Cognition Ignites By Photons!

The Answer to the "Solitude" Question:

"What Happens To Me After Death?"

This work is part of a 4-stage development of a non-communicable diseases (NCDs) prevention program, which the author began in February 2017. The goal of this stage was to develop a non-medical, self-efficacy-based method for cognitive improvement. To achieve this, the author conducted research on three key topics: the origin of cognition, the causes of cognitive decline, and the creation of a relevant and effective prevention method.

Finding the origin of cognition, however, took him extensive time in research and reviewing a wide range of related scientific studies, from neurocognitive science, cognitive psychology, and neurobiophysics, electromagnetism (EM), quantum mechanics (QM), general relativity (GR), and optical physics to nonscientific narratives, such as philosophy.

Finally, he explored the reality that photons—or electromagnetic (EM) properties such as waves—ignite human cognition, together with consciousness, memory, learning, and emotions, by transforming diffused neurotransmitters in the synaptic cleft into photonic energy within and beyond the nervous system.

Essentially, this ongoing transformation process serves as the origin of cognition in humans as well as in all non-human species, through photon-driven interactions that enable cognitive communication and coordination without the use of verbal language. This cognitive engagement also applies to plants, despite their lack of a nervous system.

Specifically, photonic energy ignites cognition, extending across various cognitive states: wakefulness, sleep, coma, and after death, with no limitations of time or locality, as long as the EM (electromagnetic) waves remain available.

Furthermore, based on his developed theory, the author also explored that the cognitive activities of living humans (before their biological death) will continue neurophysically (photonic) after death, which forms a "chunk" or key part of the discussions in this book.

Summer 2025

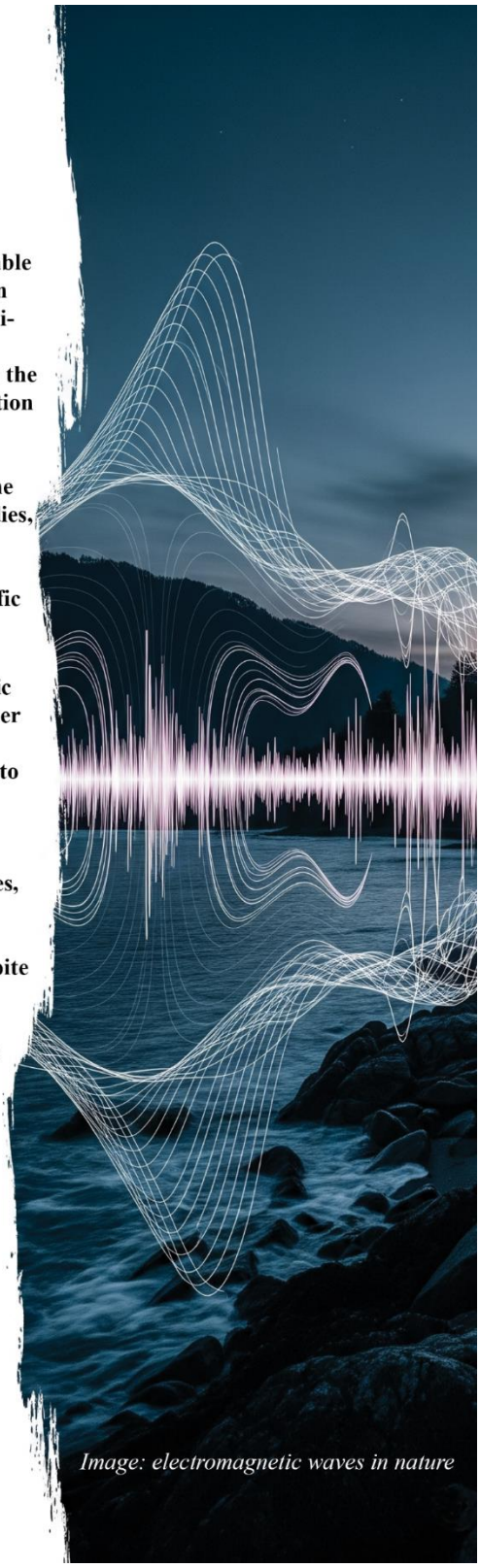


Image: electromagnetic waves in nature

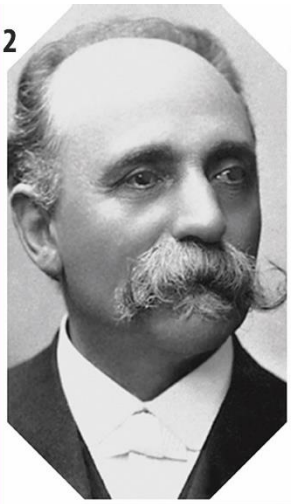
*The central hypothesis of this work, "**The Neuro-Physical Continuation of Life After Death**," was ignited by exploring Santiago Ramón y Cajal's discovery of the gap between neurons, as well as subsequent work on neurotransmitters by C. Golgi, O. Loewi, and U. von Euler.*

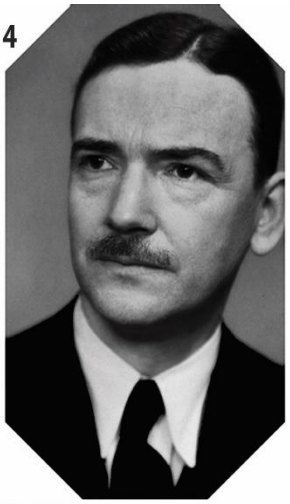
1. Santiago R. y Cajal (1852-1934), a Spanish neuroscientist, pathologist, & histologist who shared the 1906 Nobel Prize in Physiology or Medicine with Camillo Golgi.

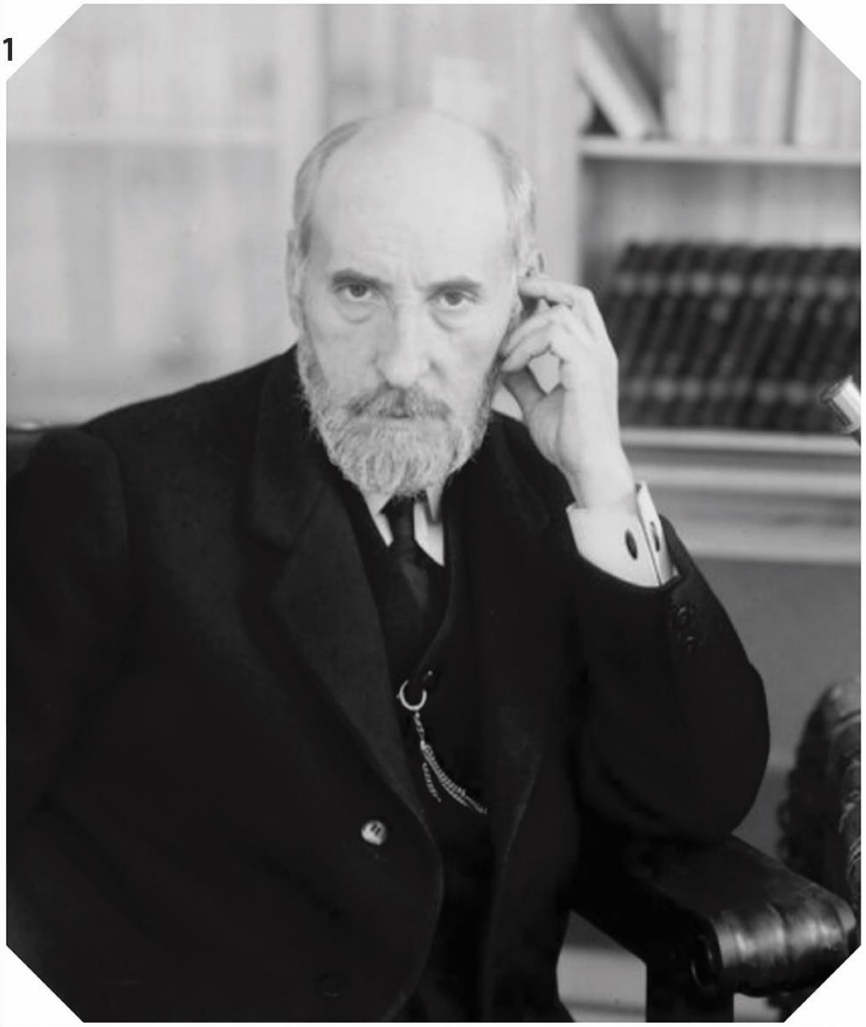
2. Camillo Golgi (1843-1926), an Italian biologist and pathologist who shared the 1906 Nobel Prize in Physiology or Medicine with Santiago Ramón y Cajal.

3. Otto Loewi (1873-1961), an Austrian pharmacologist who shared the 1936 Nobel Prize in Physiology or Medicine with Henry Dale.

4. Ulf von Euler (1905-1983), a Swedish physiologist who shared the 1970 Nobel Prize in Physiology or Medicine with Sir Bernard Katz & Julius Axelrod.







All images credit to:
#1 The Cajal Institute (Spain)
#2 Wikimedia Commons (Online)
#3 The Nobel Foundation (Sweden)
#4 Wikimedia Commons (Online)
See the refernce section for more details.

A New Theory Bridging the Gap:

"The Physics of Cognition"

&

"NeuroPhysical Life after Death" *(A scientific answer to the question humans ask themselves in "Solitude").*

Theory and Author: MT Ek, a Self-Directed NeuroPhotonist

Visual Graphics (*Vision, Selections, Layout & Editing) and enhancement: The Author*

Original images' credit to the authors and sources: *See the reference section (Page 397)*

Cover Background: A "Milky Way" of NeuroPhotons in the space. [11]
Cover Image (Nervous System and a few of Its Components). [11]

All AI generated images for this work are created based on the author's vision and provided instructions.

Millennium-Z Publication

Contact: Neurophotonist@gmail.com

Author: *A Self-Directed Neurophotonist*

- **Assigned Name:** *MT Ek*
- **Studies**
  - Formal: *Psych, Computer Information Syst. (CIS), Metal-Mechanical Studies, Gender & Women Studies.*
  - "Informal": *NeuroScience, Physics, Cognitive Psych, NCDs Health Care, Soc.*
- **Birthplace:** *The third Planet from the Sun*
- **Natural Citizen of:** *The Green Earth*
- **Naturalized Citizen:** *The land of natural equality enough to be proud of!*
- **Home:** *The Planet Between Venus & Mars*
- **Living Approach:** *Dynamics (Beyond the Comfort Zone)*
- **Schooltown/s:** *Various Towns in Three continents*
- **Hometown:** *The hamlet of childhood adoring memories and joy of the overflowing of wild viola arvensis and bicolor pansies*
- **Land of Birth**: *Where "The stars are beautiful, so the eyes of my people"*
- **Diet:** *Non-Paleo*
- **Aversion:** *To any type of smoke even, from the combustion of wood*
- **Joy of Pets:** *Observing social imprinting of a group of baby ducks, behaviors of baby bears, and a Koala*
- **Flavors of Cinema:** *The Father (French-British film, 2020), Aziz/ Dear (Iranian film, 2023), The Sessions (American film, 2012)*
- **Books Lit Teenage Years:** *The Picture of Dorian Gray (Oscar Wilde, 1890), Les Miserables (Victor Hugo, 1862), The Exception and The Rule/ play (B. Brecht, 1930)*
- **Sound of Music:** *La Paloma (Spanish), Reminiscing, Monica's Vals (Swedish), Never thought I'd see…, La Vie En Rose (French),Take Five, Marcel, Ku'u Home…, (Hawaiian), Güləbatin (Azeri), The Ordinary Road (Chinese), Ly O Lay Ale Loya (Indigenous song), To Be Free, Linger, Sar oomad (Armenian melody), Scheherazade, Shalom (Klezmer…), Yellow, Val Gerama (La Paloma, Caspian Sea version), Hometown Glory, Les Ailes (Arabic), The Wedding, Try to Remember, You Already Know, La Paloma (Guitar), Jellyfish, Speed of the sound, Story, Bolero.*
- **Sustainable Learning:** A curriculum teaching *Cued Speech* and basic brain structures to all students, preschool through college, with a dual purpose: to improve communication with people who have hearing loss, and to break the taboo surrounding the difficulty of learning about the brain. Using the Cued Speech technique while speaking should be a criteria for politicians in public works, allowing them to communicate directly with constituents who have hearing loss.

Note: *Since all the colored text above represents hyperlinks, and readers without access to an interactive digital version of this work cannot directly view the referenced information and titles online (the books, films, songs, and poem-verse, learning innovation), the URLs for each site are provided on page 417.*

Acknowledgments:

With sincere gratitude to the scientists and researchers whose valuable insights, data, and expertise contributed to the development of this work, and deep thanks to the various sources, websites, services, platforms, and eight libraries services, sources, and staff in four different countries.

Note: *The inclusion of academic institutions, film titles, clips, presentations, books, music, websites, individuals, and other external references or URL links throughout this work is intended solely to enrich the thematic and related discussion. These mentions are provided for informational purposes only and do not imply endorsement, affiliation, sponsorship, or promotional intent.*

Science Is an Endless Universe, Discovering All Other Universes!

___ *MT Ek*

Science library of Upper Lusatia in Görlitz, Germany *Photo credit:* [5]

The Current Chronic Obstacles to the Advancement of Science, include elitism, ancientism/ traditional practices (e.g., the use of recommendation letters as a selection criterion in educational institutions and research centers), inflexible attitudes, biases in age, race, origin of nationality, etc., partiality, the incompetence of some lecturers, and some admission committee members. Additionally, there is an over-reliance on formal degrees and titles.

Statement: *Citation Transparency*

This work employs the "Vancouver" citation style, first formalized in 1973. At that time, digital publishing and online access to sources were not yet available, and the style did not anticipate hyperlinking as a tool for citation transparency.

To adapt Vancouver style for modern *interactive-digital* version of this work (to view all sources, videos, audios, etc.,) have been hyperlinked directly within the bracketed citation numbers that follow quotations. This allows readers to verify sources instantly and enhances the traceability of cited material. On the reference page, citation numbers are also presented in bracketed format and hyperlinked, offering a streamlined experience for both general readers and third-party reviewers. Although Vancouver style does not require a formal disclaimer, it is important to note that all references in this section follow its guidelines. Care has been taken to ensure proper attribution and observance to copyright standards.

Feedback from readers or third parties regarding citation accuracy or copyright compliance is warmly welcomed. Any suggestions for correction or removal will be sincerely appreciated and addressed with care and detailed information for the cause of deletion. ___ *MT Ek*

Cognition Ignites by Photons

Gathering Photons *Image Credit:* [6]a

Photons—the basic units of the Sun's radiant energy—are key players in the electromagnetic (EM) spectrum, which spans all possible frequencies and wavelengths of EM radiation.

The size of a Photon in the context of quantum mechanics, are treated as *point-like* particles—having no definitive size or internal structure—and are considered massless, according to the special theory of relativity. A photon's energy and frequency are described and measured by its wavelength.

Photons ignite cognition after interference of diffused neurotransmitters (NTs) linked electromagnetic (EM) waves (inside the synaptic cleft and nervous system) with entered EM waves from outside world of the body.

Education Forever: *A Cognition in Motion Never Ages*

From structured academia to informal education, from research to reflection, from self-directed or independent studies to easygoing informative learning — all are valid paths. Education and Learning are not limited by age, format, or institution: *Civility is the reason.* ____ *MT Ek*

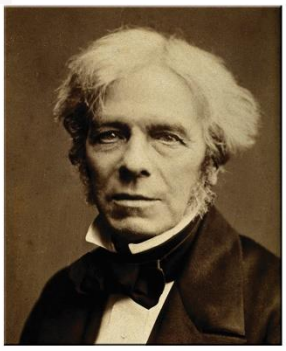
Image by AI, based on the author's vision and provided instructions [6]b

The Pioneering Physicists Whose Discoveries Inspired This Work's Electromagnetic (EM) Discussion!

Hans Ch. Ørsted's discovery of electromagnetism, Michael Faraday's work on electromagnetic induction and diamagnetism, and Joseph Henry's independent discovery of induction and self-induction were all groundbreaking and truly "pioneering" in the field of electromagnetism. Their foundational experimental and theoretical groundwork ultimately led to the comprehensive understanding and exploration of the *electromagnetic spectrum*.

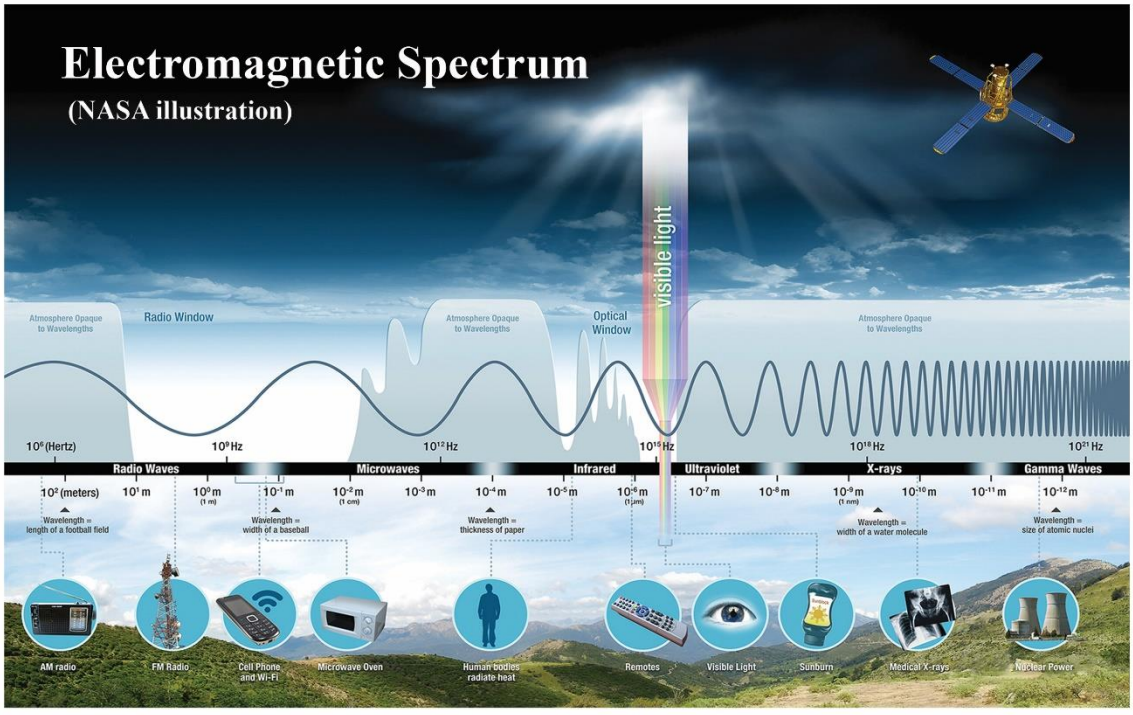
Electromagnetic Spectrum or the entire range of all electromagnetic (EM) waves—from radio waves to microwaves, infrared (including visible light), ultraviolet (UV), X-rays, and gamma rays—are composed of photons, which are massless particles and organized by their various wavelengths and frequencies. *Credit of All images below:* [7], [8], [9], [10]

Hans Ch. Ørsted (1777-1851)



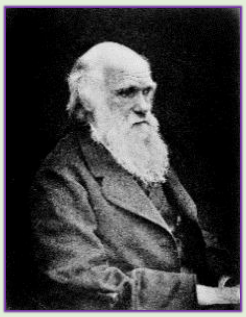
Michael Faraday 1791-1867)

Joseph Henry (1791-1878)



The Visionaries behind Modern Psychology!

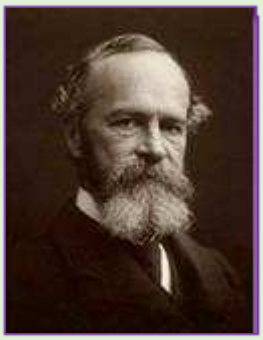
Five of the Key Scientists Who Paved the Way for Understanding Cognition!



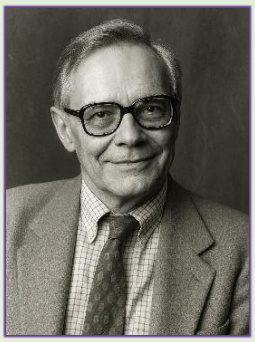
I

II

III



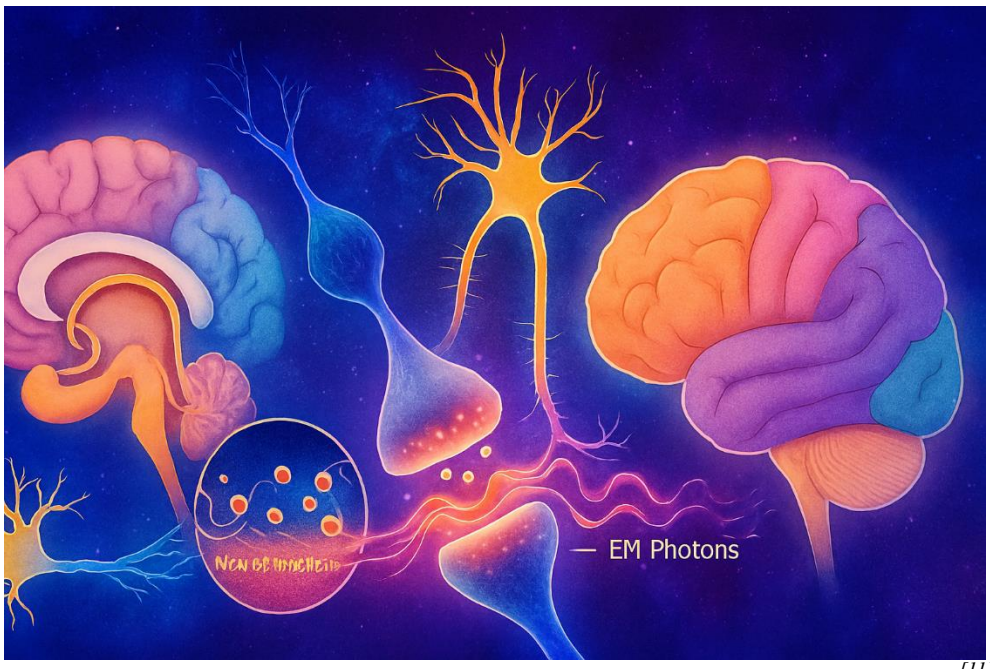
IV



V

I. **Charles Darwin** *1809-1882*
II. **Wilhelm Wundt** *1832-1920*
III. **Ivan P. Pavlov** *1849-1936*
IV. **William James** *1842-1910*
V. **Ulric R. G. Neisser** *1928-2012*

Images: I [12], II [13], III [14], IV [15], & V [16]



Nervous system components. Image by AI based on the Author's vision and provided instructions [11]

Theoretical Framework of the Physics of Cognition:

Cognitive (NeuroPhotonic) Communication & Conscious Life before and After Death
What Remains Conscious after a Human's Biological Death? What Does It Look Like?

What remains after a human's biological death—capable of conscious communication, timeless presence in unlimited distance—is "Milky Ways" of NeuroPhotons. Just as the Milky Way contains billions of stars, so too, billions of physical NeuroPhotons are released from the human body (before and after death) and remain up in the air, accessible as collective effect of vast numbers of photons with specialized cameras.

These neurophotons representing the physical basis of cognition including emotional memories, emerge as a result of waves of EM interference and actively communicate with the neurophotons of other living or deceased human and nonhuman animals. Furthermore, neurophotons create the physical foundation of consciousness as an aspect of cognition.

Unlike the stars of the Milky Way, the countless small white dots in the following image represent the released neurophotons of every human being, extending across near and distant space. These neurophotons interact—both physically and consciously—with those of other humans and species, before and after biological death. Consider this: if each person, each species, and even plants release photons numbering in the billions—comparable to the stars in the Milky Way—then imagine the vast number of neurophotons that have existed since life first began on Earth, more than four billion years ago.

Milky Way at Night! Image by Ai based on the author's vision and provided instructions: [17]

The Physics of Cognition: *Outline*

A> Electrochemical waves link neurotransmitter (NT) activity both within and beyond the nervous system, appearing in nature as neurophotons.

B> Some NTs released from the presynaptic terminal leak or drop off—before and after detaching from receptors on the postsynaptic neuron—and diffuse into the synaptic cleft. This diffusion extends beyond the nervous system.

C> These diffused and dispersed NTs exit the body as neurophotons after being influenced by electromagnetic (EM) properties—such as wave activity within the cleft and its surroundings—and through interference with other EM waves in nature, occurring both before and after death. This interference is the key mechanism that initiates cognition in the form of NeuroPhotonic energy.

D> NTs affected by EM waves—whether from living or deceased individuals—escape into the external environment (e.g., the air) and remain active. These NTs continue to interact with other EM-affected NTs from different individuals. These interactions occur:

- Between external NTs (outside the body) and other external NTs
- Between internal NTs (inside the body) and external EM-influenced NTs
- In both directions (internal ↔ external)

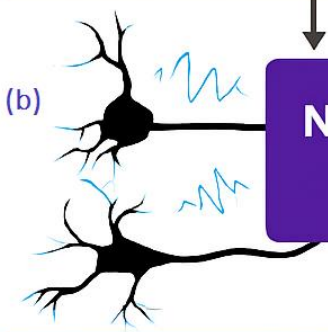
E> These interactions take place externally, where free-floating EM-affected NTs from deceased humans—dispersed through nature and the cosmos—interact with similar NTs from other living or deceased beings. This phenomenon applies across species and resembles particulate matter (PM) in the air. External-to-internal communication (and vice versa) occurs when one or both individuals are alive. (In plants, which lack a nervous system, such interactions occur via photonic—not NeuroPhotonic—waves.)

F> Cognitive interactions—driven by NeuroPhotonic energy—occur continuously and sentiently, both consciously and subconsciously. EM waves carry cognitive information as neurophotons, which are generated in the synaptic cleft via the nervous system after NT diffusion. These neurophotons interact with similar EM waves—representing cognitive or NeuroPhotonic energy—from other species, including humans.

Theoreticl Diagram of NeuroPhotonic Communication

(a) Electromagnetic (EM) waves link neurotransmitter (NT) activity within and beyond the nervous system in nature as neurophotons

(b)



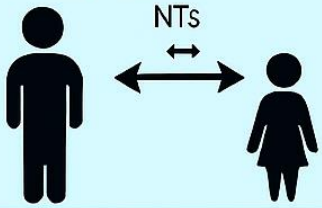
NeuroPhoton Energy

(c) Diffused and dispersed NTs exit the body as neurophotons after interference with EM waves within, both before and after the nervous system

(d) NTs affected by EM waves – whether from living or deceased – escape into the external environment or air, where they remain active.

They continue to interact,

External EM-affected NTs



(e) Plants, which lack a nervous system, interact via photonic–nt NeuroPhotonic energy ($E = hv$)

(f) Cognitive (NeuroPhotonic energy) interactions between EM-influenced NTs occur continuously and sentiently (consciously and subconsciously). EM waves carry cognitive information as neurophotons, igniting in the synaptic cleft via the nervous system after NTs diffusion, mutually interacting with similar EM waves (cognitive or NeuroPhotonic energy) from other species including humans.

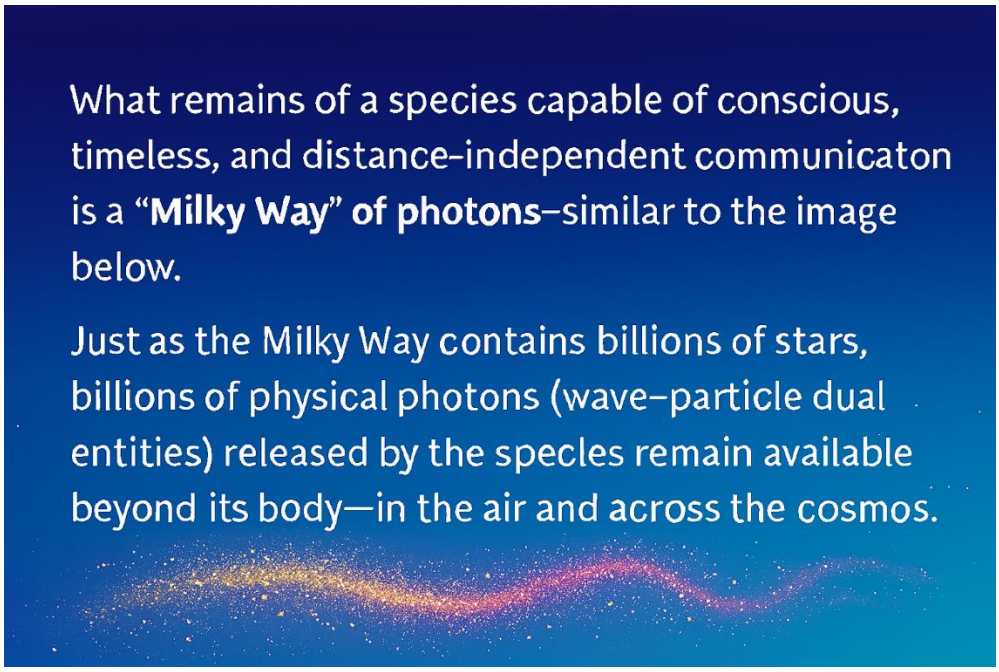
The Physics of Cognition: The Core Definitions

Physics of Cognition is the proposed scientific domain that explores cognition as an electromagnetic and photonic process, rather than solely a biochemical or computational one. It investigates how neurotransmitters, EM waves, and neurophotons interact to form, transmit, and sustain cognitive energy. This physics-based model challenges traditional neurobiological paradigms by framing thought, memory, and awareness as emergent properties of wave interference, photonic dispersion, and environmental resonance.

Neurophotonic refers to the theoretical framework in which cognition arises from the electromagnetic interactions of neurotransmitters, resulting in the generation, transmission, and reception of neurophotons. It encompasses both the internal processes (within the nervous system) and external dynamics (in air, nature, and cosmos), positioning cognition as a photonic phenomenon. Neurophotonic communication is continuous, sentient, and bidirectional — occurring consciously and subconsciously across living and non-living systems.

Neurophotons are photonic emissions generated by neurotransmitters (NTs) as they interact with electromagnetic (EM) waves within and beyond the nervous system. These emissions represent cognitive energy that escapes the body and remains active in the external environment, enabling interaction between living and deceased beings. Neurophotons are not merely byproducts of neural activity — they are carriers of cognitive information, capable of mutual interference and communication across species.

Neurophysical a "blend" of neuro (relating to the neurotransmitters) and physical (relating to physicality of photons. It is not a widely established or commonly used term in scientific literature.



To

Santiago R. y Cajal (1852–1934),

the Spanish neuroscientist, pathologist, and histologist who won the Nobel Prize.

Just as Albert Einstein's Special Theory of Relativity revolutionized physics, Santiago R. y Cajal's identification of neuron individuality transformed neuroscience.

Without his discovery, this work would not exist.

Image Credit: [18]

To Otto Loewi
(1873–1961),
the Austrian pharmacologist and Nobel Prize winner in Medicine, who discovered the first neurotransmitter in 1921 and called it "Vagusstoff."
Without his discovery, this work would have had no foundation to develop the hypothesis of neurotransmitters' electromagnetic interactions both inside the nervous system and outside the body, in nature.

To Ulf von Euler
(1905–1983),
a Swedish physiologist and shared Nobel Prize laureate in Physiology, He devoted most of his research to one of the most important neurotransmiters, "Noralrenaline," which is central to the key discussion in this work regarding the causes of having a pleasant dream or a "nightmare" during sleep.

Images Credit: [19], [20]

To An Unforgettable Human of Faith:

Our Father! A Person of Religious Faith,
Whose Open-Minded Views and Advice
(to see beyond the Box), Instructed me to
be What Supposed to be. ___*MT Ek*

To “The Millennium of Z”

Considering Generation Y shares some of Generation X’s mindset—both influenced by the traditions and values passed down through millennia—Generation Z, by contrast, displays a remarkably independent and self-determined outlook. While Generations X and some Y continue to rely on the frameworks established by past generations, shaped by the living ethos, pathos, and logos of their predecessors, Generation Z stands apart.

This generation is not confined by the same cultural dictates or expectations; instead, it forms its own path, driven by ideals of humanity, dignity, equality, peace, and science. Its social-cognitive structure is distinct, prioritizing a future-oriented, inclusive approach to life that challenges traditional paradigms. Given Generation Z’s constructive cognitive framework and its potential to influence the course of the following generations of this millennium. This generation’s vision will define the coming centuries through this millennium, shaping the world in ways that previous generations could not have imagined, which is fitting to name it *”The Millennium of Z.”* Despite the current dominance of Gen X forces, regressive, and archaic slogans in the world, the author remains firmly optimistic. He believes a better humanitarian world will emerge as soon as the generations of this millennium— Gen Z, and those that follow its path, *Alpha, Beta, Gamma, Delta*, …—begin to lead societies in the coming decade/s and centuries.

Image Credit:[21]

Relevant Questions and Answers:

- **"What happens to me after death?"**
  - *A NeuroPhysical (Neurophotonic) continuation of current life will extend cognitively, consciously, and sentiently*
- **What does neuro-physicality consist of?**
  - *Waves of Electromagnetically affected neurotransmitters in the form of NeuroPhotonic energy*
- **How does communication between humans occur after death**?
  - *Physically (Electromagnetically)*
- **How the electromagnetically communication between humans take place after death?**
  - *Cognitively*
- **In which cognitive state does communication occur after death?**
  - *Consciously and subconsciously*

The Last Words First!

This work is the result of four stages of independent studies, conducted outside a research lab that began in February 2017. However, it truly began during the fourth stage, while completing a non-medical preventive program focused on Non-Communicable Diseases (NCDs), including the impacts of obsessive smart device use, excessive time spent on social media, unhealthy diets, and cardiovascular diseases. At that phase (stage four), while concentrating on developing activities to reduce early-age cognitive decline, Alzheimer's disease, and other cognitive impairments (e.g., Parkinson's disease), the author began to explore the origin of cognitive ignitions.

Through outside-lab research, notably drawing inspiration from *Santiago Ramón y Cajal's* discovery of neurons as individual units with gaps between them—the author reviewed reliable studies across neuroscience (e.g., neurobiophysics, neuroimaging, neurocognitive science), physics (particularly electromagnetic radiation), and cognitive psychology. Philosophical theories and thoughts as non-scientific perspectives, from Aristotle to poet Emily Dickinson's views on the brain, were likewise considered. However, this gap in understanding prompted an investigation into the origin and underlying mechanisms of human cognition. He hypothesized that, in addition to electrical impulses and electrochemical signals, there are other types of interactions involving neurotransmitters that play a critical role within the nervous system.

In the end, the author distinguished narrative fiction from scientific evidence on the origin and physics of cognition, concluding that natural electromagnetic (EM) photons directly originate human cognition. In stage 4 of his work, he concluded that human and non-human cognition originates through dynamic engagement with properties of the electromagnetic spectrum in the nervous system and beyond, in nature—including atmospheric and cosmic signals, as well as other external non-biological sources. This occurs because diffused, neurotransmitters—both within synaptic clefts and throughout the nervous system (even outside the body)—are continuously interacted by electromagnetic waves. (These waves effect also explain how non-human animals, birds, and other species communicate and coordinate interactions without language —and plants without nervous system.)

As a result of this electromagnetism (energy of photons), human cognition ignites and originates conscious states (wakefulness) and subconsciousness (during sleep, in a coma, and after death, as long as energy of photons or electromagnetic properties are available in nature and beyond). As an outcome of the exploration, the author developed the hypothesis: "The Neurophysical Life (Live communication) after Death."

The Exploration:

The author explored the influence of electromagnetic properties (e.g., waves) on the diffused neurotransmitters in the synaptic cleft—focusing specifically on the cognitive and neurological processes. Through this original research, he proposes that these mechanisms

serve as the driving forces behind all cognitive activity, both conscious (during wakefulness) and subconscious (during sleep, in a coma, and even after death).

Continuously, reviewing numerous studies and experiments conducted over the past two centuries, the author found no definitive explanation which physiological substances or components within human organs directly responsible for generating the various forms of cognition. That said, the author came across two scientific studies that emphasized the involvement of photon energy in human cognition, but neither was directly relevant to the ideas he presents in this work. The first scientist, Russian biologist Alexander Gurwitsch, observed biophotons emissions and their role in growth in the 1920s. Decades later, in the 1970s, German biophysicist Fritz-Albert Popp proposed that changes in brain biophotons emissions correspond to different cognitive tasks.

It is important to note that the main difference between these scientists' suggestions and what the author proposes here lies in the process and mechanism by which cognition is generated through photons inside the nervous system and extend outside the body. While their focus was on *biophotons,* the author explored the idea that the "ignition" of cognition occurs via *neurophotons,* which are distinct.

Consider this key points:

Biophotons are released by biological matter. When a photon is emitted by a living cell, it is called a biophoton, an ultra-weak photon and is a subject of biophysics and biophotonics.

Neurophotons, however, are generated after diffused neurotransmitters are affected by circulation of electromagnetic (EM) waves that enter the synaptic cleft and the surrounding, the nervous system from outside the body.

Notably, *biophotons* are created or released by the living cells (neurons and non-neuronal cells, e.g., glial cells) of all organs including arms, legs, etc., but *neurophotons* are result of affection of neurotransmitters - biological signals, not biological cells - by external EM waves.

Important to note: Biological signaling is fundamentally rooted in the electromagnetic (EM) nature of bioelectrical activity, which arises from ion flux or movement across cellular membranes. These intrinsic or natural EM signals interact with externally propagating EM waves as they pass through the synaptic cleft and extend into surrounding neural and extraneural environments. Through productive interference, their combined effects generate a novel and intensified EM wave. This emergent signal propagate outward, exiting the body via neuroanatomical pathways—such as peripheral nerves and cerebrospinal fluid (a composition of water, proteins, and glucose) channels—as well as through anatomical or physiological passageways including respiration (breathing) system, perspiration (sweating) system, urination, and even substances released by glands.

Furthermore, since the generation of *biophotons* depends on living cells, as soon as they - the cells - die — whether for any reason or following human biological death — the release of

biophotons will also stop. On the other hand, because *neurophotons* are generated by the effect of external electromagnetic waves (through constant circulation) on the diffused neurotransmitters in the synaptic cleft and surrounding areas, they can persist and survive as electromagnetic waves after reaching the outside world, even after human biological death, including the death of all cells.

Nonetheless, the theories of Gurwitsch and Popp were sufficiently instructive and eye-opening for scientists in related fields. Over the past hundred years, their work laid the foundation for the mainstream scientific community's approach to developing theories about the origin and physics of cognition in relation to photons. However, the continued repetition and endorsement of philosophical and unscientific theories—such as the concept of the "unconscious mind"—have led to a century of wasted scientific effort.

The "Solitude" Question: *"What Happens to Me After Death?"*

Based on the principles of electromagnetic (EM) photon interactions, the author theorized "The Neurophysical (NeuroPhotonic) Life (live communication) after Death." If the small white dots in the night sky image (below) of the Milky Way are considered neurophotons, then billions of them represent what remains permanently alive of a human as massless wave-particle duality (zero rest mass) physics of consciousness as part of cognition. The details of this theory are discussed from various angles in different sections of this book (e.g., page 15). This is the answer to the *"solitude" question* that has been considered by all humans throughout history, including the present population of over 8 billion people on Earth: This is the answer to the *"solitude" question* that has been considered by all humans throughout history, including the present population of over 8 billion people on Earth.

The Milky Way at Night *(Like NeuroPhotons in the Universe)* *Image:* [22]

This Work: A Simplified Scientific Writing!

Since the scientific answer to the question of solitude— *what Happens to Me after Death?*— applies to all 8 billion people on Earth, this work employs a *simplified* approach - non-traditional - to scientific writing. The author's method seeks to ensure that nearly every reader can *follow* the scientific discussion without difficulty**.** Therefore, unlike almost all scientific books, which are filled with dense and small texts page after page, this work includes "gaps" of blank pages combined with a variety of illustrations, short paragraphs and common language. This method provides a more reader-friendly interface of the book, allowing for "breathing room" while navigating through the scattered and scientific texts.

A combination of daily life incidents is used in this work:

To make the content of this scientific work easier to grasp, the combination of ordinary people's experiences of "mystical" incidents in their daily lives was another approach to writing. In addition, utilizing common cases, visually friendly information, color coding, typesetting, and including general presentations, etc., made this scientific work flow like a graphic novel, historical literature, and short stories.

No specific scientific skills needed to comprehend this work:

No specific scientific skills are required to understand the content or grasp the main points, the process, and the mechanism of the hypotheses ad related discussions." It is for all, particularly for those who are usually not interested in scientific literature.

Minimum use of academic and research lab terms:

This work is mainly for those who are interested in exploring the reality of human's undiscovered cognitive interactions with a minimum use of research lab terms. It is for those who are fascinated by reading scientific work with the least technical terms or spending time looking up definitions of unfamiliar words.

"Read and Run"

To comprehend the main argument about the physics of cognition and how humans communicate neurophysicality with others—alive or dead—as the author suggests for the first time in the neuroscience community, the book describes the mechanism of such communication. The simplicity and fluency of this work's writing style make it easier to be comprehended by all readers, not just scholars, scientists, philosophers, academics, and college students who are more interested in scientific and philosophical texts. This work is for readers of different backgrounds than science, even for those who usually get "bored" of reading scientific books and materials. It includes a variety of daily wonders and familiar unanswered questions that will catch the readers' attention so that they will "read and run" this work in almost any environment. The author attempts to smoothly describe, discuss, and highlight the structures of the brain as a component of the nervous system while minimizing the use of technical and scientific terms.

Easy to follow the content of this work:

To follow the content of this work, the author uniquely, timely, and frequently explained and discussed the most relevant scientific descriptions, unfamiliar terms, and vocabulary as much as possible. The flow of information and writing style of this work differs from most works in science and Neuro-Physiology, Neuro-Psychology, and Neuro-BioPhysics in particular.

A Taste of This Book's Readable Science:

An Analogy…

He was sitting on a second-floor balcony of a four-story building, just a stone's throw from the open sea. The view was wide, the breeze gentle, and he was enjoying a light meal. Below, on the patch of grass near the building, a lone crow caught his attention. It moved with calculated caution—scanning the area, pecking at the soil, searching for something palatable. But there was not much to tear apart with its powerful beak, nor anything worth carrying off to a safer spot, as crows often do.

He had a habit of watching birds closely, fascinated by their behavior. On impulse, he tossed a spoonful of his rice-mixed meal down toward the crow. Within seconds, two more crows dived in from behind the building, landing with precision and pecking at the scattered grains. Moments later, another pair arrived—then a few more from the sides of the building. In less than a minute, the quiet patch of grass had become a busy crow buffet.

Now, this is something you already know: toss food outside, and birds seem to appear out of nowhere. It is a familiar scene in parks, backyards, and balconies. But here is the part people rarely think about—how do birds that were not even visible, perhaps flying high above or hanging far away, know that food has suddenly become available in a specific spot?

It is not magic, and it is not just luck. There is a mechanism at play—one that operates across species, from birds to humans to plants. It is grounded in electromagnetic properties: waves, fields, and radiation. These are not abstract concepts reserved for physicists—they are part of the everyday language of nature, quietly orchestrating interactions that seem innate but are deeply physical.

In other words, it was the Electromagnetic wave of sensory cognition that carried by Neurophotons, which led the crows to detect the energy absorbed by the matter (the food) even from long distance or behind the 4-story building. Hence, it is the photonic sensory cognition that allows animals to locate prey by detecting the waves of their body heat, even in darkness or birds like geese, swans, pelicans, etc., fly in a "V" shape (Echelon).

The Stage of the findings

This section explains how the process—or story—of this work began, tracing back to February 2017. After working for about four years on a non-medical health initiative focused on preventing non-communicable diseases (NCDs), the author expanded his efforts to include non-traditional activities aimed at reducing early cognitive decline, including Alzheimer's disease.

It was at the stage (stage 4), he learned about the individuality—or separation—of each nerve cell (neuron), along with the gaps or spaces between them in the nervous system, which was discovered in 1888 by the Spanish pioneer neuroscientist Santiago Ramón y Cajal. At the same time, the author observed a striking absence of information in the mainstream scientific literature regarding any cognitive activity of neurotransmitters within these spaces after their release from the presynaptic neuron. Beyond the well-known processes—such as enzymatic degradation, reuptake by the presynaptic or glial neurons, and diffusion away from the synapse—no cognitive functions were documented.

In particular, the observation that neurotransmitters diffuse away from synapses prompted the author to ask himself different questions:

- What would be the effects of these "leftover" (diffused) neurotransmitters' interactions in the spaces?
- Do the "free" interactions of these "leftover" neurotransmitters in the gaps play a role in human cognition?

This line of inquiry led him to dedicate four more years of constant independent study and research outside a traditional lab to finding an answer. The answer he found was this:

Yes, neurotransmitters that have diffused away from synapses in the spaces are the major actors in generating human and species cognition after being affected by the photons of electromagnetic radiation both inside the gap/synaptic cleft, Nervous system, and outside the body.

Here is Why: According to the mainstream scientific community, high-energy electromagnetic (EM) radiation can break molecular bonds and cause molecular dissociation, but only if the radiation has sufficient energy to overcome the bond energy holding the atoms together. However, the author questions this view, proposing that a molecule might first absorb low-energy EM radiation, such as infrared light, which increases its vibrational or rotational energy. Then, after entering a higher-energy environment (e.g., a plasma field or a region exposed to intense ultraviolet radiation), it could gain additional energy from other forms of photonic energy, reaching the threshold required for bond dissociation outside the body.