

A Memorial for Dr. Luc Montagnier and the Coming Revolutions in Optical Biophysics

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On February 8, 2022, Nobel Prize winning virologist Dr Luc Montagnier passed away.

Since the earliest moments of COVID-19’s appearance, Montagnier was slandered and ridiculed for his challenges to the underlying assumptions of the disease’s causes and remedies despite the constant slings and arrows of the deep state which sought to shut the door on all such dangerous discussion.

More important than Montagnier’s claims of laboratory origins of a disease (which appears to have more to do with bacteriological than viral causes), are found in an overlooked domain of optical biophysics which the good scientist completely revolutionized during the last 15 years of his fruitful life.

It is this lesser understood, yet infinitely more important aspect of Montagnier’s contribution to human knowledge which have fallen under the radar of too many analysts and citizens, which I believe he would want to be remembered by.

What is Optical Biophysics and What did Montagnier Discover?

Optical biophysics is the study of the electromagnetic properties of the physics of life. This means paying attention to the light emissions and absorption frequencies from cells, DNA, and molecules of organic matter, how these interface with water (making up over 75% of a human body) and moderated by the nested array of magnetic fields located on the quantum level and stretching up to the galactic level.

Not to discount the bio-chemical nature of life which is hegemonic in the health science realm, the optical biophysician asks: which of these is PRIMARY in growth, replication, and division of labor of individual cells or entire species of organisms? Is it the chemical attributes of living matter or the electromagnetic properties?

Let me explain the paradox a bit more.

There are approximately 40 trillion highly differentiated cells in the average human body, each performing very specific functions and requiring an immense field of coherence and intercommunication. Every second approximately 10 million of those cells die, to be replaced by 10 million new cells being born. Many of those cells are made up of bacteria, and much of the DNA and RNA within those cells is made up of viruses (mostly dormant), but which can be activated/deactivated by a variety of methods both chemical and electromagnetic.

Here's the big question:

HOW might this complex system be maintained by chemical processes alone- either over the course of a day, month or an entire lifetime?

The simple physics of motion of enzymes which carry information in the body from one location to another simply doesn't come close to accounting for the information coordination required among all parts. This is where Montagnier's research comes in.

After winning the 2008 Nobel Prize, Dr. Montagnier published a revolutionary yet heretical 2010 paper called ["DNA Waves and Water"](#) which took the medical community by storm. In this paper, Montagnier demonstrated how low frequency electromagnetic radiation within the radio wave part of the spectrum was emitted from bacterial and viral DNA and how said light was able to both organize water and transmit information! The results of his experiments were showcased wonderfully in this 8 min video:

Using a photo-amplifying device invented by Dr. Jacques Benveniste in the 1980s to capture the ultra low light emissions from cells, Montagnier filtered out all particles of bacterial DNA from a tube of water and discovered that the post-filtered solutions containing no material particles continued to emit ultra low frequency waves! This became more fascinating when Montagnier showed that under specific conditions of a 7 Hz background field (the same as the Schumann resonance which naturally occurs between the earth's surface and the ionosphere), the non-emitting tube of water that had never received organic material could be induced to emit frequencies when placed in close proximity with the emitting tube! Even more interesting is that when base proteins, nucleotides and polymers (building blocks of DNA) were put into the pure water, near perfect clones of the original DNA were formed!

Dr. Montagnier and his team hypothesized that the only way for this to happen was if the DNA's blueprint was somehow imprinted into the very structure of water itself resulting in a form of "water memory" that had earlier been pioneered by immunologist Jacques Benveniste (1935-2004), the results of which are showcased in this incredible 2014 documentary "Water Memory".

Just as Benveniste suffered one of the most ugly witch hunts in modern times (led in large measure by Nature Magazine in 1988), Montagnier's Nobel prize did not protect him from a similar fate as an international slander campaign has followed him over the past 10 years of his life. Nearly 40 Nobel prize winners [have signed a petition](#) denouncing Montagnier for his heresy and the great scientist was forced to even flee Europe to escape what he described as a culture of "intellectual terror". In response to this slander, Montagnier stated to LaCroix magazine:

"I'm used to attacks from these academics who are just retired bureaucrats, closed off

from all innovation. I have the scientific proofs of what I say”.

Describing the greatest challenges to advancing this research, Montagnier stated:

“We have chosen to work with the private sector because no funds could come from public institutions. The Benveniste case has made it so that anyone who takes an interest in the memory of water is considered... I mean it smells of sulphur. It’s Hell.”

The Long Wave of Discovery (and the Clash of Two Sciences)

Montagnier’s fight is merely a shadow of a much larger clash within western science itself. While many people think simplistically that there is one singular branch of science from Galileo to Descartes to Newton to the present, the reality upon closer inspection shows us that there are actually two opposing paradigms- one of which has been obscured systematically by politically-motivated witch hunts since even before the days of [Huxley’s X Club and the 1869 founding of Nature Magazine](#).

Since this fight is so often overlooked, a few words should be said here and now.

In opposition to the materialist tradition which has attempted to impose “material causes” onto natural phenomena, the more potent school of optical biophysics embodied by Montagnier was set into motion by none other than Louis Pasteur. Long before the Beschamp-Pasteur controversy arose, and long before conducting work on pasteurization, Pasteur’s early scientific work was shaped by discoveries into the optical properties of living matter and the handedness phenomena of life. In short, during his early creatively potent period, Pasteur discovered that solutions which had organic material dissolved within them had the incredible property of rotating polarized light to the “left” while liquid solutions devoid of organic material did not hold that capability.

In an 1870 letter, Pasteur described his cosmological insight into the dissymmetrical property of life to a friend Jules Raulin stating:

“You know that I believe that there is a cosmic dissymmetric influence which presides constantly and naturally over the molecular organization of principles immediately essential to life; and that, in consequence of this, the species of the three kingdoms, by their structure, by their form, by the disposition of their tissues, have a definite relation to the movements of the universe. For many of those species, if not for all, the Sun is the primum movens of nutrition; but I believe in another influence which would affect the whole organization [geometry], for it would be the cause of the molecular dissymmetry proper to the chemical components of life. I want by experiment to grasp a few indications as to the nature of this great cosmic dissymmetrical influence. It must, it may be electricity, magnetism...”

This left handed property to life [still confounds astrobiologists over a century later](#).

With the mysterious 1906 death of Pierre Curie whom had advanced upon Pasteur’s research, and as World War I derailed this course of investigation (many of the brightest young minds of Europe were sent into a four year meat grinder of trench warfare), the baton was dropped in Europe, only to be taken up again by two Russian-Ukrainian scientists who worked together closely at the University of Crimea: Vladimir Vernadsky (father of Russian atomic science and the founder of the school of biogeochemistry 1863-1945) and his friend

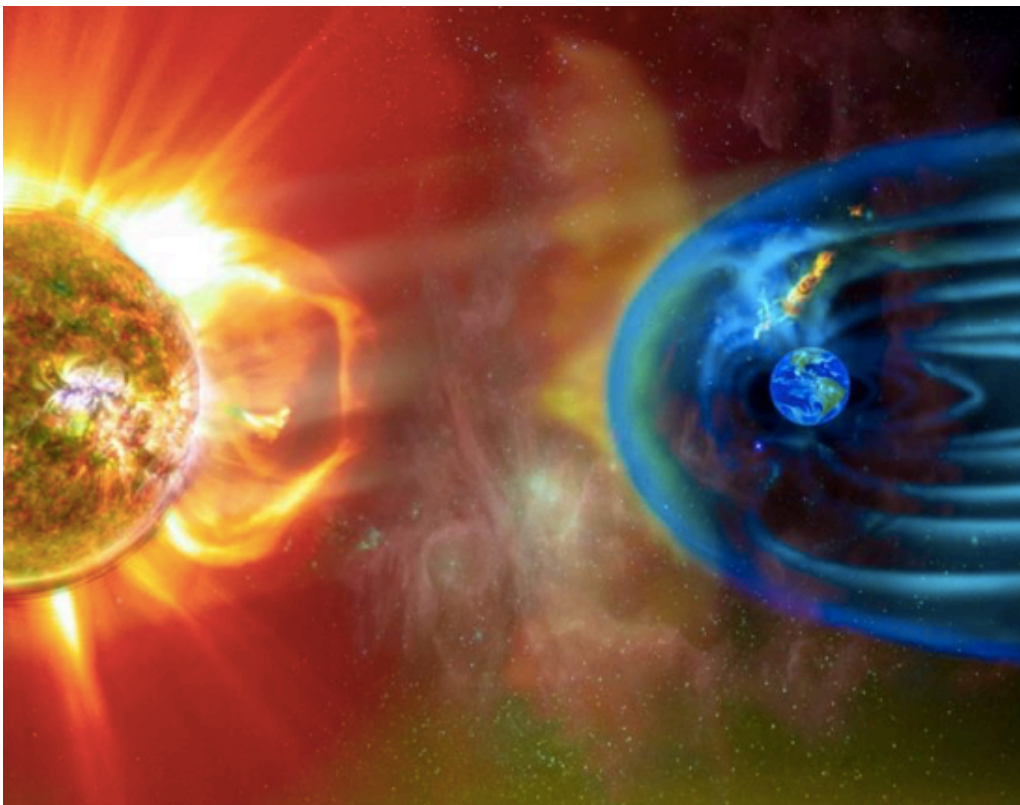
Alexander Gurwitsch (1874-1954).

Vernadsky Revives Pasteur's Insight

Vernadsky used Pasteur's work extensively in his own construction of the biosphere and always made a point that the electromagnetic properties of life were the driving force of biochemistry. Going further than anyone alive to define the mechanisms of the biosphere, Vernadsky explained that the true scientist must not start with individual organisms and "work from the bottom up" as too many radical Darwinians were apt to do, but rather start, as Louis Pasteur had beforehand, with the galaxy and an awareness of the driving force of electromagnetic/cosmic radiations which shape the directed flow of biospheric evolution.

In his 1926 book [*the Biosphere*](#), Vernadsky began his description of the biosphere with the following remarks:

"The biosphere may be regarded as a region of transformers that convert cosmic radiations into active energy in electrical, chemical, mechanical, thermal, and other forms. Radiations from all stars enter the biosphere, but we catch and perceive only an insignificant part of the total. The existence of radiation originating in the most distant regions of the cosmos cannot be doubted. Stars and nebulae are constantly emitting specific radiations, and everything suggests that the penetrating radiation discovered in the upper regions of the atmosphere by Hess originates beyond the limits of the solar system, perhaps in the Milky Way, in nebulae, or in stars."



While Vernadsky spent his life focusing upon the macro-states of the biosphere, and how it interacted with the lithosphere and noosphere (the nested domains of non-life, life and creative reason) organized within arrays of magnetic fields moderating the flux of cosmic radiation through the universe, his colleague Gurwitsch focused upon the intersection of light and magnetic fields within the micro-states of living cells.

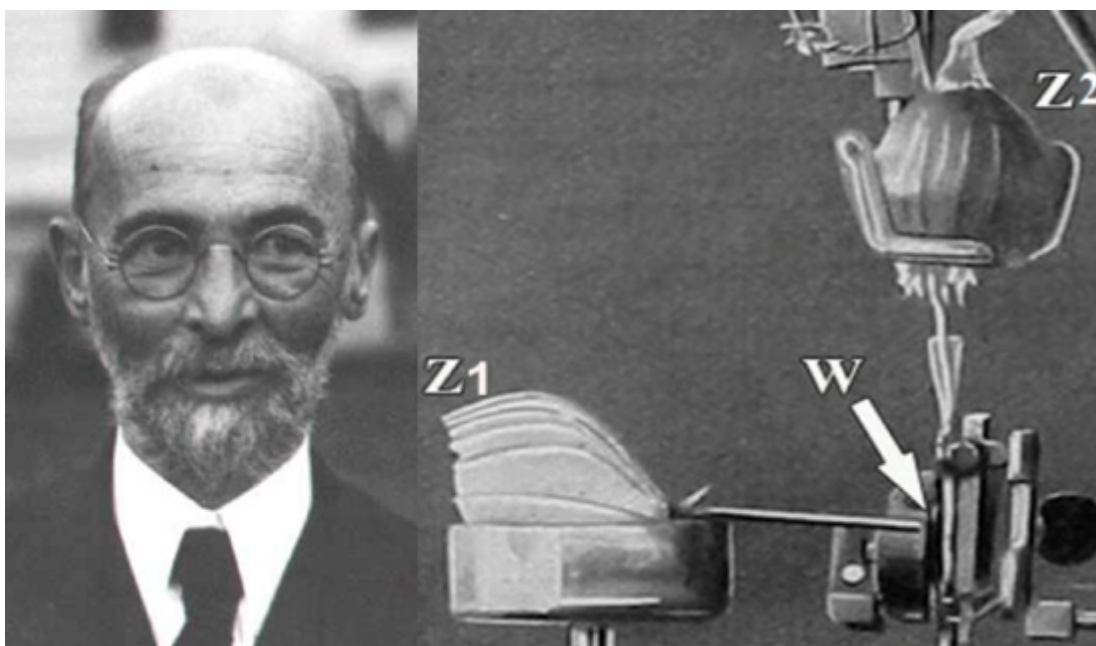
Alexander Gurwitsch's Mitogenic Radiation

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Describing his discovery in a 2011 study on [Cosmic Bio-Radiation](#), researcher Cody Jones described Gurwitsch's basic insight:

"Gurwitsch developed three nested levels of field structures, arranged according to complexity and spatial extent, ranging from the molecular (molecular constellations), to the cellular (relations among cells), to the organismic levels (the different organs and systems that constitute a single organism). Each nested field could be described in terms of different mechanisms as to how the morphology advanced for any particular structure, yet they were all unified towards the realization of a definite future state of existence."

Gurwitsch first revolutionized life sciences by shaping an elegant experiment which demonstrated that cells emit weak bursts of ultraviolet light as they went through mitosis. To prove his theory, Gurwitsch set up two onion roots growing in perpendicular directions and found that the higher rates of light emissions which occurred on the newer tip of the roots induced cell growth of 30-40% when brought into proximity of an older onion root. Although no instruments sensitive enough to pick up these ultra-weak frequencies existed during his lifetime, Gurwitsch demonstrated that light from the ultraviolet spectrum must be generated from new cells by separating the old and new onion roots by various types of lenses which blocked out different parts of the spectrum and found that only when UV light was blocked did the effect of 30% cell growth increase come to an end. Gurwitsch called this "Mitogenic Radiation".



Alexander Gurwitsch and his original onion root experiment. Two onions (Z1 and Z2) grow

perpendicularly with point W representing the point of intersection of the younger root emitted from Z1 and the older root of Z2 separated by a quartz lens blocking the emissions of ultra violet emissions from Z1 to Z2.

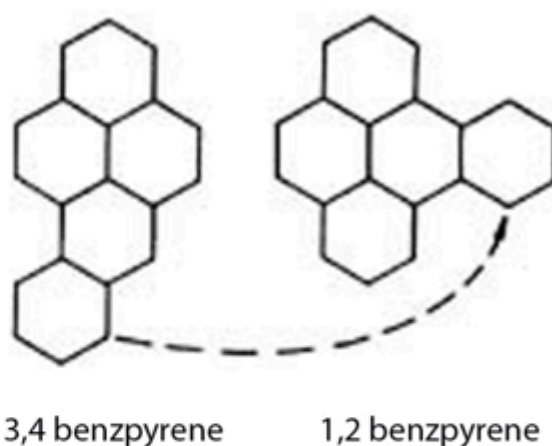
While Gurwitsch was ostracised by the scientific establishment during his life, technologies arose among the astrophysics community in the 1950s which permitted scientists to measure extremely weak light frequencies in the range of Gurwitsch's mitogenic radiation (obviously useful for picking up faint signals from other galaxies in deep space). When teams of Italian astronomers applied their equipment to organic material, Gurwitsch's discovery was verified experimentally for the first time.

One would have thought such a discovery would have revolutionised all of biology, medicine and life sciences on the spot- however after a brief spike in interest, the discovery was soon forgotten and relegated to a "negligible" secondary feature of life which had no causal role to play in any of the mechanics or behaviour of organic activity. The materialists and reductionists who wished to maintain that all life was merely the sum of parts won the day.

Then another biophysicist named Fritz-Albert Popp arose onto the scene.

Fritz Popp's Biophotonic Discoveries

During the 1970s, Popp was a cancer researcher trying to figure out why only one of the two isomers of Benzpyrene caused cancer. An isomer is sometimes known as a mirror image configuration of a molecule which are chemically identical, yet whose properties can differ vastly. Under the materialist/reductionist's logic, there was no reason why one isomer (Benzpyrene 3,4) which is found in cigarettes and tar would induce cancer growth in lung tissue while another isomer (Benzpyrene 1,2) would be completely benign.



TWO FORMS OF BENZPYRENE - The 3,4 benzpyrene, which is found in coal-tar and in cigarette smoke, is chemically very similar to 1,2 benzpyrene, which is considered harmless. The only major difference between them is that 3,4 benzpyrene has a strong absorption/emission anomaly in the ultraviolet area of the spectrum. Popp (at left) asked himself, could these optical properties of the molecule be the direct cause of its carcinogenicity? [source of image and caption: 21st Century Science and Technology]

After discovering the work of Gurwitsch, Dr. Popp began measuring the ultra-weak light emissions from the Benzpyrene molecules and their effects upon cell growth in liver tissues and found that the extremely high light absorption/emission properties of Benzpyrene 3,4

were the cause of the disharmony of cell regulation. Measuring the photon activity from cancerous vs healthy liver cell growth is a striking way to clearly see that cancerous growth coincides with exponential photon emissions while healthy liver photon emissions are very stable.

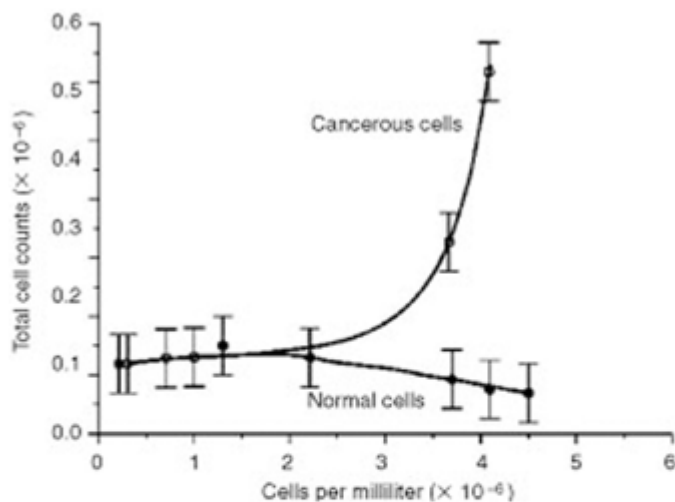


PHOTO COUNTS OF NORMAL LIVER CELLS VS CANCEROUS CELLS- Normal liver cells (lower curve) have a relatively stable or even falling level of photon counts at increasing cell density, while cancer cells of the same cell type show an increasing photon count at higher cell densities. From this, it was concluded that populations of cancer cells have lost the harmony and coherence that is typical for healthy tissue
[source of image and caption: 21st Century Science and Technology]

Over the course of his highly productive lifetime, Dr. Popp discovered that these light emissions occurred at different wavelengths according to the cell types, function and species. When Popp brought two biological samples into proximity, things became additionally interesting as the “rhythm” of their photon emissions synchronized beautifully when close together and fell out of sync when separated. This was outlined in his paper [On the Coherence of Biophotons](#).

Describing the clinical application of these discoveries, Dr. Popp stated:

“Light can initiate, or arrest, cascade-like reactions in the cells, and that genetic cellular damage can be virtually repaired, within hours, by faint beams of light. We are still on the threshold of fully understanding the complex relationship between light and life, but we can now say, emphatically that the function of our entire metabolism is dependent on light.”

Popp’s discoveries amplify those of the great Russian scientist A.B. Burlakov who found that the ultra weak light emissions emanating from two sets of fertilised fish eggs separated by a glass demonstrated a powerful harmonizing effect. If one set of eggs were older, then the younger eggs would mature and develop much faster if brought into proximity. However if the age difference between the two sets were too great, then the scientist found that the younger set would see a higher rate of death, deformities and retardation of development.

This mode of thinking about life has the mind of the scientist approach life in a manner more

in common with a musician tuning his instrument to an orchestra or a conductor holding multiple sound waves in his mind simultaneously as a whole musical idea which is greater than simply the sum of its parts. It is a much more natural and effective mode of thinking than the materialist/reductionist approach today dominant across most western universities that treats the organism like a machine and the whole as a sum of chemical parts.

A fuller sweep of these discoveries was presented in a 2020 lecture presented by this author, which can be viewed in full here:

Casting Montagnier's Research in a New Light

Returning once more to Luc Montagnier with a renewed appreciation for the longer wave of scientific tradition which he is a part of amplifying, we may appreciate some of the conclusions which he has drawn from often ignored yet completely verifiable properties of light waves, structured water, bacteria and DNA which may cause us to redefine our understanding of "life", "disease" and "medicine" forever. This exercise will possibly cause us to appreciate the importance of an international crash program in optical biophysics research and light wave/interference therapy to treat diseases plaguing humanity including COVID-19.

In [a 2011 interview](#), Dr. Montagnier recapitulated the consequences of his discoveries:

"The existence of a harmonic signal emanating from DNA can help to resolve long-standing questions about cell development, for example how the embryo is able to make its manifold transformations, as if guided by an external field. If DNA can communicate its essential information to water by radio frequency, then non-material structures will exist within the watery environment of the living organism, some of them hiding disease signals and others involved in the healthy development of the organism."

With these insights in mind, Montagnier has discovered that many of the frequencies of EM emissions from a wide variety of microbial DNA is also found in the blood plasmas of patients suffering from influenza A, Hepatitis C, and even many neurological diseases not commonly thought of as bacteria-influenced such as Parkinson's, Multiple Sclerosis, Rheumatoid Arthritis and Alzheimers. In recent years, Montagnier's teams even found certain signals in the blood plasmas of people with autism and several varieties of cancers!

Over a dozen French doctors have taken Montagnier's ideas seriously enough to prescribe antibiotics to treat autism over the course of six years and in opposition to conventional theories, have found that amidst 240 patients treated, [4 out of 5 saw their symptoms either dramatically regress or disappear completely!](#)

These results imply again that certain hard-to-detect species of light emitting microbes are closer to the cause of these ills than the modern pharmaceutical industry would like to admit.

A New Domain of Thinking: Why Big Pharma Should Be Afraid

As the [filmed 2014 experiment demonstrated](#), Montagnier went even further to demonstrate that the frequencies of wave emissions within a filtrate located in a French laboratory can be recorded and emailed to another laboratory in Italy where that same harmonic recording

was infused into tubes of non-emitting water causing the Italian tubes to slowly begin emitting signals! These DNA frequencies were then able to structure the Italian water tubes from the parent source a thousand miles away resulting in a 98% exact DNA replica!

Standing as we are, on the cusp of so many exciting breakthroughs in medical science, we should ask: what could these results mean for the multi-billion dollar pharmaceutical industrial complex which relies on keeping the world locked into a practice of chemical drugs and vaccines?

Speaking to this point, Montagnier stated:

“The day that we admit that signals can have tangible effects, we will use them. From that moment on we will be able to treat patients with waves. Therefore it’s a new domain of medicine that people fear of course. Especially the pharmaceutical industry... one day we will be able to treat cancers using frequency waves.”

Montagnier’s friend and collaborator Marc Henry a professor of Chemistry and Quantum Mechanics at the University of Strasbourg stated:

“If we treat with frequencies and not with medicines it becomes extremely cost effective regarding the amount of money spent. We spend a lot of money to find the frequencies, but once they have been found, it costs nothing to treat.”

Whether produced in a lab as Montagnier asserts or having appeared naturally as Nature Magazine, Bill Gates and Dr. Fauci assert, the fact remains that the current coronavirus pandemic has accelerated a collapse of the world financial system and forced the leaders of the world to discuss the reality of a needed new paradigm and new world economic order. Whether that new system will be driven by Pharmaceutical cartels, and financiers running global health policy or whether it will be driven by nation states shaping the terms of that new system around human needs, remains to be seen.

If nation states manage to stay in the driver’s seat of this new system, then it will have to be driven by certain fundamental principles of healthcare for all, science practice reform and broader political/economic reform whereby the sacredness of human life is placed above all considerations of monetary profit. In this light, such crash programs into long term projects in space science, asteroid defense, and Lunar/Mars development will be as necessary in the astrophysical domain as crash programs in fusion energy will be in the atomic domain. Uniting both worlds, is the domain of life sciences that intersects the electromagnetic properties of atoms, cells and DNA with the large scale electromagnetic properties of the Earth, Sun and galaxy as a whole.

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