deeply moved they are to consider that in the Voyager Interstellar Mission, a part of humanity will continue on its journey through the cosmos for tens of millions of years, perhaps surviving even our Sun. As human beings are not merely a sum of the elements that make up our bodies, so even our spacecraft are not simply the nuts and bolts that hold them together, and perhaps they, and the creative processes of the people that designed, built, and maintain their missions could be considered in more poetic terms, perhaps those of Percy Bysshe Shelley:



EIRNS/Stuart Lewis

Lyndon LaRouche, conducting a webcast in 2011.

To a Skylark

Hail to thee, blithe Spirit!
Bird thou never wert,
That from Heaven, or near it,
Pourest thy full heart
In profuse strains of unpremeditated
art.

Higher still and higher
From the earth thou springest
Like a cloud of fire;
The blue deep thou wingest,
And singing still dost soar, and
soaring ever singest.

In the golden lightning
Of the sunken sun,
O'er which clouds are bright'ning,
Thou dost float and run;
Like an unbodied joy whose race is
just begun.

The pale purple even
Melts around thy flight;
Like a star of Heaven,
In the broad daylight
Thou art unseen, but yet I hear thy
shrill delight,

Keen as are the arrows
Of that silver sphere,
Whose intense lamp narrows
In the white dawn clear
Until we hardly see, we feel that it is
there.

All the earth and air
With thy voice is loud,
As, when night is bare,
From one lonely cloud
The moon rains out her beams, and
Heaven is overflow'd.

What thou art we know not;
What is most like thee?
From rainbow clouds there flow not
Drops so bright to see
As from thy presence showers a rain
of melody.

Like a Poet hidden
In the light of thought,
Singing hymns unbidden,
Till the world is wrought
To sympathy with hopes and fears it
heeded not:

Like a high-born maiden
In a palace-tower,
Soothing her love-laden
Soul in secret hour
With music sweet as love, which
overflows her bower:

Like a glow-worm golden
In a dell of dew,
cattering unbeholden
Its aerial hue
Among the flowers and grass, which
screen it from the view:

Like a rose embower'd
In its own green leaves,
By warm winds deflower'd,
Till the scent it gives
Makes faint with too much sweet
those heavy-winged thieves:

Sound of vernal showers
On the twinkling grass,
Rain-awaken'd flowers,
All that ever was
Joyous, and clear, and fresh, thy
music doth surpass.

Teach us, Sprite or Bird,
What sweet thoughts are thine:
I have never heard
Praise of love or wine
That panted forth a flood of rapture
so divine.

Chorus Hymeneal,
Or triumphal chant,
Match'd with thine would be all
But an empty vaunt,
A thing wherein we feel there is
some hidden want.

What objects are the fountains
Of thy happy strain?
What fields, or waves, or mountains?
What shapes of sky or plain?
What love of thine own kind? what
ignorance of pain?

With thy clear keen joyance
Languor cannot be:
Shadow of annoyance
Never came near thee:
Thou lovest: but ne'er knew love's
sad satiety.

Waking or asleep,
Thou of death must deem
Things more true and deep
Than we mortals dream,
Or how could thy notes flow in such
a crystal stream?

We look before and after,
And pine for what is not:
Our sincerest laughter
With some pain is fraught;
Our sweetest songs are those that tell
of saddest thought.

Yet if we could scorn
Hate, and pride, and fear;
If we were things born
Not to shed a tear,
I know not how thy joy we ever
should come near.

Better than all measures
Of delightful sound,
Better than all treasures
That in books are found,
Thy skill to poet were, thou scorner
of the ground!

Teach me half the gladness
That thy brain must know,
Such harmonious madness
From my lips would flow
The world should listen then, as I am
listening now!

II. Win the Peace

ZEPP-LAROCHE WEBCAST

How Can You ‘Reopen’ an Economy That No Longer Exists?

This is the edited transcript of the Schiller Institute’s May 29, 2020 interview with Helga Zepp-LaRouche, by Harley Schlanger. Subheads and embedded links have been added. A [video](#) of the webcast is available.

Harley Schlanger: Welcome to our webcast today with our founder and President Helga Zepp-LaRouche. It is May 29, 2020. Let’s begin with some good news: Tomorrow, Saturday, the launch of a rocket taking two astronauts to the International Space Station is scheduled. This is the first crewed rocket in nine years that was made in, and launched from, the United States. LaRouche PAC has just released a new program, for 1.5 billion jobs globally, including 50 million new, productive jobs in the United States. The essence of this pamphlet is the full analysis of the approach to physical economy developed by your husband. What are your thoughts on the release of this pamphlet?

Helga Zepp-LaRouche: The world needs a change in direction. We have a depression. We have a pending financial blowout of the system, the coronavirus pandemic, a famine threatening, and growing social chaos. It’s very clear that the accumulation of these crises—including now a threatened strategic confrontation among the major countries—demands a completely different paradigm. We have to inject a solution addressing all of these problems. That is the character of our program to create 1.5 billion new, productive jobs worldwide, starting with 50 million jobs inside the United States. That program is based on the principles of my late husband. In a productive economy, at least half of the workforce should be deployed in real productive workplaces. He had a quite different conception of what is productive, and what not.

Today, only 12% of the labor force in the United

The LaRouche Plan to Reopen the U.S. Economy: The World Needs 1.5 Billion New, Productive Jobs



Construction of the ITER (international tokamak, magnetic confinement fusion experiment) facility in Cadarache, France, 2018. Photo: Oak Ridge National Laboratory

States is employed in productive jobs, and a lot of it—more than 70%—is in the service economy. With the consequences of previous policies of the Obama and Bush Administrations, and the destruction, for the last 50 years, of the productive character of society, there are now almost 50 million unemployed in the United States.

To turn this around, we will need an immediate investment program for 50 million jobs in the United States in such frontier areas as the Artemis space program. According to the principles of Lyndon LaRouche, at least 5% of the labor force should be deployed in basic research and development. Therefore, the Artemis program and the rocket launch, is the direction to go. NASA Administrator Jim Bridenstine said a little while ago that international cooperation in space is what lifts the world above geopolitical confrontation.

This is extremely important. The idea of space travel



NASA/Aubrey Gemignani

NASA Administrator Jim Bridenstine: International cooperation in space is what lifts the world above geopolitical conflict. Here he is shown climbing out of a mockup of the Demo-2 Crew Dragon space capsule at SpaceX headquarters in Hawthorne, California on October 10, 2019.

instills the kind of optimism which can lift people's eyes up to the stars, up to the skies, to see that there are many frontiers to be conquered. It instills the optimism of man's ingenuity, which can address all problems and find solutions.

We will present our program in the next weeks in great detail, so tune in to our various websites. I encourage everyone to use the 29-page digital [offprint](#) of the program, "The LaRouche Plan To Reopen the U.S. Economy: The World Needs 1.5 Billion New, Productive Jobs," to make sure everybody has access to it. We need a broad discussion among engineers, civil engineers, farmers, city councils, and people who represent every aspect of productive society. We have to mobilize the entire society as occurred with Roosevelt's New Deal, which led the United States out of the Depression. That is exactly the kind of discussion we urgently need, because we now face an existential crisis. Join in this discussion and make sure the solutions are put on the agenda.

Schlanger: Helga, I think it's important for people to think this through, because with the partial "reopening" of the economy, in this global crisis, there's no solution in the United States alone, is there?

Zepp-LaRouche: Obviously not. The economic crisis and the unemployment in the United States has accelerated. It is really reaching a shock front, because of the collapsing of the physical economy of the United States. If you look around the world, this increasing

collapse is happening everywhere. And as the coronavirus pandemic spreads—there is a famine threatening as a result of the collapse of agriculture, also triggered by the coronavirus but not caused by it, with the danger of 300,000 people dying of hunger per day!

The pandemic is now reaching the Southern Hemisphere, exactly as we have warned. Probably the worst case right now is Brazil. Officially there are 420,000 cases in Brazil. The São Paulo Medical School at the University of São Paulo reports that there are probably 15 times more cases than officially recognized. There is very little testing, there is incredible poverty in the favelas in the impoverished Northeast of Brazil; so they estimate it may be 5-6 million people infected, and that is as many as the rest of the world combined.

In Chile, COVID-19 is out of control, and people are starving and there are riots. We need to implement the program for 1.5 billion productive jobs for the global workforce. Sixty percent of the world labor force is employed in the so-called "informal economy," which is a euphemism for jobs, with no benefits and no security, in which people live from hand to mouth, and for the most part have no productive skills.

If you look at the unemployment in the world, and this informal work, you see an incredible waste of productive potential. The world needs productively employed people to build a world health system, a health system in every country, and to double world food production. We face an oncoming famine, which requires that we double world food production.

We are campaigning for this in almost all the countries of the world, effectively reaching into Africa. Several organizations in Africa now recognize that ours is a viable proposal. So I ask you to sign our [petition](#), "Coronavirus Petition: For a Global Health Infrastructure." Read and distribute as widely as you can our world food emergency [program](#), and our [program](#) for 1.5 billion productive jobs. We need a public debate and we need many people in the fight for this solution.

Schlanger: Under these kinds of circumstances, there are often diversions, provocations that lead to civil unrest, and the danger of war. First, on civil instability and unrest: What are we seeing emerging around the situation in Minnesota, where the police killed an unarmed African-American?

Zepp-LaRouche: This is already exploding in fur-



CC/Studio Incendo



DoS/Freddie Everett

Zepp-LaRouche: "Hong Kong's status as a special administrative region, has been violated by foreign-instigated military and terrorist actions in Hong Kong." A leading anti-China voice, U.S. Secretary of State Mike Pompeo, is doing everything he can to provoke China.

ther riots, and it just demonstrates, that unfortunately there is latent racism in the United States and Europe, basically a tinder box, which, under conditions of unemployment and stress caused by the pandemic, can explode. I don't want to discuss the particulars of this case: President Trump has called for an investigation. The video of the incident leaves no doubt that this was a murder, the man clearly indicated that he couldn't breathe. Let me just say that this is a totally horrible expression of what happens to human beings when a society doesn't respect every human being as sacred.

President Trump has called for an investigation, and hopefully this will lead to justice. More fundamentally, we have to eliminate the conditions that have created such a tinder box. That means creating a real economic recovery, giving people hope again. Under conditions of breakdown, social tensions and racial tensions will tend to just explode. We now have five months until the U.S. election. Unless our program is put on the agenda, way before the election, I don't see any guarantee that we will even get there. If you take that, together with the strategic escalation, I can only reiterate, we need a change in paradigm, quickly, for both domestic reasons in the United States, and emphatically so internationally as well.

Schlanger: We're also seeing a hardening of the anti-China tone coming from people such as Secretary of State Mike Pompeo, related to the new law for Hong Kong. What do people need to know, because clearly what Pompeo is doing is way out of line. He's pushing us and China toward a new confrontation.

Zepp-LaRouche: The destabilization against Hong Kong didn't start with the most recent decision of the Chinese National People's Congress, a new bill making the security law of China applicable to Hong Kong, which is its right. It is in response to what happened before, the riots that were instigated by the British, by people including the former, and last, British Governor of Hong Kong, Christopher Patten, who was quite open about it. The National Endowment for Democracy (NED) was financing and training people, and fueling the terrorism going on in Hong Kong. The West was completely duplicitous and lying by calling these people "freedom fighters" and "proponents of democracy," while in reality, these people, or many of these demonstrators, were terrorists, using violence against the police, the police headquarters, causing the situation to get out of control.

Now, Pompeo is threatening—I don't know if he has done it already, or if he is about to do it—to take away the "autonomous" status of Hong Kong, which is supposed to hurt China financially and economically, because the autonomous status of Hong Kong allowed Hong Kong to be used as an international financial trading place, which has a not-so-good history. You must take this whole thing back to the Opium Wars, and the British military campaigns against China in the 19th century, which was the reason why Hong Kong went to the British Empire in the first place!

Hong Kong does not belong to the British, it belongs to China! In 1997, Hong Kong was basically given back to China, but for a period of 50 years, until 2047, with an interim status as a special administrative

region, under the rubric One China, Two Systems. But that has been violated by foreign-instigated military actions and terrorist actions in Hong Kong.

So, if the Chinese government is now saying that they will not allow this anymore, and they assume the responsibility to fight against these terrorists for national security reasons, it's their absolute right. Those who sponsored the terrorists should have thought about this beforehand. However, if this is now happening, sure, it will hurt China.

But I really don't think the people who have forced China to take this step have thought it through, because Hong Kong is not just a financial place for China, it is also the place where a lot of stuff coming out of the opium trade and so forth is still going on in the international banks located there. That will be eliminated. So Hong Kong may actually be a trigger point for much more nasty consequences for the international financial system, so this anti-China action, if carried out, may actually be shooting themselves in the knee.

It's really important to understand the long history of containment, including active military operations in previous centuries against China by the British, by the French, by the Japanese. I think China has grown out of that with the absolute determination that it will never again allow the kinds of suffering and damages which have occurred in these operations. China is now strong enough to make sure that it is not going to suffer the same thing again.

If this is pushed too far—and you can see that the tone in the Chinese media is actually getting sharper—they have announced that they may answer with quite tough measures, such as sanctioning U.S. firms, like shutting down certain economic operations in Hong Kong. But at the same time, they always say, it's better to renegotiate, to go back to the diplomatic way of solving problems.

I can only say this U.S.-China conflict is probably the most dangerous conflict, presently, because, as I have said many times, the idea that you can contain a country of 1.4 billion people, whose government has set out on a correct economic policy, by emphasizing scientific and technological progress, you cannot contain that! Especially when the West is still, at least in Europe, committed to an absolutely foolish neo-liberal green policy, and destroying itself in that way, while China, together with some other Asian countries, is putting its hope—and actually doing it—in scientific and technological progress. China has become the world

leader in several areas, like space programs—not terribly much, but they are ahead in certain areas in fusion research, in fast train systems; they have a completely different morale in their population than the West has demonstrated in its harsh, really irrational reaction to the lockdown measures to contain the pandemic.

So China's set to arrive. And if you want to stop that, the only way you can do it is with World War III. China has said that since its self-declared opponents know that China has become by now a very strong military power, and it doesn't think they will risk a World War III, that the only card left would be the decoupling of the economies.

Now, again, given the intertwined nature and interconnection of the global economy, if there were a serious push to decouple the United States economy from that of China, forcing the rest of the world to take sides between these two blocs, in a new Cold War, given the condition of the world economy, right now, I don't think it would last very long, and it would lead to a gigantic collapse both of the financial system and the real economy. And out of this chaos could come all kinds of danger, including that of war.

Schlanger: You described earlier a regime-change crew that was involved in the Russiagate and Ukrainegate attacks on President Trump. That crew included George Soros and the gang of speculators from the City of London. This is the same network that's targeting Argentina now, isn't it?

Zepp-LaRouche: Oh, yes. In the next days, we'll see whether Argentina will become another trigger point, perhaps leading to a chain-reaction collapse of the financial system. On May 22, Argentina did not pay about \$500 million on bond interest payments, and now the Credit Derivatives Determination Committee of the International Swaps and Derivatives Association is deciding whether or not this is a "credit event"—a default. If the credit default swaps (CDS) system kicks in, this could indeed lead to such a trigger.

All of this makes absolutely clear that the demand of Lyndon LaRouche to have a New Bretton Woods system is absolutely urgent. Again, it cannot be done on a lower level; it has to occur on the highest level of the key countries. The United States, Russia, China and India have to get together and say: "Look at the world, look at the many crises spinning out of control. We take responsibility for the fate of humanity and we declare

that we will give the whole world a new direction of international cooperation, because confrontation can only mean World War III. Therefore, we will declare a New Bretton Woods system.”

They will then declare a 1.5 billion jobs creation program; they will cooperate to get a decent health system in every country; they will move together to double world food production, and start concretely to industrialize Africa, to rebuild Southwest Asia.

All of these things would be easy to do, if only the political will can be mobilized. But it emphatically means you have to get rid of the war mongers. I think about what President Trump said about former National Security Advisor John Bolton, that if he had not kicked him out, there would have been six world wars already. Well, maybe there are some others in his administration for whom the same thing applies. President Trump is in a very difficult situation with all the aspects we described. So, we need to mobilize the population to support him against these war mongers.

The anti-China campaign in the United States can only lead to a catastrophe for all of humanity. Fundamentally, it's completely unjust, because all the accusations against China are ludicrous! A German online publication published documentation about the many mistakes made by the German government in not responding to the warnings of the World Health Organization in the beginning of January. It kept sleeping in February, and only in March, when the coronavirus cases began erupting in Germany, did it start to look for masks and protective clothing and all of this, and naturally then there was a big scrambling. There are other countries that have clearly not responded to the warnings coming from China and the WHO.

The truth is not something which is owned by people like Pompeo, but the truth is what can be clearly demonstrated in terms of a timeline of what happened and when. The key reason why this is a pandemic has nothing to do with the coronavirus; it has everything to do with the liberal economic system, and the takedown of the health system by the Bush Administration, by the Obama Administration. In doing this they have created the conditions, including the non-development of the developing countries, so that this virus could turn into a pandemic! It's very important to not mix up things, and the blame game has to stop! It is implying the danger of



EC

European Commission President Ursula von der Leyen's €750 billion "recovery fund" proposal is just one more effort to steer European financial investments into a disastrous Green Deal.



Wind turbines: renewable energy in the Netherlands.

World War III and people had better wake up to that.

A Green European Union Bank Bailout Fantasy

Schlanger: Helga, there are two more topics I want to bring up: One of which, when we talk about missing the boat, we saw the European Union come up with another bailout policy disguised as some kind of effort to revive the economy. What can you say about that?

Zepp-LaRouche: Oh, that is a complete disaster. I can only hope that the already visible opposition against it will be strong enough to put it in the wastepaper basket: This is a proposal by Ursula von der Leyen, President of the European Commission, for €750 billion over five years, which essentially is supposed to show solidarity with the weaker European member countries. In reality—and this has been discussed very clearly by many voices, in Italy in particular—it is an effort to transform the German economy according to the fantasy of the Green Deal, which is von der Leyen's pet project.

This program would mean allowing investments only in green projects such as green renovation of housing, solar, wind power; one million charging stations for e-cars. I mean—all of these are according to this Green New Deal. If ever implemented, this program would

mean a completely sidelined Europe; all are economically completely invalid policies, because they lower productivity, they lower the energy-flux density. It would mean that Europe becomes technologically obsolete and sidelined. The character of Europe as industrial nations would be completely smashed, and this would lead to social chaos.

Fortunately, there is opposition in the German parliament, in the European Parliament, but especially also coming from the sovereignists in France, and the Italian equivalent—they don't call themselves sovereignists, but they are, *de facto*—who basically say that this is increasing the debt, and if Italy is forced to increase the debt, why don't they do it directly by issuing government bonds, rather than going through the EU? There are warnings even from the European Central Bank that this program may detonate the Eurozone, and frankly, given the fact that this EU bureaucracy is all on the wrong side, that may not be a bad thing, because it would allow for an alternative policy of working together with Eurasia on the development of the Belt and Road Initiative, which is the way to solve problems in Africa and Southwest Asia.

So this European Commission program is hopefully not going anywhere. It's the worst kind of economic idiocy you can imagine.

Schlanger: Finally, we come to the strange case of Joe Biden, who can't seem to decide whether he's a candidate for President or a fugitive from justice in the Federal Witness Protection Program hiding out in some basement. With the recent developments in Ukraine, it may be that he is going to become a fugitive from justice: What's going on with that situation?

Zepp-LaRouche: Well, that is very interesting, and very little, if at all, covered by the mainstream media. In Ukraine, the Prosecutor General (Attorney General) has now put up a criminal investigation against Biden for both corruption and also the fact that he imposed undue pressure on the Ukrainian government, on then President Petro Poroshenko, to kick out the Prosecutor General Viktor Shokin, who was investigating a company called Burisma, where Hunter Biden, the son of Joe Biden, had a post which paid him a lot for doing nothing. There is documentation now in the courts that Joe Biden threatened to withhold \$1 billion from Ukraine if Shokin wasn't kicked out. But Poroshenko was such a willing



CC/Chatham House



Gage Skidmore

Joe Biden (right), Obama's vice president, is now under criminal investigation for corruption in Ukraine involving former President Petro Poroshenko (left).

tool that Biden didn't have to do much.

This is a clear case of corruption and utmost interference in the internal affairs of another country, and I think it is very, very interesting. Let's see how this plays out. It may change the U.S. election dynamic very quickly because this is now an official criminal investigation.

Schlanger: As I was saying, I think this is going to keep Joe in the basement a little bit longer. Let me just urge our viewers again, to go to the LaRouche PAC or Schiller Institute websites, and bring up the new [program](#), for 1.5 billion new productive jobs. This is a game-changer. We have an opportunity to do something, now, because of the crisis, and if you were listening to what Helga was just saying, we're in a global crisis, but there are solutions, and that should give you hope.

Helga, anything else from you?

Zepp-LaRouche: I would like you to become active with us, because this is a moment in history where it can go completely wrong, quickly; and, if we implement this program, we can bring hope to billions of people in the world. Since the human being is basically a being with creative reason, let's hope that enough such human beings get together and mobilize with us for this good plan, and then we can change history for the better. So get active with us!

Schlanger: OK, thank you very much, Helga. We'll see you next week.

Zepp-LaRouche: Till next week.

May 28, 2002

MEMORIAL DAY ADDRESS

The Lessons of Wartime for Statecraft Today

by Lyndon H. LaRouche, Jr.

Mr. LaRouche delivered a Memorial Day webcast on May 28, 2002, sponsored by his Presidential Campaign Committee, LaRouche in 2004. He spoke to an audience in Washington connected to a New York group. The webcast was broadcast internationally over the Internet. This is the edited transcript of his speech. A video of his speech and the discussion session that followed is available [here](#) in Windows Media Player format.

In these times, I'd like to speak on the question of the lessons to be learned from looking at the human side, the human experience, of war. And despite the fact that the Congress has monkeyed so much with the date of Memorial Day, let us consider this Memorial Day Week, and let us celebrate it accordingly.

Now, let me begin with the question of where do you find in yourself, not only the courage to conduct war, to participate in war, when necessary; but where do you find in yourself those qualities which enable you to look beyond the short term of next week, or your immediate community, and find that strength you need to think and act on the basis of what the consequences of your behavior will be, perhaps for the next generation or two yet to come? We need that kind of courage today, that kind of intellect among our own citizens, so that they can begin to think clearly, in the way that the present crisis demands of us. To think clearly, as a similar but different challenge was presented to people who fought and died in two wars in the last century, the two world wars of the last century.

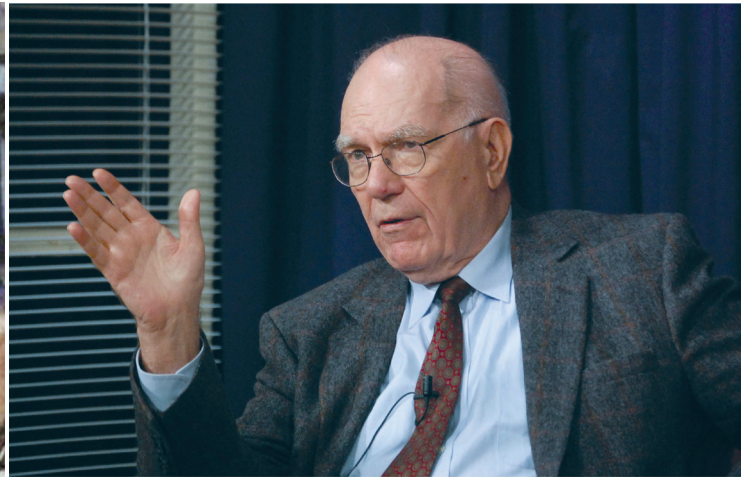
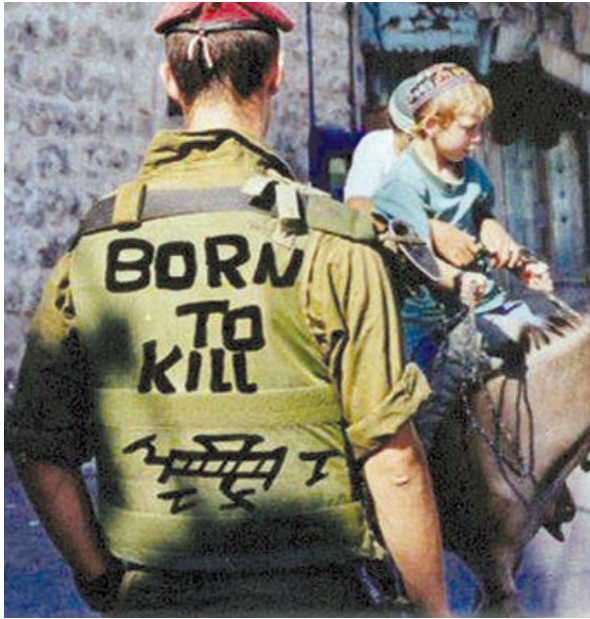
To find that source of strength, I ask you to look inside yourself, and look at the history of your family, what you know of your family, and what you know

about the nation beyond your immediate family. And think about the fact that you live and you die, as the people before you did, and you think about not only what you're getting out of living now; but you're thinking about *how you look, how the way you behave, how the way you respond to the present crisis, looks in the eyes of those who died, and who can not act any more, but are looking at you, within your own mind, and saying: "Are you capable of doing what needs to be done, as we did in our time?"*

Now, in my own case—to start with my own case, as it will help, perhaps, for you to look at your own—I go back about 200 years; that is, in terms of my experience in my family. My parents were born in the 1890s, my grandparents were born in the 1860s. At our family table, we went back, with one character, who was a great-great-grandfather, was rather famous in his time, he was a leader of the Abolitionist movement, and got in some trouble on that account. And he was rather famous, and he kept appearing at the family dinner table—what he said on such-and-such occasion was remembered, and spoken of, again and again. And every family has something like that. My history goes back 200 years.

Now, in terms of the family history of the nation, it goes back further. My first ancestors came respectively to North America from France and England in about the 1670s. Some to Pennsylvania, some to Quebec. Other ancestors came from Scotland and Ireland in the 1860s; one, —my great-grandfather—was a Scottish soldier, a professional saber-man, who came over to join the Civil War in the First Rhode Island Cavalry; his brother was a famous sea captain for the White Star Line; and in the same group, we have some Irish who came in, and they came in at about the same time. We also had, on the French side from Quebec, a certain trace of American

Editor's Note: This speech was first published in *EIR* Vol. 29, No. 22, June 7, 2002, pp. 48-62.



EIRNS/Stuart Lewis

LaRouche insisted, “The object of war-fighting is to win the peace, not to kill everybody you wish to hate.” A “utopian” soldier (left), represents the post 1960s increasing dominance of the utopian faction in the militaries of the U.S., NATO, and Israel.

Indian ancestry. So, if I go on the warpath once in a while, you’ll understand why. But, such is the nature.

So that we all have our own particular type of roots, in our own family history, and in this nation, and in their own nation, if it’s a different one. And we think of ourselves as mortal beings, who live for a time, with a succession of families, and within a nation. We think of ourselves as worth being remembered. We remember those who went before us, and their faces are still in our mind as part of our conscience. And that generally is the model for the healthy development of any child, or young person, in society. The family, neighborhood grouping, the roots of the family, back two, three, or more generations, a sense of where the family came from, and where the nation came from; what was important to those who went before us. These kinds of things.

So, instead of thinking about what makes us feel good, today, we say, “What would make us feel good when we’re dead? What can we go to our grave, thinking we did, that was good? That we did something necessary; that we had the courage to do something necessary.” We all die, sooner or later. And that, essentially, is our history. But, other people die in war. And there’s a slight difference between dying in general and dying in war. And I think it’s appropriate to think about that comparison today: that we are all in a similar situation; some have experienced war, some not. But war is a part of experience, and many people in the United States

died in the course of two world wars.

Death in Wartime

For example, we talk of heroes who died in battle. But most people who died in war did not die in battle; they died in what Clausewitz, in his writings, called “friction.” Jeep accidents, illnesses. For example, in my experience, there was an area in northern Burma, in which soldiers in that area, ran into a disease called, generically, “bush typhus,” or in Japanese, tsutsakamushi—which Japanese soldiers had brought into that area, from other parts of Asia. And at that time, we had no cure for it. So, these soldiers, many of whom I saw dying, were simply lying in a hospital barracks, quietly dying, with no cure in sight. They did not return home to their families.

There was a case in one ward in the same hospital, in which there were three people who had died, or were dying, of a plane accident—I believe it was a C-46, of the type that was flying at that time, from Myitkyina [Burma] to China—they crashed on takeoff. They survived, but they inhaled a lot of kerosene or gasoline, and they were dying of the effects of that on their lung system, and so forth. They were certainly semi-comatose, moving. And day after day, they would lie, being cared for, in beds, side by side, by the wall, in that barracks. And across the aisle from that, was a fellow of Hispanic background, a Mexican-American, who was dying because he had been shot by a British MP, while

the two world wars. Let's just take a



U.S. Coast Guard/Paul Queenan

U.S. Marines landing on the Japanese island of Iwo Jima, February 1945.



LoC

Gen. Douglas MacArthur was not out to kill Japanese, but to win the war.



Nazi Stormtroopers on the march.

visiting the village. And they were there, day by day—we watched them, living and dying. And one morning, they were simply gone. They'd died overnight, all four of them.

Jeep accidents and so forth. And that's the way most people, who died in war, died. Not in battle, but as a result of friction. That was part of our experience.

So we had two world wars. And let's look briefly at

glimpse of some film clips from motion-picture shots made of American soldiers in World War I; and after that, take a look at some shots from Germany, during the period that Germany was going into World War II—just to get a sense, a memory of the *feel* of what this was like. The images are obvious to you. These are just old films from that period. This was the kind of war, but many people died.

Look at this image of soldiers going over the top, to charge, over the top to charge, into machine-gun fire, against barbed wire, and so forth, was a significant part of the American experience. This was one of the ways people died. But they also died, in France, not only in the trenches, trench war, but they died in frictional incidents of war. But they didn't come back. And there were families waiting for them, but they never had the chance to receive their return. And that's also part of the American experience.

This went on—again, the German phenomenon. The march to war. You see the mobilization, the march to war. It worries you, because you see people like that, marching like that, marching to war. You think about what goes on in their minds as they do that. You see the horrors of Nazi Germany, with the SS troops marching; the other troops marching, marching to war, a war which would end up with the virtual destruction of Germany. Marching to war. And that was just the German side in World War II.

Winning the Peace

Look at the case of the war in Asia, in order to learn a lesson: Now, Douglas MacArthur was a great general, probably one of the greatest in American history. He did the most for the United States, as a commander. He fought a war in the Pacific, under what seemed to be desperate circumstances; he brought it to a successful conclusion, even before Hiroshima. He fought a couple of heavy battles, or ordered a couple of heavy battles, serious ones, major ones, bloody slugfests, but he fought *no unnecessary battles*. He moved past islands, occupied by Japanese troops, and didn't attempt to get them out of there. Why waste lives, taking islands? We have them isolated. We control the seas; we control the air around them. Why bother? We'll come back later. No need to fight a war on those beaches; no need to go into those islands. So MacArthur had a sense of economy of war.

MacArthur was not fighting war to *kill people*. The object of the American soldier in World War II was not to kill people—maybe some people had that idea—it wasn't killing. The purpose of war-fighting was to *win the war*. The purpose was to *win the peace*, not to kill everybody you wish to hate, but to win. To win what? To win war. What's war? Winning the peace. That was MacArthur's policy. *We didn't need to invade Japan*. We never needed to invade Japan. In my opinion, MacArthur never intended to. Certainly MacArthur was the kind of general who would never have done the silly thing by dropping nuclear weapons on Hiroshima and Nagasaki. Why did we need to invade Japan? Why is the myth that we needed to invade Japan told? It's a big lie.

Japan is an island-country, without adequate raw materials and similar resources in its own territory. Japan lives as an economy, as a modern economy, by imports from other parts of the world, including Asia. Therefore, the American strategy, the MacArthur strategy for the Pacific war, through World War II, was not to kill Japanese. The American strategy was to bring



Painting by Friedrich Bury



Painting by Louis-Léopold Boilly

Gerhard Scharnhorst (left) and Lazare Carnot developed the Classical military conception of strategic defense—the opposite of today's utopianism.

Japan to *surrender*, to peaceful surrender. By what? By building a net, a blockade net; a naval and aerial blockade, which would prevent Japan from getting the materials it needed to maintain its economy, and therefore, its war machine.

It was also known during that time, which many of you may not know, that the Emperor of Japan, in the course of early 1945, had entered into diplomatic negotiations for peace. His channel for negotiations was the Vatican. It was the office of a Cardinal Montini, who was later Pope Paul VI, and some friends of mine were involved in those negotiations, at that time. So, the United States knew it had an offer of negotiations of peace from the Emperor of Japan. Why should we invade Japan? Why didn't the peace come? Well, partly because the British and Americans didn't want it to come—after Roosevelt was dead. Partly because some people wanted *vengeance*, not peace. But MacArthur and others understood that the problem the Emperor had—the Emperor wanted peace, but he had some generals who didn't want to surrender, and therefore, the U.S. policy was to squeeze, maintain a tight blockade—*aerial and naval blockade*—which was almost totally effective, and Japan would have to surrender, and the generals would have to bend their knee to the will of the Emperor. And peace would come.

In point of fact, the peace that did come, after Hiroshima and Nagasaki, was the same peace, which the

Emperor had negotiated, through the Vatican channels, before then. So there was never a need for U.S. troops to have a forced invasion of those islands of Japan. MacArthur was not out to kill Japanese. MacArthur was out to *win war*, by using the strategic and logistical might of the United States, mobilized to bring about a condition, in which the Japanese people and institutions would accept peace as the alternative to war.

That was the way we used to fight wars.

Now, there's a principle involved, and you may smell what I'm getting at here about present military policies, which, frankly, are immoral and insane. And I would hope that our country would stop it, because it's stupid, immoral, insane.

The Concept of Strategic Defense

We used to have a different military policy. Before they got rid of MacArthur, and before Eisenhower retired as President, we used to have a different kind of military tradition in the United States—different than what we have today, different than what was shown in Vietnam, different than what is being shown right now. What was that policy? The policy was developed in the 18th Century, and there are two figures from the 18th Century who are most important for anyone who wants to understand this, to study today. One was the greatest military genius of France—not Napoleon, who was somewhat of a bandit, more than a military genius—but a major-general, Lazare Carnot, who was also a famous scientist.

Lazare Carnot, who was already a military genius, was given the command of the French forces in 1792. At that point, France was being invaded by every army in Europe. The intent of those armies was to cut France up into individual pieces and chop it up. Lazare Carnot was given the command, a hopeless command at that point. He turned a hopeless command into a total victory, within two years. He reformed the armies of France. He made a scientific mobilization of the type that Franklin Roosevelt probably knew about, and would have been happy to imitate, and France's military forces on the continent of Europe, became invincible. Every invading army was defeated. France's integrity was defended. Unfortunately, Napoleon spoiled the whole show later on.

In this same period, there was another leading military figure in Germany: Gerhard Scharnhorst. Scharnhorst was a product of an education given to him at the school of a famous fellow, Wilhelm Schaumburg-

Lippe. The educational program of the school was provided by one of the great geniuses of the 18th Century: Moses Mendelssohn, the famous Moses Mendelssohn who designed the program of teaching at the military school which produced one of the greatest military minds of Germany—Gerhardt Scharnhorst.

The same group of Scharnhorst, when faced, at the point that Napoleon was sending the Grand Armée—which was sort of like the predecessor of the Hitler Waffen-SS—into Russia; the German Prussians, influenced by Scharnhorst, developed a plan which was based on some work by a fellow who was an in-law cousin of Friedrich Schiller. On the basis of the study of Schiller's *History of the Revolt of the Netherlands* and *The Thirty Years War*, that Prussian command devised a program, which they presented to the Tsar of Russia, a policy of strategic defense, which resulted in the entrapment and destruction of Napoleon.

The Citizen-Army

This concept of strategic defense, is consistent with the idea of the citizen-army. One of the things that came out of France under Lazare Carnot, that came out of Germany under the influence of Scharnhorst: the idea of the citizen-reserve army. We Americans in World War II were not the best fighters. The Germans were much more effective as soldiers than the Americans, soldier for soldier. And this has been studied extensively. Because they had a training program, in depth, and a reserve program, which was based on the Scharnhorst program. We put together a military force in the United States, after years of negligence of the necessary steps to build a standing reserve, effective reserve, and to build a military force that could cope with these kinds of problems.

So we went into World War II like a bunch of military slobs, generally. I saw it myself, so I have eye-witness testimony. But what we won the war with, and what our best commanders understood, was to use the economic might, which had been built up again, under President Franklin Roosevelt, to give us the logistical, and strategic-logistical capabilities to win war by logistics. And the United States won World War II with logistics—not with kill-power. We don't have logistics today. We have kill-power. We don't have a war-winning capability. We have a perpetual war-fighting capability, until it just quits when it gets tired. And that's the big issue.

We emerged from World War II, not only as the

greatest power on the planet, but the *only* power on the planet. No other nation represented a power in world terms, just the United States. We had no need to invade Japan. We controlled everything. We controlled their environment. We controlled their skies. We controlled the seas around them. We didn't need to invade. We were prepared—at least some of us—to make peace with Japan. So why should we fight war? Why should we invade?

There's a famous fellow—Machiavelli, who most people misunderstand these days—who laid down a policy, a military policy, in his works on the books of Livy, and pointed out the reasons why, when an enemy is defeated, *you never go in for the kill*. Because the enemy may start killing again, in desperation. You never close in—bayonet to bayonet, or otherwise—on a defeated enemy. What you do, is you use the power you have, to create the conditions under which the enemy will accept a *peaceful solution* to the conflict.

Which is the way we should approach our problems today. We should not be the world policeman, like Roman Legions, or the Nazi Waffen-SS, running around the world and killing people we say are the rogue states, or might have weapons of mass destruction, or might have terrorists among them. That policy is idiocy, is criminality. We knew how to do things better before: Build up two things—a strategic defense, in depth, which is largely economic power, physical-economic power. Increase the productive powers of labor of your people, as Roosevelt did during the 1930s in the recovery. Build up your educational system. Open plants. Create new productive jobs, not consumer-society jobs, but production-society jobs. Farms that function. Machine-tool shops that work. Stop being a consumer society, which we've degenerated into, and go back to becoming a producer society.

We have the ability in the United States today, as a nation, to secure, to establish our security, planet-wide, virtually without firing a shot in military fire, in any part of this planet. All we need to do, is to learn the lessons of history of past centuries, including the Roosevelt history, and lay down a plan of reconstruction of a rotting, collapsing world economy, and say: We're going to do our part in revising an economy that has failed.



Statue by Félix Charpentier

Jeanne d'Arc's courage made possible the birth of France as the first modern nation-state.

Leadership: The Case of Jeanne d'Arc

Now back to the individual.

The individual must have the courage, the personal courage, to actually exert a command position in warfare. Soldiers go along, as long as they trust their officers and leaders, but it's the commanders who must have the courage which inspires the soldiers in confidence to work with the leader. We need people who are leaders in the true sense, not leaders in the sense of "Do as I tell you or I'll shoot you." But leaders in whom the people that follow them have confidence. Leaders who inspire confidence in their people. Not like the politicians we tend to elect nowadays, but actual leaders.

We have some examples of leaders in modern history, at the birth of modern history, for example, the 15th Century. Jeanne d'Arc, a farm-girl, who was seized by the commitment, a mission, to force a King, who was a no-good King, to become a real King of France. And to reestablish France in its dignity as a nation. And she succeeded. But because of betrayal by that very King himself, Jeanne was tortured by the English Inquisition, and burned alive, after torture by the

English Inquisition.

She refused to capitulate. And by her refusal to capitulate, in accepting the risk of being burned alive, she made possible, not only the existence of France as the first modern nation-state—that under Louis XI—but inspired circles in the Catholic Church to conduct reforms which we saw in the 15th-Century Renaissance. This little peasant girl, who had a sense of a mission in life, who used her life to do a good, *because it had to be done*, inspired people around her, and by her courage, inspired a nation, and more than just that nation, to establish the first, true modern nation-state in European civilization.

The example of France under Jeanne d’Arc, the example of Louis XI, was used, in England, to free England from a tyranny, the tyranny known as that of Richard III. And Henry VII of England, established in England, the second modern nation-state on this planet.

Enter Venice

Now along came an attempt by the enemies of the nation-state, the Venetians, to destroy England, to destroy England’s character as a nation-state, and to do that, they sent agents into England, to corrupt a rather foolish heir of Henry VII—Henry VIII; you know, the usual sexual thing; you had the religious adviser, Zorzi, who acted as a marriage counsellor. They tormented Henry VIII with the promise of a woman, Anne Boleyn, who was nothing but a prostitute, virtually, and the stupid King became corrupt, and England was being destroyed.

Now, what killed Thomas More was not the fact that he objected to the divorce of the King to marry Anne Boleyn; what killed him, was the fact that he stood against this corruption of what had been accomplished by Henry VII. England had been the second nation-state founded. It was being built as a great economy from the rubble that it had been under the previous Plantagenet rule. It was being destroyed. He gave his life, lost on the chopping block, in order to inspire people such as William Shakespeare, who was one of his great followers intellectually, and others, to keep alive in England, that which the Venetians had attempted to destroy, with the case of Henry VIII, and others.

It’s because of that courage of Thomas More, in England, and because of the influence, in particular, of Shakespeare and people like him and his associates, that there was founded in North America, beginning

with the Massachusetts Bay Colony, in particular, a conception of a new kind of nation-state built on this continent, at a time that Europe was so corrupt, so torn by religious wars—from 1511 to 1648, Europe was torn apart by religious warfare—of the type that some people would like to start around the world today. And during that time, people in Europe said, let us go to North America. Let us build the foundations of a new nation, in this continent. And the Winthrops, and the Mathers, in Massachusetts, typify that great venture.

Then came Penn with Logan, and others came, as things became terrible in Europe. More and more people looked to North America as a place to build a republic, in the legacy of France’s Louis XI, the legacy of Jeanne d’Arc, the legacy of Henry VII, the legacy of Thomas More: to build that in this, that republic in this nation. And great Europeans, despairing of the possibility of building a republic in Europe under these conditions, turned in the 18th Century to the English colonies of North America, especially to the circles of Benjamin Franklin personally, to assist us, in building up the foundations for creating this republic, which is therefore an historic exception, in the modern history of mankind. This was the first true republic established in modern mankind, and it was established on the basis of these foundations, contributed to us, largely, by Europe.

The First True Republic

And without the courage of the people who did it, people like Jeanne d’Arc, and Thomas More, this could not have happened. I’m not recommending to people that they go out and be burned alive, or have their heads chopped off, I’m not particularly fond of that sort of entertainment, as some people are—but rather, I’m saying that you have to find in yourself some element of the quality of courage, the quality of insight into the future, the future that you leave behind, after your mortal life is ended, and say that what I am, in the history of mankind, is, as I view my parents, grandparents, and great-grandparents, and so forth before me: I view myself as a passing mortal individual, but I want my life, while it’s going on, to *mean* something. And therefore, I will spend my life *wisely*. If I have to die on the battlefield, I will spend my life wisely, for a meaningful purpose, for my nation and for mankind.

Now people who think that way and can find their roots in family and history and also in the future, that way, have the courage to face gladly, the kind of challenges which we as a nation face today. And one would

wish that as I speak, that those who died, or whose families made the sacrifice of their death, during two world wars of the past century, could be with us today, to hear me say this, and to see you hear this, that they might believe that in this nation, there's something that still lives, *that made their sacrifice worthwhile*.

And there's the source from which you find your strength. You will find another source you have to call upon. It's called ideas. Some people believe that what's important is what they know from experience. Experience is sense perception: what I can see, what I can taste, what I can touch; what I feel in my neighborhood, my community, my personal, immediate, physical sense of self-interest. Some people think that way. That's a foolish way of thinking. Because you don't understand, then, the difference between man and animal. Think of all the people you know, who say that mankind is just another monkey, or just another ape.

I admit that we've elected some politicians who might lend themselves to that view. But man is *not* an ape. Man has a quality which no animal has. Look, if man were a higher ape, whether on high stuff or not, the human species, in the past 2 million years, would never have reached a level above several million individuals. We now have *billions* of people. How do we get billions of people, out of a being which, as an ape, is only capable of maintaining a miserable bunch of monkeys, so to speak, at about a few million members, planet-wide? How'd we get that? Because mankind has a quality which no monkey has. So don't monkey around with mankind! Mankind is capable of discovering universal principles which cannot be smelled, tasted, seen with the senses, but which the mind is able to define, and we're able to prove experimentally.

This is what we mean, when we say in Christianity, Islam, or Judaism, that man and woman are made equally in the image of the Creator of the Universe. Because we each have within us, that power to discover truth, the truth of universal principles which no monkey, no lower form of life, can do. And through this power, we are able to change man's relations with nature; we're able to change ourselves, to improve and develop ourselves. We're able to transmit these discoveries to our children, over successive generations. We're able to build societies where there were nothing but jungles. *This is why man is sacred*. This is why every human life is special and sacred. This is why every human being, man or woman, is equal, in this quality, which need but be developed and expressed.

Ideas as a Source of Courage

What gives you the power to deal with great crises, is to recognize that; to think in terms of principles that you can discover, and prove, as Kepler discovered the law of gravity, universal gravitation, in a book he published in 1609. You can discover these principles; you say, that if I can learn an idea, discover, re-discover an idea, or contribute a new discovery of principle; and if I can pass along these discoveries which I've taken in part from people before me—if I can pass them to the next generation, if I can enrich these discoveries with something I contribute myself, then I live forever, as a human being.

Because in the time I occupied mortal life, I picked up the heritage of ideas from the culture, people before me; I picked it up from other cultures than my own, I put these together in part, I transmitted these to young people, as good teachers transmit these discoveries to children, and when I die, these ideas, which I've helped to make possible, these achievements, will be transmitted to those who come after me. And therefore, the greatest thing about being human, is to be truly a person who acts in a way, which justifies the characterization of a being, man and woman equally, made in the image of the Creator of the Universe. Given the power to transform this Universe, capable of transmitting these discoveries from one generation to another, to build the human race from its initial imperfection as a beast-like creature with this quality, into something much better.

And therefore, if I can do something, with my life, which helps that process, then my life really means something. And I can go out of this life wearing a smile, because I have won. I have won the battle for the meaning of a personal life.

Therefore, when it comes to war, or things like war, the person on the other side is a human being, made in the image of the Creator of the Universe as we are, of the same nature and the same true, fundamental interest, if they but know it. Therefore, the function of war, is to defend this heritage, this cultural heritage, that we have been given, but to invite others to share it with us. Invite them to enter into fraternity with us. And say, stop being a fool. We will defend—if you go crazy, like a madman, and do something evil—we're going to stop you, if we have to. But we will rejoice, when you become human and accept the conditions of fraternity and peace. And that's the proper object of warfare: to defend what must be defended, so that it can be preserved for humanity, to preserve the dignity and the lives of our people, the purpose of our culture. But it is not to conquer or destroy

like a beast trying to destroy another beast. We do not eat man.

The purpose is to bring the human race together, as a community of sovereign nation-states, each perfectly sovereign, but united by an understanding of certain common principles, by which we can live together, but not only merely live together—not merely get along and not kill—but live together in the sense that we are busy living our lives, making a contribution which is not shameful in the eyes of those who came before us. We're contributing something to the future. And therefore, when you are future-oriented in that way, you have a source of courage which no other human being has, who lacks that sense of the future.

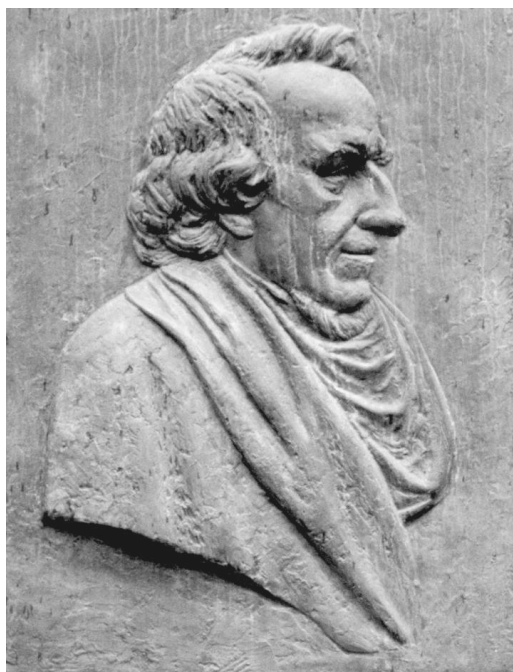
The Yiddish Renaissance and Its Enemies

Now let's look at something awful. Let's look, just briefly, at a glimpse of what's going on in Israel and Palestine today. Let's look at what is happening in Palestine and Israel now. Let me speak very frankly, because these are frank times, people are being killed, and you don't use soft words to describe hard reality.

A long time ago, in Russia, there was a bad man. His name was Colonel Zubatov. He was the head of a secret police organization which was disbanded, essentially, in that form, after 1905. It was called the Okhrana. This fellow Zubatov recruited an individual called Vladimir Jabotinsky. Jabotinsky became an agent of the Okhrana, which was a British Intelligence-affiliated Russian intelligence organization at the time, a police state.

The main target of the Okhrana at that time were the Jews of Russia. Now the leading organization among the Jews of Eastern Europe, of Russia in particular, was called the Bund, which was based in the northern parts of what was then called Russia. It's known in the United States as the Workmen's Circle organization.

These people represented a formation called the Yiddish Renaissance, which was an extension among Jews of Eastern Europe, of the tradition of Moses Mendelssohn, of the German Jewish tradition of Moses Mendelssohn. And modern European Jewry, in all its



EIRNS/Steve Meyer

"It was through Moses Mendelssohn and his family and friends that Jews were first allowed to be treated as human beings in Austria." Shown: A bas relief of Moses Mendelssohn at a Jewish middle school for boys in Berlin.

achievements, and there were many, was actually largely a result of a revolution in the standards of the Jew, effected through the influence of Moses Mendelssohn, one of the greatest intellectual figures of the 18th Century.

It was through Moses Mendelssohn and his family and friends, that Jews were first allowed to be treated as human beings in Austria. This was by Joseph II of Austria, the Emperor. And similar status of Jews was finally elevated to a condition in Germany of full dignity. And from that point on, under the influence of Moses Mendelssohn's program, we have some of the greatest music ever composed, because Mozart, Beethoven, other great composers, the circles of the Bach family, were all part of this same

tradition, this so-called Classical tradition, which was linked to this Jewish circle of Moses Mendelssohn.

For example, Schubert—some of the songs of the Jewish service, were composed with the aid of Franz Schubert. Mozart was closely allied with the Mendelssohn family. Beethoven was subsidized, in part, by Itzig, from Leipzig, a part of the extended Mendelssohn family. The great contribution of German Jewish physicians, scientists, and others, like Heinrich Heine and others, to the culture of Europe, and civilization as a whole, as well as Germany, came from these people. And we had in Eastern Europe, what was called the Yiddish Renaissance.

The same tradition, with the famous, famous name like Sholem Aleichem, famous in the United States in particular. Many of the people who came here, who were Jews from Europe, came from Germany, originally, and later came in great numbers from the Yiddish Renaissance masses of Europe. Even into the 1960s, in the mobilization around Martin Luther King, for civil rights in the United States, the Jewish unit, the Jewish element, in the fight for civil rights of African-Americans, came largely from the legacy of the Yiddish Renaissance, of the immigrants of the Yiddish Renaissance, into the United States.

The Heirs of Jabotinsky

So, here's the great tradition against which the Okhrana was fighting, Zubatov was fighting, and Jabotinsky was an agent. Jabotinsky then, as an agent, went to Paris, where he worked for one of the worst Okhrana agents in the world, the fellow who wrote and published the so-called *Protocols of the Elders of Zion*. He then became involved, among other things, in a British Intelligence operation called the Young Turks, in Turkey. He was the publisher of the magazine, of the official magazine, of the Young Turk movement. He went to Italy, where he became a close associate of Benito Mussolini, declared himself a fascist, like Mussolini. His organization in Italy became an integral part of the fascist military organization in Italy. He—when Hitler was first elected to office, or nominated to office, in Germany—he offered to support Hitler if Hitler would drop the anti-Semitism. This guy Jabotinsky, the Jabotinsky movement, is a fascist movement.

This movement went, along with others, into Israel, in the settlements in Israel, and became the terrorist wing of Israel which was associated with the terrorist Menachem Begin. Remember Menachem Begin? The fellow who bombed the King David Hotel. Residing there was the British Governor of this region, or this area, sitting up in his bathtub, and they bombed the hotel. The hotel did not fall down completely, but there's this fellow sitting up in his bathtub, with the building fallen down around him.

So these guys were really killers. What happened is, in the course of developments from about 1967 through about ten years later, the traditional Zionists, like Nahum Goldmann, the founder of Zionism, of that type, these types were pushed out of the dominant position of power, and a group called the Likud, which incorporated the ideas and aspirations and moods of these fascists, declared fascists, became more and more a power in Israel.

Ariel Sharon represents that fascist movement. [He copied] the operation that the Nazis of Germany ran

against the Jewish ghetto of Warsaw in 1943, [and] is now being conducted by the fascist Sharon against the Palestinian ghettos of the Middle East, Israel, and Palestine. And people are saying, if you're against Sharon, you're an anti-Semite. These people are liars. They are moral degenerates. It's not forgivable.

For someone who says, "I'm Jewish, I'm fighting for the Jewish people," to do what the Jabotinsky movement did, as an avowed fascist movement. This is the Jabotinsky who was turned down by Hitler, because Hitler wouldn't give up the anti-Semitism. And to perpetrate a crime, which the Israeli Defense Forces know, is an actual copy of the operation which the Nazis ran against the Jewish ghetto of Warsaw, against the Palestinian people. This is a crime against humanity. *This is genocide*. And when someone says, "If you call this genocide, you're an anti-Semite," they're sick.

But the problem here is this: How many people in the United States, for example, will defend Sharon, will defend what the Israelis are doing, while other Israelis are risking their lives opposing this, saying this is wrong? Remember, the Sharon government came to power indirectly, through the terrorist assassination of Prime Minister Rabin of Israel, who recognized that this kind of thing must not happen. You have

a terrorist government, a government that came to power through terrorism, the murder of a Prime Minister of Israel. You have in effect a criminal, fascist government in charge in Israel. Period. Don't talk about democracy, President Bush is misinformed. He should send Condoleezza Rice back to school to learn something. Get some better advice.

So this is the kind of problem we face. But worse is, that not only are people in the United States expressing mass sympathy for this thing, including some of the worst anti-Semites in the United States, who are called the Christian Zionists. You want to find a real racist, anti-Semite, in the United States? Find yourself a Christian Zionist. You'll find among them the typical Ku Klux Klan types, who also happen



The fascist Vladimir Jabotinsky, who spawned what today is the Likud party in Israel.

FIGURE 1

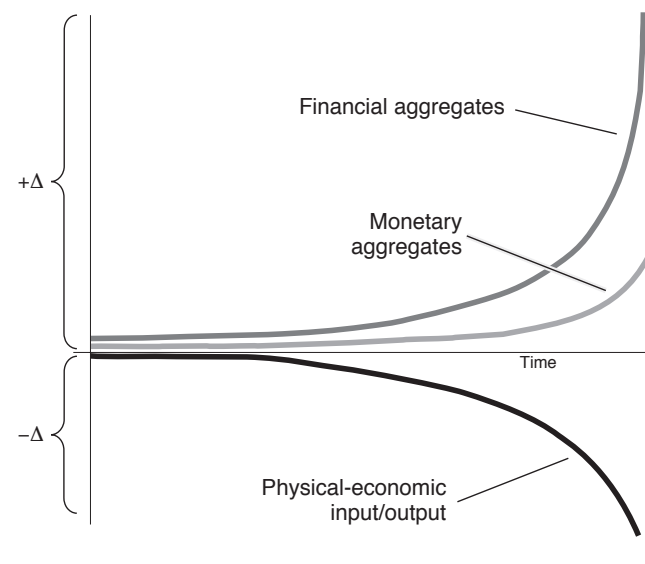
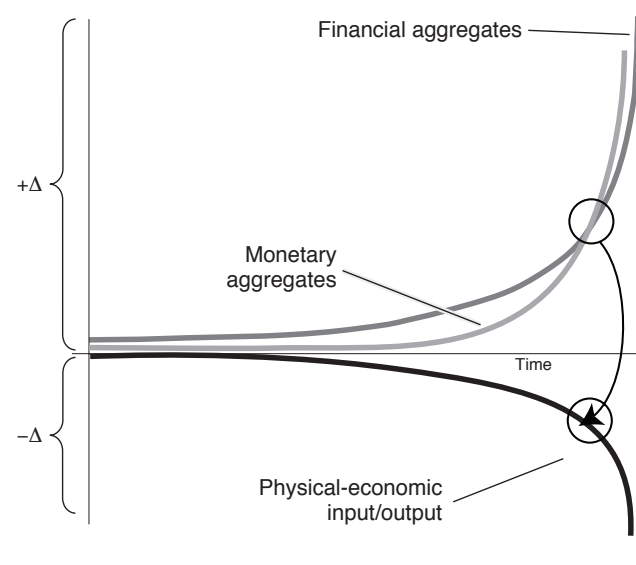
A Typical Collapse Function

FIGURE 2

The Collapse Reaches a Critical Point of Instability

to be anti-Semites. These are the guys, the Pat Robertsons, the Falwells, and so forth, who're implicitly fascist themselves. And many Americans have fallen for it.

Worse than that, we have a military policy which is wrong. We don't have a strategic defense policy. We don't have an economy which is geared up to provide the sinews of strategic defense. We do not have a peace policy for the world. We—if I were President of the United States today—we would be bringing the world together, and it would be successful. Because the world wants it. The United States still has an authority and a legacy. If it became itself once again and said, we must have a solution to this worldwide financial-economic crisis, we must have peace and cooperation on this planet, nations all over the world, peoples all over the world, would rejoice and join us. We have that kind of power. So why aren't we using it?

There Never Was a Recovery

Now, we come to the final point. What's the situation? Let's just go through this [Figure 1]. I've gone through it before—again, but it's important to put what I'm about to say, in this context I've just given you.

Now this is old news to many of you, but just to walk through this, because certain things have happened recently that will make these things much more significant for you than perhaps before. Some years ago, back in 1995, as I reported earlier, I was at a Vati-

can conference on the question of health care, and, as a participant, I gave them a paper, to try to illustrate what was wrong with the world economy—which of course has something to do with our health-care situation today—that this was the nature of the problem.

We have a system now, since 1966, a degeneration in the U.S. economy, a degeneration from what used to be the world's greatest producer society, into a decaying, decadent, consumer society. We don't produce any more, or we produce less and less. We import from abroad, and we can't afford to pay for it. And we're able to import less and less, now.

So what kind of a system do we have?

The financial aggregates—that is the rate of growth of stock-market assets and similar kinds of nominal assets, paper assets—were rising at a very high rate. In order to keep this market going, there was a monetary emission, that is, printing of money or similar things, from the Federal Reserve and others, which was being poured into the markets, to push this bubble of financial paper. But, while they were doing that—the growth of financial aggregates and monetary aggregates was based on looting, actually cannibalizing our pre-existing economy. So that, per capita, the real, physical output of the United States, per capita, was collapsing, farms, industries, so forth. Runaway shops, all this sort of thing. Now that's the picture.

Now in this case [Figure 2], this is the point reached in about the year 2000. And what this represents is that

you had a point at which the rate of increase of money printing required to maintain the financial markets, was greater in amount, than the amount of financial aggregate they were saving. At this point, there was an acceleration, a steep acceleration, in collapse of the physical economy. Now this happened about the Summer of the year 2000, in real terms. People didn't pay much attention, or didn't wish to pay much attention, because the financial aggregates were still going up. Until the full impact of the collapse of the so-called New Economy, occurred, people didn't pay much attention to it. But it happened then.

It's in **Figure 3**. These are actual figures, or based on actual government figures. So what you see here is the crossover point. You see, the employment is down, manufacturing employment—that's *real* employment; the farmers would show a more disastrous effect—corporate profits fluctuating; the debt rising, the debt level rising, but the U.S. money supply is being increased more rapidly than the financial markets are rising. So at that point, you've hit a point which has a historical precedent, a very important one: Germany 1923.

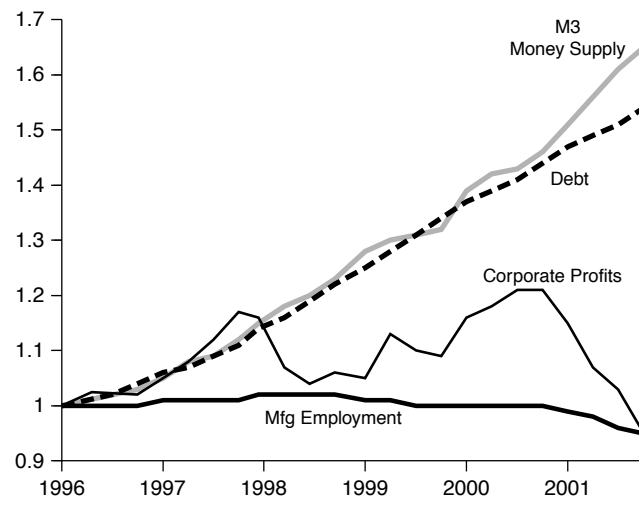
Germany was doing a similar kind of thing then, to prop up the Reichsmark while it was trying to pay off the so-called war reparations debt. Up until the Spring of 1923, there was inflation, but not a chaotic or hyper-inflationary bubble. Suddenly, in June-July of 1923, the bubble exploded. And by that time, later in November, the German Reichsmark was bankrupt. So what happened here, what you're seeing here, is something similar to what happened in Germany in 1923.

Now, you see on the markets today, if you pay attention to what the reports are from around the world, since Enron collapsed, it is now apparent, that every time you were told there was a recovery in sight, or signs of a recovery, in the international markets or the U.S. economy; it was faked. The figures have all been faked. And right now, especially this week, the figures on the amount of this fakery, are beginning to come tumbling out. *There never was a recovery*. There never was a genuine uptick.

And it happened just already today—the day starts out, the market's going up. But then you find out the reason the profits are increased, they said, without mentioning expenses. And the firm had the biggest loss ever. In that kind of fakery. So people today in the

FIGURE 3

The U.S. Economy's Collapse Function



Source: EIRNS.

United States are faced with the fact: There is no recovery, there never *was* a recovery, and under this system, there never *will* be a recovery. The world is going into the biggest depression in modern history, at least since the 17th Century. Right now.

And the gold price was up to, what? About \$5 in one day. That's not an increase in the value of gold; that's a decrease in the value of the U.S. dollar. We are now in a depression that is worse than what you were in—if you were living then—in 1929-1933. It's happening. It is presently irreversible. Anything they try to do to prevent it will only make things worse. But there are solutions.

There Are Solutions

Now, here's where the hard thing comes. What is the solution? If you look at the history of the United States and the world, from 1945 to 1965, that is the so-called post-war recovery period. And you look at the United States in 1966, to the present, you'll see—that's why I used these figures, '66—because the economy we had, in the post-war reconstruction in the United States, Europe, Japan, and to some degree South and Central America—that was a real recovery. A success. There were a lot of problems with it, a lot of injustices. But, in terms of economic figures as such, it was a success. It was real. There was actually an increase in the productive powers of labor. More

was produced, more was available. Consumption standards improved. That sort of thing.

But, 1966 on: It stopped. We began to slide down, and the rate of downslide accelerated. It was accelerated at a fast rate under Nixon. 1971: Nixon took the dollar off the gold-reserve system. Created a floating-exchange-rate system. The U.S. economy has never recovered from the effects of that.

Then came along Brzezinski. Don't blame Carter; Carter was President—but he was only the President. Brzezinski ran the show. Under Brzezinski's dictatorship, from 1977 to 1981, the destruction of basic economic infrastructure and regulation in the United States caused the greatest destruction of the U.S. economy in all history, in total amount. That destruction has continued, with Garn-St Germain, with Kemp-Roth, and with other arrangements. It continued—we looted Europe, we looted Russia in particular after 1989-1991, and we got by with a lot, because we were able to loot countries. We looted Europe. Europe became, when the Soviet power collapsed, Europe became less powerful, because now it was at the mercy of the Anglo-American interests.

And the looting of Germany, and of continental Europe, really took off at that point. Russia was looted beyond belief. Poland has been looted beyond belief. The Poles would be happy to have communist Poland back today. The same thing is most of Eastern Europe, the same thing. Around the world. Look at Japan. Japan is about ready to blow. There is a healthy industrial economy inside Japan, but the entire financial system, which has supported the United States, is about to collapse. Look at the ASEAN countries, other countries.

The collapse is fully under way. We are now in a worldwide collapse which has been caused by a change in the world system, from a system with imperfections, but which nonetheless worked—the post-Roosevelt system. The system was actually built by Roosevelt. From 1945 to '65, we had an economy, a real one. With policies that actually worked. Since 1966, we've gone step by step into an economy that doesn't work. Now it's collapsed. The amount of debt which is outstanding today, could never be paid.

We are sitting on top of a real-estate bubble collapse in the United States today, the Fannie Mae/Fred-die Mac bubble is about to blow. What day it's going to blow, I don't know. But it's going to blow. People are

going to find that houses which they have listed as mortgages at a half million or so, plus or minus, in the Washington, D.C. area, or the New York area, these shacks will probably be lucky to go for \$100,000 redeemable value. People are going to be wiped out. Jobs are going to be wiped out. Firms are going to be closed down.

What is the government going to do? It's going to happen. Well, if you had a Franklin Roosevelt in there, you'd know what to do. You'd freeze what you had to freeze, you'd put the country through bankruptcy reorganization and restore the fixed-exchange-rate monetary system, and believe me, we could get it through quick, right now. You would put in regulation worldwide. Regulation of trade. A new tariff system, a protectionist system. You would make sure that people were not fired. We'd keep banks from closing their doors, even if they're bankrupt, to keep the trade going. We would keep people employed, and the government would turn around and start a large-scale, mass-employment program based on infrastructure to stimulate the re-growth of the entire economy.

We would do that in cooperation with nations around the world, which are now desperate. And if the United States said we're willing to do it—for example, if I were President right now, every one of them would say, "Yes." They'd agree with everything I say. They wouldn't even know half of the things I'm talking about, but they would agree with it, nonetheless, because in a time like this, they're looking for leadership. They want credible leadership, that knows what it's talking about, and is willing to act, and is trustworthy, in the sense that it will act. And if they find that, they're going to say, "Okay, we're working with you." And we'll sit down, and we'll discuss the details of what we're going to do. And then do it.

A Mobilization of Courage

So what we need now, is a mobilization of courage, from among not too courageous leaders around the world, and from the people who will push them. We can get out of this mess; we've dealt with messes before. Organizing and reorganizing a financial system or monetary system is not the greatest thing in the world; it's a tough thing. It would take us 25 years, to repair the damage to the world, and the United States in particular, done by the changes of the past years. We can do it.

We'll do it with methods which are not dissimilar, entirely, from what Franklin Roosevelt did, beginning in 1933. It worked then, the post-war version of Roosevelt, which was a diluted version, also worked. It'll work again.

We rebuilt Europe with people like Jean Monnet and so forth in the post-war period; we can do it again. We can work with Russia and we can rebuild Russia. We have tremendous potential markets in China, in Southeast Asia, India, and so forth. If we build the system which they need, to do the development which they need, and they represent, therefore, the markets we need, for the products we can produce, that they need. And if we have a 25-year credit program among nations to do that, we can pull this nation and the world, out of the mess.

We have to decide, however, what kind of a world we want to build. Not a world in which we tell everybody how to run their government. Not a world in which we tell you you're a rogue state; you're not a rogue state; or you're a rogue state tomorrow, but not today, or whatever. We need a world in which we agree that there are several simple principles: that

every people has the right to be self-governed by a perfectly sovereign form of nation-state republic; that the policy of the United States is that which Secretary of State at the time, John Quincy Adams, said to the nations of South America and to the world: As soon as the United States has enough muscle to do it, we're going to kick the British and the Habsburgs out of the Americas, and we're going to establish a community of principle among perfectly sovereign nation-states.

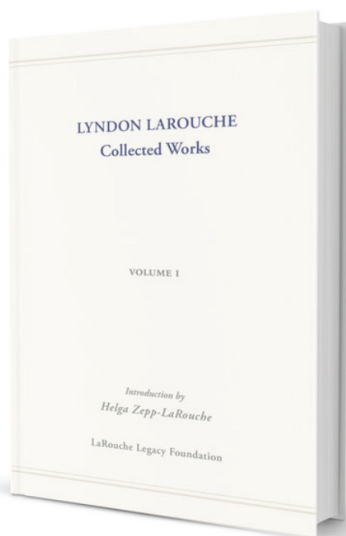
We have to say the same thing today to the world. The world we want, is not a world of our design, it's not a world in which we become the dictator or the emperor; what we need, is a world which is composed of perfectly sovereign nation-states, which in their own mutual interests, will cooperate and will establish principles, a community of principles of agreement.

Right now, we've got a big job. Rebuild the world economy, make the world a safe place to live in, economically. I think we can succeed. I'm willing to do it. Who else is?

Thank you.

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