

The Light of Creative Logos
The Honor of Achilles: Fair Dealing Leads to Greater Profit
On The Importance of Compensating and Crediting Artists while Seeking their Consent
by Dr. Elliot McGucken (www.emcgucken.com)

Jack Bogle of Vanguard: Dr. Elliot McGucken's course *The Hero's Odyssey in Artistic Entrepreneurship and Technology* is an inspiring tribute to the relevance of classical ideals in our modern lives. —Jack Bogle, founder and former CEO of Vanguard in his book *Enough: True Measures of Money, Business, and Life*

Rembrandt: Choose only one master - Nature.

Einstein: I am enough of an artist to draw freely upon my imagination (Creative Logos). Imagination is more important than knowledge. Knowledge is limited. Imagination encircles the world.

William Ferriss, former Chair of the National Endowment of the Arts (NEA): Many thanks for the impressive work that you are doing (Dr. McGucken's artsentrepreneurship.com). I look forward to keeping in touch and commend you on the innovative teaching you do.

Thomas Jefferson: “As we advance in life... they all fall off one by one... until we are left with Virgil and Homer, and perhaps Homer alone.”



Dr. Elliot McGucken Gallery Show
<http://instagram.com/elliottmcgucken>
<http://www.emcgucken.com>



The Rage of Achilles, Iceland © Dr. Elliot McGucken

Martin Luther King Jr.: If we are to go forward, we must go back and rediscover those precious values - that all reality hinges on moral foundations and that all reality has spiritual control.

Dante: Art, as far as it is able, follows nature, as a pupil imitates his master.

The New York Times: McGucken's course (*The Hero's Odyssey in Arts Entrepreneurship & Technology 101*). . . rests on the principle that those who create art should have the skills to own it, profit from it and protect it. "It's about how to make your passion your profession, your avocation your vocation, and to make this long-term sustainable," he said. --*New York Times Small Business*

1. The Rage of Achilles

[the United States Congress shall have power] To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors **the exclusive Right** to their respective Writings and Discoveries.



the Epson international

[P]ano awards



Stoicism Exalted: Montana Winter Wolves © Dr. Elliot McGucken

Homer's *Odyssey* opens by describing the fine art landscape, nature, and wildlife photographer:

*Sing in me, Muse, and through me tell the story
of that man skilled in all ways of contending...
He saw the townlands,
and learned the minds of many distant men...
and weathered many bitter nights and days
in his deep heart at sea . . .
Striving only to serve his men, and return on home. . .*

Homer's *Odyssey* as translated by Robert Fitzgerald (1961)



the EPSON international
[P]ano awards



Rising Storm Death Valley National Park, Dr. Elliot McGucken

Library of Congress James Madison Building Inscription: EQUAL LAWS
PROTECTING EQUAL RIGHTS ARE THE BEST GUARANTEE OF LOYALTY &
LOVE OF COUNTRY, Madison to Jacob de la Motta, August, 1820

Fine-art landscape, nature, and wildlife photography is the pure, refined gold—the Creative Logos—that today’s “AI” systems so desperately need. For we nature photographers learn firsthand from Rembrandt’s, Van Gogh’s, Monet’s, Thoreau’s, and Dante’s *et al.*’s prime master—Nature. “Beauty will save the world,” wrote Dostoevsky, and we humble ourselves before Nature’s whimsical, fleeting beauty, rising well before dawn day after day to 4-wheel and hike the countless backroad miles inherent in all our greater photographs.

SMART NEWS

Trending Today

Flooding Creates a 10-Mile-Long Lake in Death Valley

The rare ephemeral lake was caused when the compacted, dry desert soil wasn't able to absorb the .87 inches of rain that recently fell on the national park

Jason Daley

Correspondent
March 13, 2019



Elliot McGucken, www.mcgucken.com

Most of the time, visitors to Death Valley National Park in southern California don't expect to see much water. The area is the hottest and driest spot in North America. So it was surprising when, after a massive storm last week, a winding 10-mile-long lake appeared in

the park.

PRINCESS **DROP & GO** **Hurry for deals on last minute cruises** fares from **\$49*** per day! **Book Now!** *legal restrictions apply

Report an ad

PRINCESS
The LOVE BOAT Sale 
Includes \$100 deposit, \$100 excursion credit, drinks, Wi-Fi, crew appreciation + up to 30% off* **Book Now!**
*legal restrictions apply

Celebrating 75 years of **The Outrigger Way**. Rooms up to **25% off** **Book Hawaii Now!** 

The legendary photographer Ansel Adams stated, "Landscape photography is the supreme test of the photographer - and often the supreme disappointment," and when endurance, skill, and fortune combine, we exalt a primal, firsthand understanding of beauty. As a photographer and physicist, I live by Einstein's words, "Look deep into nature, and then you will understand everything better."

Without making copies of our fine art, the billionaire’s “AI” systems are as useless as they are soulless. The mere silicon and binary algorithms are incapable of Creative Logos—that Galilean spark of reason which sees further by not only standing upon the shoulders of giants, but by saying something new. AI’s autocomplete algorithms can only produce that which is based upon the thousands of opinions which have come before, and thus it is designed to thrive in the darkness of some Platonic Cave, while naturally seeking to deny any who escape any groupthink regime to see the Light. Galileo reminds us that the Creative Logos is found in the individual soul:

Galileo: For in the sciences the authority of thousands of opinions is not worth as much as one tiny spark of reason in an individual man.

The better the art which AI trains on, the better the output. And so it is that those AI systems which honor the simple precepts of Copyright—those AI systems which honor the Real Intelligence of the Constitution, Natural Law, and the simple, commonsense, civilizing decency exalted by Homer, Moses, Madison, Bogle, and Dante on down—those AI systems which properly and politely secure rights to use the artist’s fine art will ultimately prevail. Those AI systems which respect Nature and Natural Law will be respected. Those AI systems which honor human dignity and integrity will endure. Those AI companies which seek artist consent and compensate artists as the artist requires will triumph. Vincent van Gogh stated, “There is nothing more truly artistic than to love people,” and until AI is capable of Love and Logos, the “AI” CEOs will desperately need our art.



The Arrival: $dx_4/dt=ic$ © Dr. Elliot McGucken



Dr. Elliot McGucken in Yellowstone National Park © McGucken

Hemingway wrote, “The world is a fine place and worth fighting for,” as is our fine art photography which captures the world’s exalted, archetypal beauty, rendering ephemeral moments eternal, and inspiring others via the transcendent. The father of modern landscape photography Ansel Adams noted, “Photography is more than a medium for factual communication of ideas. It is a creative art,” adding, “A great photograph is one that fully expresses what one feels, in the deepest sense, about what is being photographed.” Master photographer Edward Weston—also a member of Adams’ F64 photography group, described the goal of capturing nature’s immortal archetypes—the higher Platonic forms—writing, “This then: to photograph a rock, have it look like a rock, but be more than a rock.” And Adams reminds us that photography is a realm where the humble soul might yet aspire towards Milton’s goal of creating “Things yet unattempted in prose or rhyme,” writing, “We must remember that a photograph can hold just as much as we put into it, and no one has ever approached the full possibilities of the medium.”

Copyright is a most foundational Natural Right and Human Right—it offers the prime celebration and exaltation of the Individuals who together comprise “We the people.” Our art, oft obtained via our blood, sweat, and tears, is an extension of our hearts and souls—of our passions and dreams—of all that we previsualize in our mind’s eye, and of all the investments

and *actions* taken in rendering that vision real. The landscape photographer's art is their biography cast as an epic film, with each still telling of the struggle and glory, together forming an arc spanning one's life and forever marrying it to the fantastical. And it is a most Natural Right to own one's heart and soul—to own one's blood, sweat, and tears—to own one's passions and dreams—to own one's investments—to own one's mind and body—to own one's story—and to own all the sacred creations that are gained by one's rugged, enduring labor married to one's unique talents.



Open Built Environment category - Winter Moonrise over Los Angeles by Elliot McGucken from United States.
Elliot McGucken//EPSON Int Pano Awards/TNG

When Jack Bogle, the late founder and former CEO of Vanguard (one of today's largest investors in "AI" systems), sent me the galley proofs for his 2010 book *Enough: True Measures of Money, Business, and Life*, and asked for suggestions, I sent him two quotes which I embed in all my photography—one from Homer's *Odyssey* and one from Socrates' *Apology*—two of the books I taught alongside Bogle's 2014 *The Battle for the Soul of Capitalism* in my class on art and entrepreneurship. Bogle included both quotes in his book:

"Fair dealing leads to greater profit in the end." —Homer's *Odyssey*

"Virtue does not come from money, but money and every lasting good of man derives from virtue." —Socrates' *Apology*

Virtue—the rugged, wealth-creating pursuit of excellence in the creative arts—is exactly what fine art nature photography affords the lone cowboy. We celebrate Natural Law with every shot as sure as Clint Eastwood’s “Man with No Name” celebrated the Homeric order with every shot of his Colt .45 Revolver in Sergio Leone’s masterful films. When viewed through the lens of “fair dealing,” and “artistic virtue,” the beauty of the Constitution’s soul shines forth, where the only place the word “Right” appears in the main body of the Constitution is in the “Copyright Clause”—yes indeed—the Right to own one’s creativity was considered *essential* to not only the individual’s enduring freedom, but to the progress of “science and the useful arts,” and the very Wealth of Nations:

[the United States Congress shall have power] To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.

Such are the simple precepts of Natural Law which I exalt in every photograph I shoot. At the center and circumference of my photographs is Homer, Socrates, and the United States Constitution—as sure as the Golden Ratio is also found in the Supreme Court’s architecture—as sure as the divine symmetry of “Equal Justice Under Law,” inscribed in the frieze above the Supreme Court, is rooted in the very same eternal Euclidean, Lockean, Jeffersonian, and Mosaic Logos. The stones which the postmodern “AI” CEOs tossed aside became the keystones of my art, and now they desperately need that art, going so far as to steal it, sans any compensation or credit.

2022



*Certificate of
Acceptance*

Elliot McGucken

Desert Angel Dante's Beatrice
Terry A. Allen

In recognition of photographic excellence
and inclusion in the
Top 101 International Landscape
Photographs of the Year.

Peter Eastway

Peter Eastway
2022 Top 101 International Landscape
Photographs of the Year



CREATED FOR LIFE

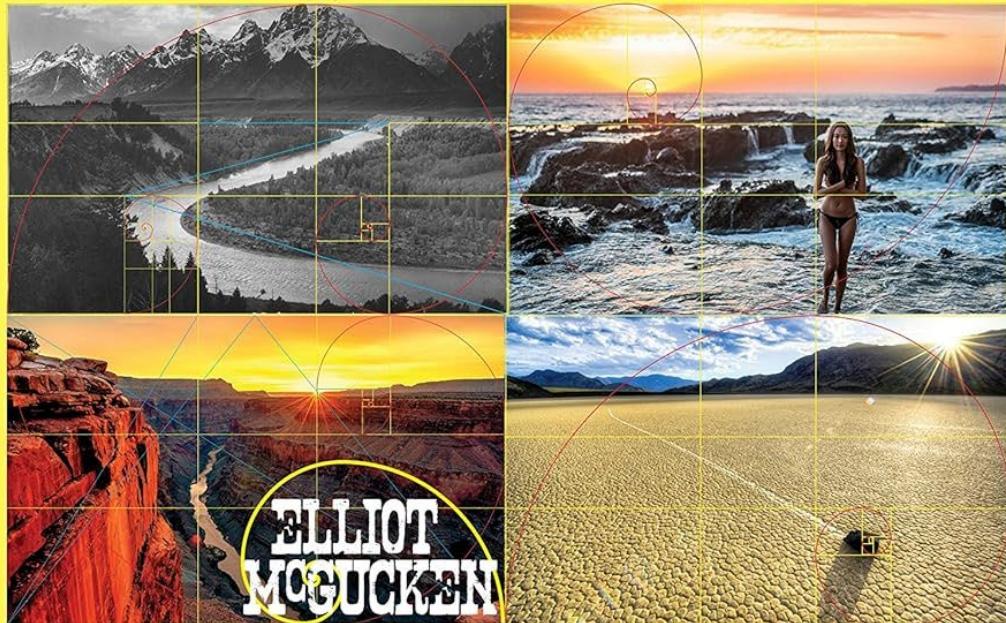
momento pro

NISI

JOIN THE GOLDEN RATIO FELLOWSHIP!



HOW TO EXALT ART WITH LEONARDO DA VINCI'S,
MICHELANGELO'S, & NATURE'S DIVINE PROPORTION PHI



DR. ELLIOT MCGUCKEN



City of Angels © Dr. Elliot McGucken

While Odysseus strove to save his men and bring them safely on home, they ultimately perished as they dined on the Sun God Helios's cattle against Odysseus' warnings. So too did Moses return on down from Mt. Sinai with the Ten Commandments (including Thou Shalt Not Steal Art) only to find his people worshipping the Golden Calf. In both cases the people ignored the higher ideals in favor of the baser appetites, and lost access to that higher, honorable civilization which is based on the Rule of Law. George Washington summed it up with, "Freedom and Property Rights are inseparable. You can't have one without the other."

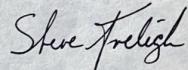
THIS IS TO CERTIFY THAT

Dr. Elliot McGucken

WAS A WINNER IN THE 2019

NATURE'S BEST NATIONAL PARKS

PHOTOGRAPHY COMPETITION



STEPHEN B. FREILIGH
NATURE'S BEST PHOTOGRAPHY
EDITOR-IN-CHIEF, PUBLISHER



The great poet Percy Shelly famously noted that “poets are the unacknowledged legislators of the world,” and epic art is that which reminds us of the higher ideals—the final act’s justice in the showdown found in Homer’s *Odyssey* and every Western and courtroom drama on down—the cathartic realization of justice in *To Kill a Mockingbird*, Sergio Leone’s *The Good, The Bad, and The Ugly* trilogy, and every John Ford, John Wayne, and John Grisham film. Leone credited Homer as being the master writer of Westerns, as sure as Lincoln stated that anyone who wished to learn of humanity had to read Homer, and Jefferson stated, “As we advance in life, they all fall off, one by one . . . until we are left with Homer alone.”

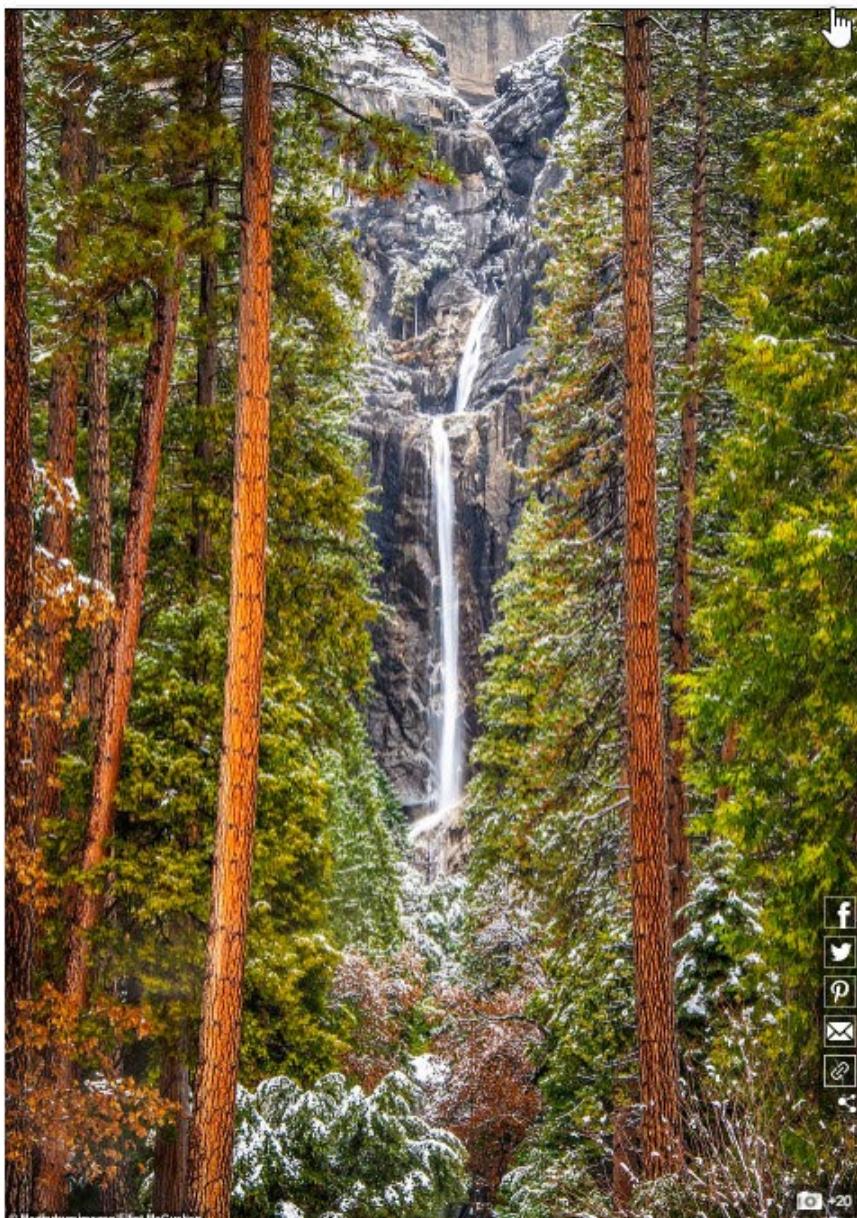


Grizzly bears play fighting in Alaska and a herd of bison trekking through the snow in Yellowstone are among the 20 stunning finalists of the National Parks photography competition

- The 20 finalists for the Nature's best Photography National Parks Photo competition have been announced
- Some of the pictures include two grizzly bears fighting and a landscape of Grand Teton National Park
- Other finalists include a shot of bison ploughing through snow and bighorn sheep scaling the side of a cliff

By SAM BAKER FOR MAILONLINE

PUBLISHED: 06:09 EST, 20 January 2021 | UPDATED: 06:14 EST, 20 January 2021



© Noddrum Images/Elliot McCucken

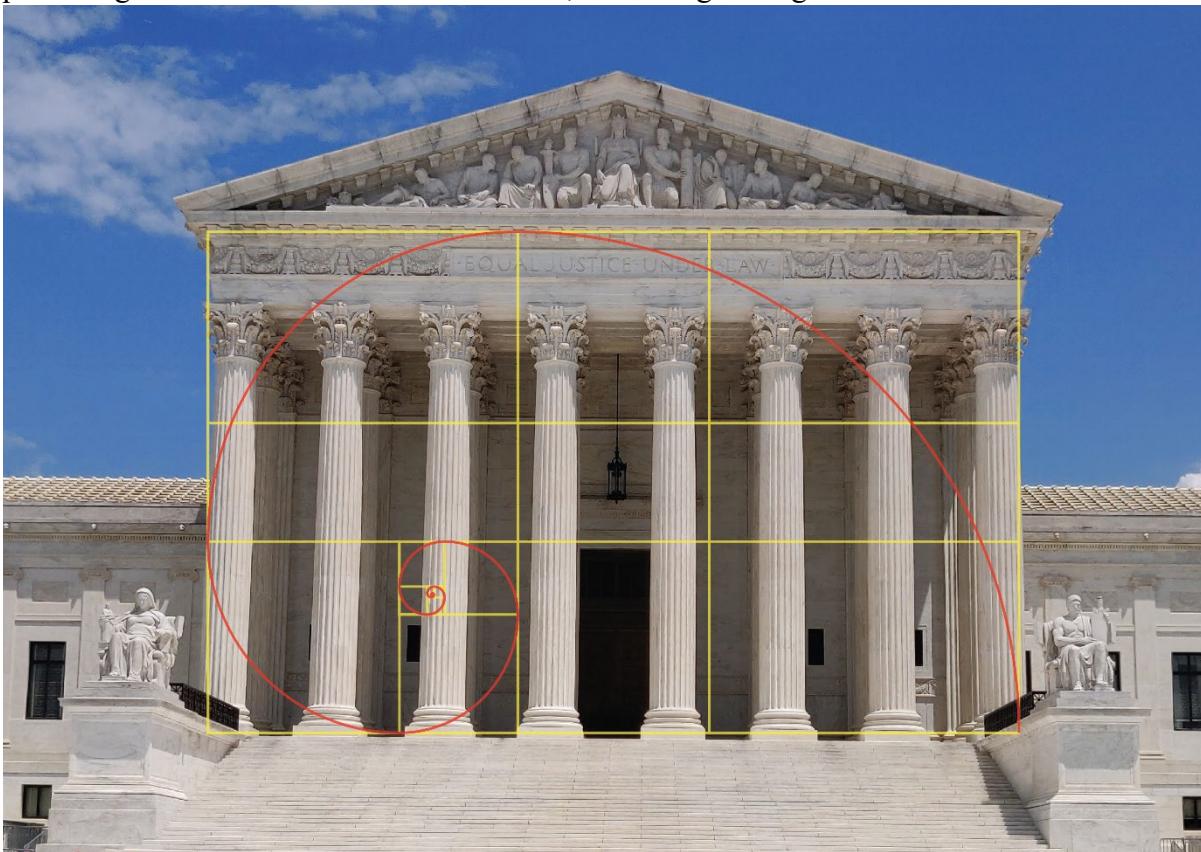
+20

Yosemite Falls: Elliot McCucken, who captured this picture of a waterfall in Yosemite National Park, was selected as one of the finalists

So it is that Copyright protects the epic poetry and art which exalt our Natural Rights and Copyright itself by protecting the artist's life and work. Copyright protects the just, Euclidean art which informs the soul of Copyright. As a picture is worth a thousand words, the Natural Law exalted in Fine Art Photography reminds us of the higher ideals by which civilization endures. Art exalts the same Euclidean Truths by which Locke and Jefferson envisioned a free society based on "self-evident" axioms:

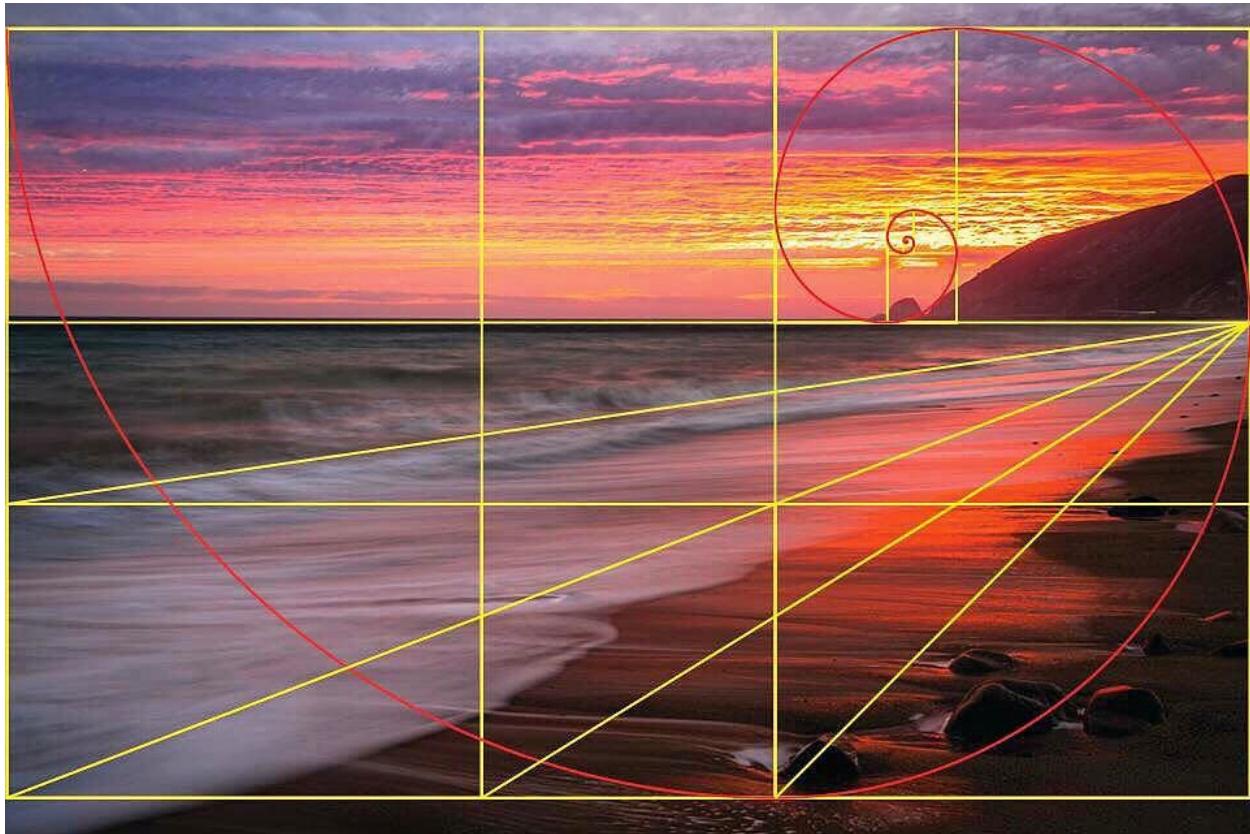
We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness (Property in the words of Locke).--That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed.

As pictured below, the self-evident, Euclidean truth that "all are created equal," is enshrined in the Supreme Court's Frieze as EQUAL JUSTICE UNDER LAW, as sure as the Supreme Court was designed in accordance to the Golden Ratio celebrated throughout Euclid's *Elements* and classical art, whence the artists learned firsthand from the golden ratio harmonies pervading the human form and all of Nature, oft distinguishing life from death:



The Supreme Court's Golden Rectangle

So too does the golden ratio inform my own compositions, such as in “Malibu Sunset” which raised \$8,000 for The Who’s/Eddie Vedder’s Teen Cancer Foundation/UCLA Hospitals:



↳ Dr. E's Epic "Golden Ratio" Fine Art raises \$8,000 for Teen Cancer via the Golden Ratio!!

40"x60" Fine Art Print raises \$8,000 for the UCLA The Who's (Roger Daltrey/Peter Townshend) Teen Cancer Program



Regarding a copyright case I was involved with, The Court of Appeals noted the Golden Ratio, while also upholding the Constitution:

"During those "lucky, magically strange, and even eerie minutes," McGucken got to work. He employed "a classical technique in art," "composing . . . using the golden ratio," a subject about which he had "penned a couple books." He took and then edited a series of photographs from different vantage points. With a little luck, a little sweat, and plenty of skill, McGucken produced a series of photos of stunning beauty." --

<https://law.justia.com/cases/federal/appellate-courts/ca9/21-55854/21-55854-2022-08-03.html>

My nature photography celebrates the US Constitution's Natural Rights by exalting the same eternal ideals of symmetry and beauty by which it was penned. All too often, modern "AI CEOs/Monarchs" seem to perceive no beauty in epic art nor the Constitution. Neither Sam Altman nor Mark Andreesen ever quote or cite Homer, Rembrandt, Moses, Beethoven, Van Gogh, Locke, Jefferson, Madison, Virgil, or the US Constitution. For instance, read Marc Andreesen's recent *The Techno-Optimist Manifesto*: <https://a16z.com/the-techno-optimist-manifesto/> which demonstrates a deficiency in epic poetry in the data Andreesen was trained on. While Steve Jobs of Apple stated that he would trade all of his technology to spend an afternoon

with Socrates, Andreesen and Altman make no mention of Socrates, nor Aristotle, nor Plato, nor Homer. While Jack Bogle of Vanguard regularly cited the Founding Fathers and the Constitution, as well as Homer and Socrates, Andreesen and Altman mention none of the Greats. It seems that Altman and Andreesen have yet to train their souls on the better data—the Great Books and Classics—from Homer and Euclid on down. Unlike the fine art their “AI” systems scrape and steal, the Great Books and Classics are all in the public domain, and Andreesen and Altman may ingest them for free by simply reading them.



The keystones the “AI” CEOs tossed aside became the bedrock of my art.

The Enlightenment brought about the idea of higher, natural laws which would trump the whims of monarchs, the church, and tech billionaires. In his *Second Treatise of Civil Government*, Ch. IV, sec. 21, John Locke wrote,

Freedom of Men under Government is, to have a standing Rule to live by, common to every one of that Society, and made by the Legislative Power erected in it; a Liberty to follow my own Will in all things, where the Rule prescribes not; and not to be subject to the inconstant, uncertain, unknown, Arbitrary Will of another Man: as Freedom of Nature is, to be under no other restraint but the Law of Nature.

The Constitution is that standing Rule common to everyone, and thus just as Big Tech gets to own and protect their IP, so does every indie artist, again exalting the Supreme Court's "Equal Justice Under Law."

Elliot McGucken

Ph.D. Physicist / Fine Art Photographer / Sculptor

McGucken Fine Art

Malibu California

Dr. Elliot McGucken is an award-winning fine art landscape photographer and award-winning physicist who has penned books on physics and photography, including a book on golden ratio compositions in fine art and photography. His "Golden Spacetimes" sculptures celebrate the golden mathematical beauty pervading nature and classical art, governing the geometrical shapes of plants, animals, ocean waves, galaxies, the beauty of the human form, the composition of classical paintings and sculptures, and his own theories on spacetime. McGucken's award-winning Ph.D. dissertation was an artificial retina for the blind which restored sight to the visually impaired, and today he seeks to again serve with light via his art and photography.



Spiral Galaxy Wave Spacetime

10 x 11 x 4 cm

Aluminum (Also Fabricating in Optical Glass with Prismatic Qualities)

2021

The golden ratio pervades nature's beauty, and McGucken's Spiral Galaxy Wave Spacetime sculpture celebrates the divine proportion's ubiquitous beauty via a single golden spiral representing both an ocean wave and a galaxy, spanning the local to the universal. The golden spiral's cross-section is in the shape of an equilateral triangle, so when made from optical glass, it will have prismatic qualities in splitting the spectrum of visible light into a rainbow, which also manifests the golden ratio via the distribution of the rainbow's colors. The sculpture is proportionally mounted on a dodecahedron which in turn resonates with golden harmonies via its pentagonal faces and the inherent golden symmetries of the "most golden" Platonic solid.

And again, Locke rooted his reasoning on property rights in Euclidean logic, drawing on the spirit of “proof by contradiction,” while writing:

“Where there is no property there is no injustice” is a proposition as sure as any demonstration of Euclid: for the idea of property being a right to anything, and the idea to which the name “injustice” is given being the invasion or violation of a right, it is evident that . . . I can as certainly know this proposition to be true, as that a triangle has three angles equal to two right ones.

So it is that when Copyright—the Natural Right to one’s intellectual property—is violated, there is injustice.

All too many tech billionaires and their postmodern churches of technology believe themselves capable of trumping Natural Rights in seizing the vast wealth inherent in our fine art collections, and using that wealth for their own purpose and profit, sans any credit or compensation for the artists who did not give consent to have their blood, sweat, and tears stolen, their beings dishonored, and their souls debased and abused. Some folks invest in stocks, some folks invest in real estate, and we artists invest in high-end photography equipment, rugged 4WD Jeeps, and bear spray. And we then invest something far greater—we invest our limited time on this earth in serving the world with beauty.

All too many contemporary tech billionaires—often the Homeric false suitors to Bogle’s Vanguard—believe they own the art of the poet-warriors on the front lines. Today I call out those “AI” CEOs, as sure as the poet-warrior Achilles called out his commander Agamemnon, who, instead of earning his prizes on the front lines of creative battle, merely seized them from his warriors such as Achilles, thusly inspiring the righteous “Rage of Achilles.” Agamemnon’s unjust actions causes Achilles to quit the Greek army on the first few pages of the *Iliad*, which is perhaps the first record of unfairly-compensated talent going on strike. Homer tells us that soon after Achilles—the greatest Greek warrior—quit, the Greeks began to lose, as “The Will of Zeus,” was done.

Homer, Zeus, Moses, Jefferson, Madison, Lincoln, and Achilles all side with the talent being fairly compensated, and thus it quite remarkable that so many AI systems are hedging against the Greats and the Constitution. Achilles calls out his commander Agamemnon who has just seized Achilles’ prize for himself:

Achilles scowled at his commander Agamemnon and answered, “You are steeped in insolence and lust of gain. With what heart can any of the Achaeans do your bidding, either on foray or in open fighting? . . . We have followed you, Sir Insolence! for your pleasure, not ours- to gain satisfaction from the Trojans for your shameless self and for Menelaus. You forget this, and threaten to rob me of the prize for which I have toiled, and which the sons of the

Achaeans have given me. Never when the Achaeans sack any rich city of the Trojans do I receive so good a prize as you do, though it is my hands that do the better part of the fighting. When the sharing comes, your share is far the largest, and I, forsooth, must go back to my ships, take what I can get and be thankful, when my labour of fighting is done. Now, therefore, I shall go back to Phthia; it will be much better for me to return home with my ships, for I will not stay here dishonoured to gather gold and substance for you."

Agamemnon responds that as he is the commander/AI CEO, he has the right to seize the prizes Achilles won in battle. And Achilles vehemently disagrees:

"Wine-bibber," Achilles cried to Agamemnon, "with the face of a dog and the heart of a hind, you never dare to go out with the host in fight, nor yet with our chosen men in ambuscade. You shun this as you do death itself. You had rather go round and rob his prizes from any man who contradicts you. You devour your people, for you are king over a feeble folk; otherwise, son of Atreus, henceforward you would insult no man. Therefore I say, and swear it with a great oath- nay, by this my sceptre which shalt sprout neither leaf nor shoot, nor bud anew from the day on which it left its parent stem upon the mountains- for the axe stripped it of leaf and bark, and now the sons of the Achaeans bear it as judges and guardians of the decrees of heaven- so surely and solemnly do I swear that hereafter they shall look fondly for Achilles and shall not find him. In the day of your distress, when your men fall dying by the murderous hand of Hector, you shall not know how to help them, and shall rend your heart with rage for the hour when you offered insult to the bravest of the Achaeans."

And so it is that Homer's *Iliad* teaches us the importance of compensating artists in its opening lines. Surely Marc Andreesen and Sam Altman have time to read the opening lines of *The Iliad* so adored by Jefferson, Lincoln, Martin Scorsese, Sergio Leone, Goethe! Or do Andreesen ad Altman consider themselves to be greater artists, statesmen, and geniuses than all the above?

Just read the first few lines of the *Iliad*, or just the first word—Rage—the divine, just Rage of Achilles that ignites when that which he gained in battle is taken from him by his overreaching, spiteful, and foolish commander. Again, when Agamemnon fails to fairly compensate and honor Achilles, Achilles quits the Greek army, and the Greeks begin to lose, as Homer tells us “the Will of Zeus was done.” So too, then, those AI systems which dishonor the artist—the poet-warriors on the front lines of Creative Logos—will fail.

*Rage — Goddess, sing the rage of Peleus' son Achilles,
murderous, doomed, that cost the Achaeans countless losses,
hurling down to the House of Death so many sturdy souls,
great fighters' souls, but made their bodies carrion,
feasts for the dogs and birds,*

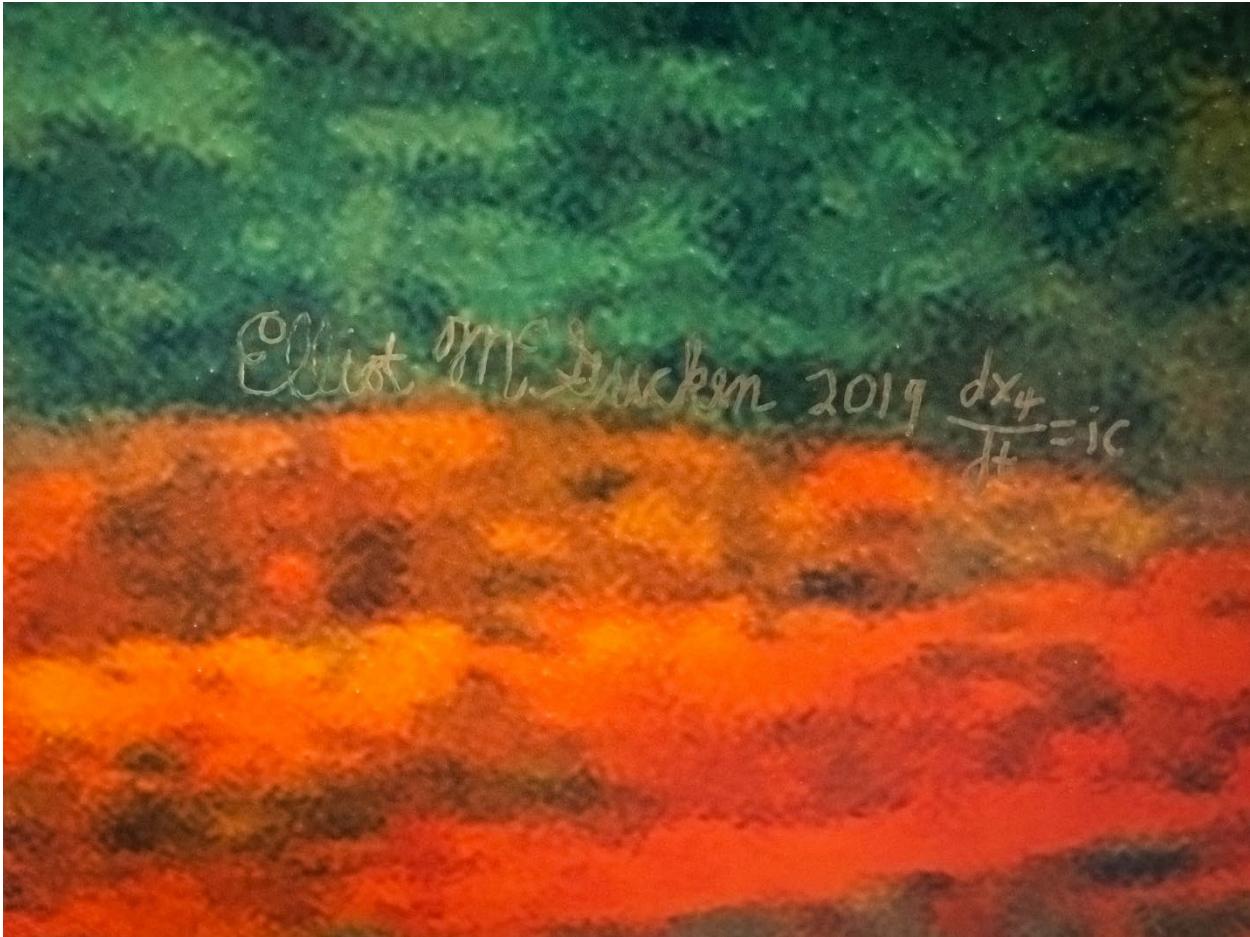
*and the will of Zeus was moving toward its end.
Begin, Muse, when the two first broke and clashed,
Agamemnon lord of men and brilliant Achilles. . .*

—Translated by Robert Fagles (1990)

Back in 2019, the Edwards Air Force Base requested a photograph of the poppy fields that sometimes miraculously blossom in the neighboring Mojave Desert. While they offered to pay for it, I donated it freely, as it was the least I could do as a “thank you” to those who serve to protect and defend the Constitution that is the friend to artists everywhere, and which has its roots in Homeric honor, as sure as Thomas Jefferson penned, “As we advance in life, they all fall off, one by one, until we are left with Virgil and Homer, and perhaps Homer alone:”

[the United States Congress shall have power] To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.





After Clint Eastwood completes a job for a gang early on in Sergio Leone's masterful film *A Fistful of Dollars*, one of the gang members asks their leader, "Instead of paying him (Eastwood), why don't we just shoot him?" Sergio Leone (like Martin Scorsese) stated that Homer was his greatest mentor, as Homer was the original, and supreme, author of the Western. Dante referred to Homer as the master poet, while Aristotle credited him as being the greatest Epic Poet. So it is, that in the Homeric spirit, the gangsters are unsuccessful in offing Clint Eastwood, and he ultimately prevails in the end, as the Natural Law of Locke and Madison, of Moses and Homer, dictates that artists must be credited and compensated for their work.

As sure as the names of Dante, Moses, and Homer are all inscribed in the ceiling of the Library of Congress's Jefferson Building in, I will be using my good friends to make the simple case for Natural Rights, Human Rights, and Copyright. And it should be noted that the founder of Vanguard—one the largest investors in so many modern AI operations—Jack Bogle—would agree with Homer, Dante, and Moses, as he wrote in his book *Don't Count on It*:

Vanguard: Saga of Heroes (Chapter 23) presents a very different interpretation than you might expect from its title. This chapter is based on a lecture I presented to Pepperdine University (CA) students, at the request of Professor

Elliot McGucken, as part of his course The Hero's Odyssey in Arts Entrepreneurship & Technology 101. "Dr. E" relies heavily upon such classics as Homer's *Odyssey* and Dante's *Inferno*, and honors me by including with these classics my own *The Battle for The Soul of Capitalism*. This essay focuses on Vanguard's odyssey, a voyage punctuated with challenges, narrow escapes, and ultimate fulfillment. I conclude by urging introspection upon our financial leaders, an idea that failed to get much traction back in 2007 when it might have helped. But these leaders were simply making too much money, taking too much risk, and showing too little concern about the crises then building. . . -p. 436: "It's no mean task to measure up to the high appraisal of my career that has been so generously expressed by Dr. Elliot McGucken. That he has, remarkably, placed my 2005 book, *The Battle for the Soul of Capitalism*, on the same reading list as *The Odyssey*—let alone the same planet!—adds even more to my burden in meeting the expectations of those who are aware of this background. . ." -- Vanguard, *Saga of Heroes*, p. 469, *Don't Count on It*, 2010, John Wiley & Sons

And so it is that Achilles, Dante, Homer, Madison, Jefferson, Locke and the the Constitution and Enlightenment Spirit all agree that artists must be properly credited and compensated for their work, and that their consent must be sought. For such is the grand importance of the The Light of Creative Logos which the Promethean artist brings to humanity.

2. Serving with Light & Writing with Light: Artificial Retina & Fine Art Photography



the laboratories of North Carolina State University, artificial vision is moving out of the realm of science fiction and into reality. During a videotaped procedure in 1994, surgeons put an electrode array into the eye of a blind patient, and while delivering small, controlled electrical pulses, asked what he could see. "Well," replied the volunteer patient, "it was a black dot with a yellow ring around it." Last spring, NSF-funded electrical engineering professor Wentai Liu and doctoral student Elliot McGucken created a microchip that will be used by the surgeons. Limited laboratory experiments have shown that this implant can expand artificial sight from the single dot in space to an array of pixels, like that of a television set. So far, the artificial retinal component chip (ARCC) has an array of 5 by 5 pixels--just enough to identify individual letters. However, Liu, of North Carolina State University, and McGucken, of University of North Carolina at Chapel Hill, say that in the next five years the chip will grow to a 20 by 20 array, and may eventually hold a 250 by 250 array--enough to read a newspaper. --NSF's Frontiers (The retina is now helping people see.)

Hello Mr. McGucken,
I just wanted to tell you that your photograph helped me to find a little bit of peace when I went to say goodbye to my Aunt at a [hospital] in Santa Monica. It was hanging near her room I was so moved by the beautiful sunset, that I took a picture

[REDACTED]
to remember the peace I found in that moment.



Over 120 of my fine art landscape photographs hang throughout the UCLA hospitals system, and I sometimes get folks thanking me for the calming and healing elements of my work. Technology from my award-winning physics Ph.D. dissertation, titled, *Multiple Unit Artificial Retina Chipset to Aid the Visually Impaired and Enhanced CMOS Phototransistors* is now helping the blind see, and so it is that someday folks may see my art via the technology I worked on, as I and a small team took artificial vision from 0 to 1. Early versions of the artificial retina research were reported on in publications including *Popular Science* and *The Wall Street Journal*:

NEWSFRONTS

SCIENCE & TECHNOLOGY

EDITED BY DAWN STOVER

MEDICINE

Restoring Sight

A MICROCHIP STUDDED with tiny sensors may give sight to the blind. Although the chip won't restore full vision, it could enable blind people to see shades of light.

Normally, light-sensing cells in the back of the retina pass information forward to ganglion cells, which send signals to the brain to form an image. Eye diseases like retina pigmentosa and macular degeneration destroy the light-sensing cells, but leave

ganglion cells intact. Scientists at North Carolina State University in Raleigh, working with eye specialists at Johns Hopkins University, wondered if they could bypass the damaged photoreceptors and directly stimulate the ganglion cells.

Developing a device that could be grafted onto the fragile tissues of the retina has proved difficult. Such a device must be small and have a constant power supply. The solution: a microchip the size of a match head, embedded with photo-sensors and electrodes that translate light patterns into electrical currents to stimulate the ganglion cells.

Scientists Wentai Liu and Elliot McGucken are evaluating the microchip in the lab before human testing begins. They say the chip won't damage tissue, because it has the same buoyancy as fluid inside the retina. And what will power the chip? One idea is to use a small battery pack, fitted to a pair of eyeglasses, to shine a laser through the cornea and onto an implanted photovoltaic cell.—Marjorie Shaffer

POPULAR SCIENCE

Dr. E's award-winning artificial retina physics Ph.D. dissertation in Popular Science.

The Wall Street Journal: After winning (the Merrill Lynch Innovations Grant Contest for an artificial retina for the blind titled Multiple unit artificial retina chipset to aid the visually impaired and enhanced holed-emitter CMOS phototransistors), he got to tour the New York Stock Exchange. Dr. McGucken caught the entrepreneurial bug. Eventually, he launched an internet company devoted to his longtime passions: writing and classical literature. . .The Web

site is filled with Dr. McGucken's poetry and commentary and discussion groups on classic literature. "It's all written in a classical context with a Generation X attitude," he says. He sells ads to online vendors in fields ranging from life insurance to pantyhose and has a deal with Amazon.com that gives him a cut of sales generated by his site. . . HE HAS RESISTED the siren call of big business, although he has talked to venture capitalists and he almost sold out to a larger company before that company was taken over. Dr. McGucken wouldn't mind being part of a larger site, but he doesn't want to be a larger company. "If I was to try to squeeze huge profits out of it to please venture capitalists, it would ruin the spirit of it," he says.

Dr. Elliot McGucken
Hero's Odyssey Mythology Photography
A Humble Pursuit of Light and Time

The beautiful Malibu/Socal scenery called Dr. E to action and adventure. He chased the light so as to freeze a bit of that relentless time which fades the beauty of the most sublime autumn scenes, but for those that we are fortunate enough to capture in art and share with others, so that they too might stand were we stood, see what we saw, and feel what we felt. As the art illuminates the soul, the greater goal of a photograph becomes to not merely show the vivid colors of a magnificent mountain, but to capture the very form of that classical, archetypal beauty celebrated by the epic poets.

Elliot's adventure began back in Akron, Ohio when he received his first Pentax. "Dr. E," as his students call him, attended Princeton University on a Judith A. Resnik memorial scholarship where he received a B.A. in theoretical Physics. His NSF-funded dissertation research on an artificial retinal prosthesis, which is now helping the blind to see.

Dr. E's pursuits may at first seem diverse, in reality they are all unified in a most simple manner -- via *light*.

Winter Low Tide - El Matador Beach, Malibu
By: Elliot McGucken
Digital Fine Art Photography

Image Donor: The Artist
Medical Center Art Collection

prosthesis is based on the fundamental concept of replacing photoreceptor function with an electronic device¹, which was initiated by² and has been extensively developed³ by Dr. Humayun *et al.*

The photoreceptors in a healthy retina, which manifest themselves as rods and cones, initiate a neural signal in response to light. This neural signal is then processed by the bipolar cells and ganglionic cells before being sent along the surface of the retina towards the optic nerve, which resides in the approximate middle of the retina, a cross section of which is given in Figure 1.1.

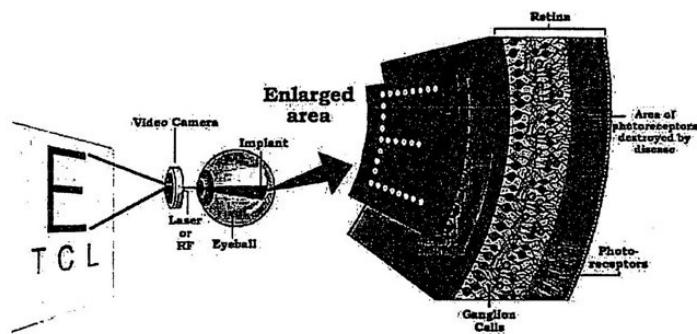


Figure 1.2: Fundamental design concept of the MARC (JHU artist's rendition).

Photoreceptors are almost completely absent in the retina of end-stage RP and AMD patients, while the bipolar cells and ganglion cells, through which the photoreceptors normally synapse, survive at high rates. The ganglion and bipolar cells remain intact, and due to the anatomy of the retina, they are in a position where they may respond to electrical stimulation. Ganglion cells, which are further on down the signal-processing line, reside upon the retinal surface. The reason for the retina's seemingly inverted architecture is that the photoreceptors require a continuous supply of oxygen, and thus the retina evolved with the rods and cones positioned close to the robust blood flow which is found at the very back of the retina. Silicon photonic

DR. E'S ARTIFICIAL RETINA DISSERTATION

RF telemetry. The intraocular prosthesis will decode the signal and electrically stimulate the retinal neurons through the electrodes in a manner that corresponds to the image perceived by the CMOS Camera.

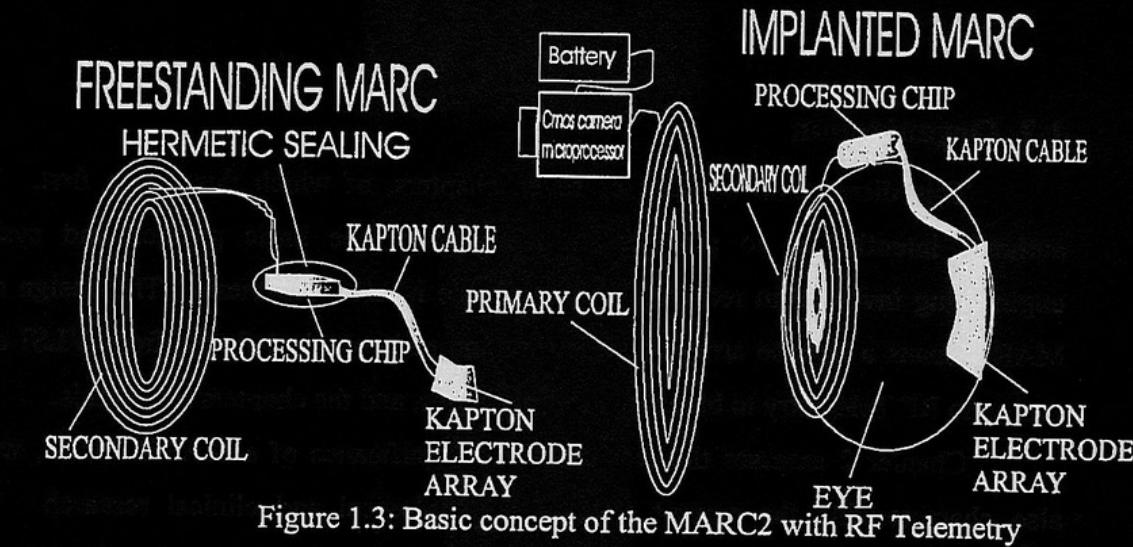


Figure 1.3: Basic concept of the MARC2 with RF Telemetry

Concurrent engineering tasks which will be elaborated upon throughout this dissertation are as follows: (1) the design, fabrication, and testing of the signal processing and stimulus-driving chips, (2) the enhancement of CMOS photodetectors, (3) the final designs and optimization of the kapton/polyimide electrode array, (4) the bonding, packaging, and hermetic sealing of the cmos signal-processing chips with the kapton electrode array and RF telemetry device, (5) the engineering of the CMOS camera and video-processing chip, and (6) the final biological testing and biocompatibility engineering of the device.

Dr. E's award-winning artificial retina physics Ph.D. dissertation.

Page from Dr. E's physics Ph.D. dissertation on an artificial retina for the blind. The project is grateful to NSF and the Fight for Sight Foundation for funding.

OCT 8 AT 9:14 PM

Your pictures cure my depression,
thank you.



OCT 9 AT 10:30 AM

Thank you!! 🎃🍁🎃

Glad to hear that! 🍁

Seen



Message...



Replied to your story

[REDACTED] It's very beautiful.



MAY 26, 2022

Thanks you Very Much for your pictures.They bring me a lot of happiness. Tomorrow I'm going to the hospital for a new treatment of my breast cancer, the current treatment has stopped working, your pictures help me to escape to dream thank you very much from the bottom of my heart



So sorry to hear that—you will be in my prayers!! Beauty is in the beholder's eye, so the beauty is all yours!! Best wishes for treatment and recovery!!



3. Physics of Light: Following the Light Beyond Plato's Cave

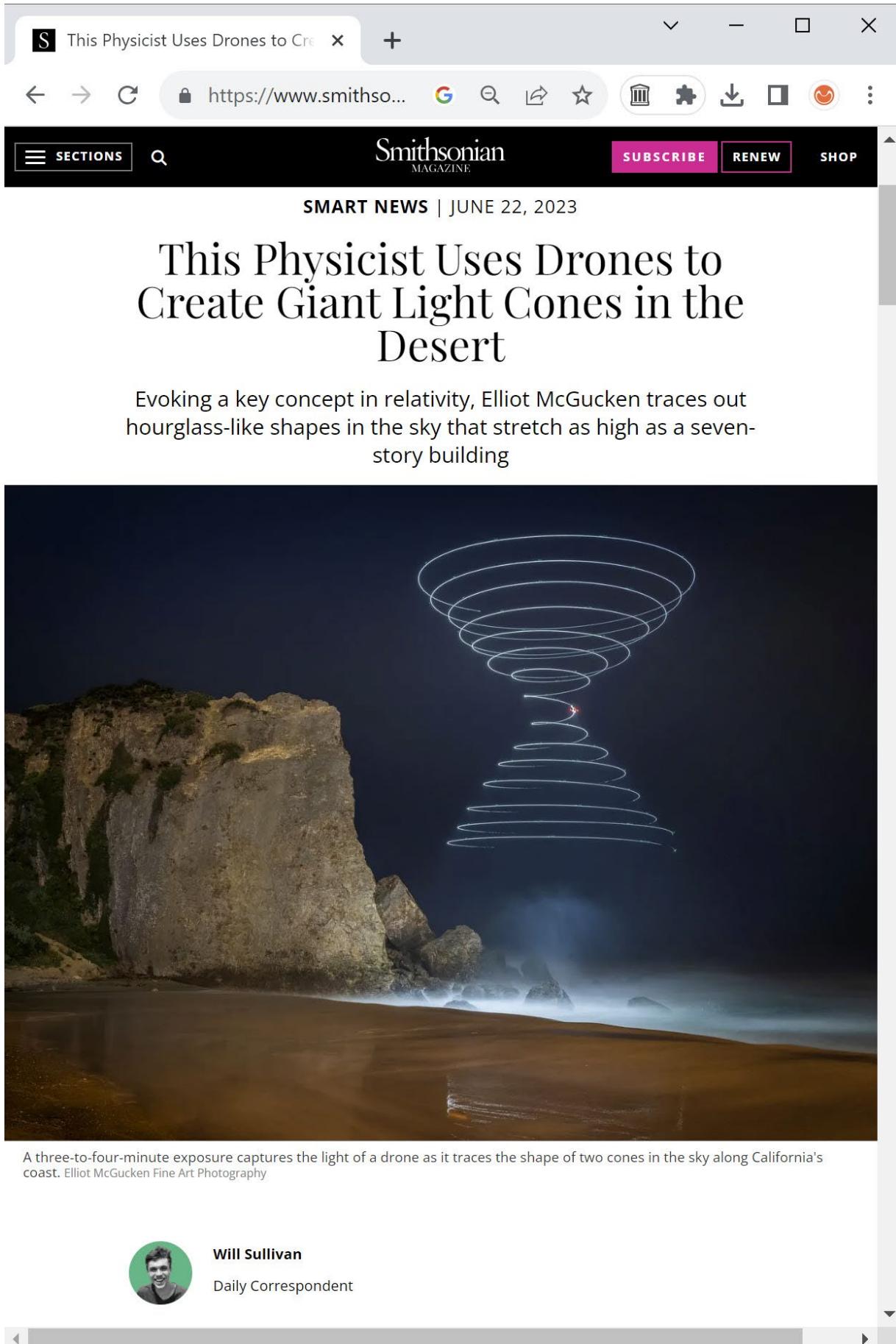
Albert Einstein: After a certain high level of technical skill is achieved, science and art tend to coalesce in esthetics, plasticity, and form. The greatest scientists are always artists as well.



Einstein's Light Cone & The McGucken Principle $dx_4/dt = ic$

I'll never forget that crisp, autumn Princeton afternoon, when I was standing in my advisor's Dr. John Archibald Wheeler's office, and he clenched his fist lightly, and stated, "Today's physics lacks the Noble... and it's your generation's duty to bring it back." O, Wheeler's prophetic soul, for the following decades saw little, or no progress, in fundamental physics in the fiat-funded academy—no progress in answering the big, foundational questions which Wheeler's generation (Bohr, Einstein, Heisenberg, Schrodinger, Planck, Pauli, Born, *et al.*) had seen as the higher purpose of physics. As sure as the simple contemplation of light's nature led to both quantum mechanics (the photoelectric effect) and relativity (the constancy of

the velocity of light for all observers in Maxwell's equations), the pursuit of light led me to $dx_4/dt=ic$ and fine art photography.



When Wheeler sadly passed away, Colby Cosh saluted him, “At 96, he had been the last notable figure from the heroic age of physics lingering among us. . . the student of Bohr, teacher of Feynman, and close colleague of Einstein. . . Wheeler was as much philosopher-poet as scientist, seizing on Einsteinian relativity early. . . He was ready to believe in the new world before most physicists. . .” As theoretical physics devolved into the now decades-old, failed groupthink programs—into the dark, Platonic Caves of String Theory, Loop Quantum Gravity, Multiverse Mania, and other “Fashions, Fads, and Fantasies” in the words of Nobel Laureate Roger Penrose, photography again afforded me a pristine frontier where Create Logos mattered and where my soul could be set free for all eternity.



the Epson international
[P]pano awards



In Plato’s classic Allegory of the Cave, Plato teaches that anyone who sees the light and returns to the cave to tell all the chained prisoners of its true nature will be put to death by those chained prisoners, who have all gained tenure and titles by agreeing with one-another while becoming experts on the nature of the mere shadows dancing on the wall. And so it is that Art offers one a place to invest the Creative Logos of their souls, far beyond the groupthink academy

or any groupthink AI systems it spawns. Again, Socrates notes that the virtue of Creative Logos is the source of all enduring wealth, even though it is so often so violently rejected by the academy and AI startup, as witnessed in the trial and death of Socrates himself, as well as in Galileo's house arrest. J.A. Wheeler's famous student Richard Feynman captured the spirit of both string theory and the modern "quantum gravity" caves:

Feynman on String Theory: I don't like that they're not calculating anything. I don't like that they don't check their ideas. I don't like that for anything that disagrees with an experiment, they cook up an explanation – a fix-up to say "Well, it still might be true". For example, the theory requires ten dimensions. Well, maybe there's a way of wrapping up six of the dimensions. Yes, that's possible mathematically, but why not seven? When they write their equation, the equation should decide how many of these things get wrapped up, not the desire to agree with experiment. In other words, there's no reason whatsoever in superstring theory that it isn't eight of the ten dimensions that get wrapped up and that the result is only two dimensions, which would be completely in disagreement with experience. So the fact that it might disagree with experience is very tenuous, it doesn't produce anything; it has to be excused most of the time. It doesn't look right.



the Epson international

[P]pano awards



Feynman on Gravity Research: I am not getting anything out of the meeting. I am learning nothing. Because there are no experiments this field is not an active one, so few of the best men are doing work in it. The result is that there are hosts of dopes here (126) and it is not good for my blood pressure: such inane things are said and seriously discussed here that I get into arguments outside the formal sessions (say, at lunch) whenever anyone asks me a question or starts to tell me about his "work". The "work" is always: (1) completely un-understandable, (2) vague and indefinite, (3) something correct that is obvious and self evident, but a worked out by a long and difficult analysis, and presented as an important discovery, or, a (4) claim based on the stupidity of the author that some obvious and correct fact, accepted and checked for years, is, in fact, false (these are the worst: no argument will convince the idiot), (5) an attempt to do something probably impossible, but certainly of no utility, which it is finally revealed at the end, fails (dessert arrives and is eaten), or (6) just plain wrong. There is great deal of "activity in the field" these days, but

this "activity" is mainly in showing that the previous "activity" of somebody else resulted in an error or in nothing useful or in nothing promising. It is like a lot of worms trying to get out of a bottle by crawling all over each other. It is not that the subject is hard; it is that the good men are occupied elsewhere.
Remind me not to come to any more gravity conferences! --*What Do You Care What Other People Think? Further Adventures of a Curious Character* by Richard P. Feynman



the Epson International

[P]pano awards





the Epson international

[P]pano awards





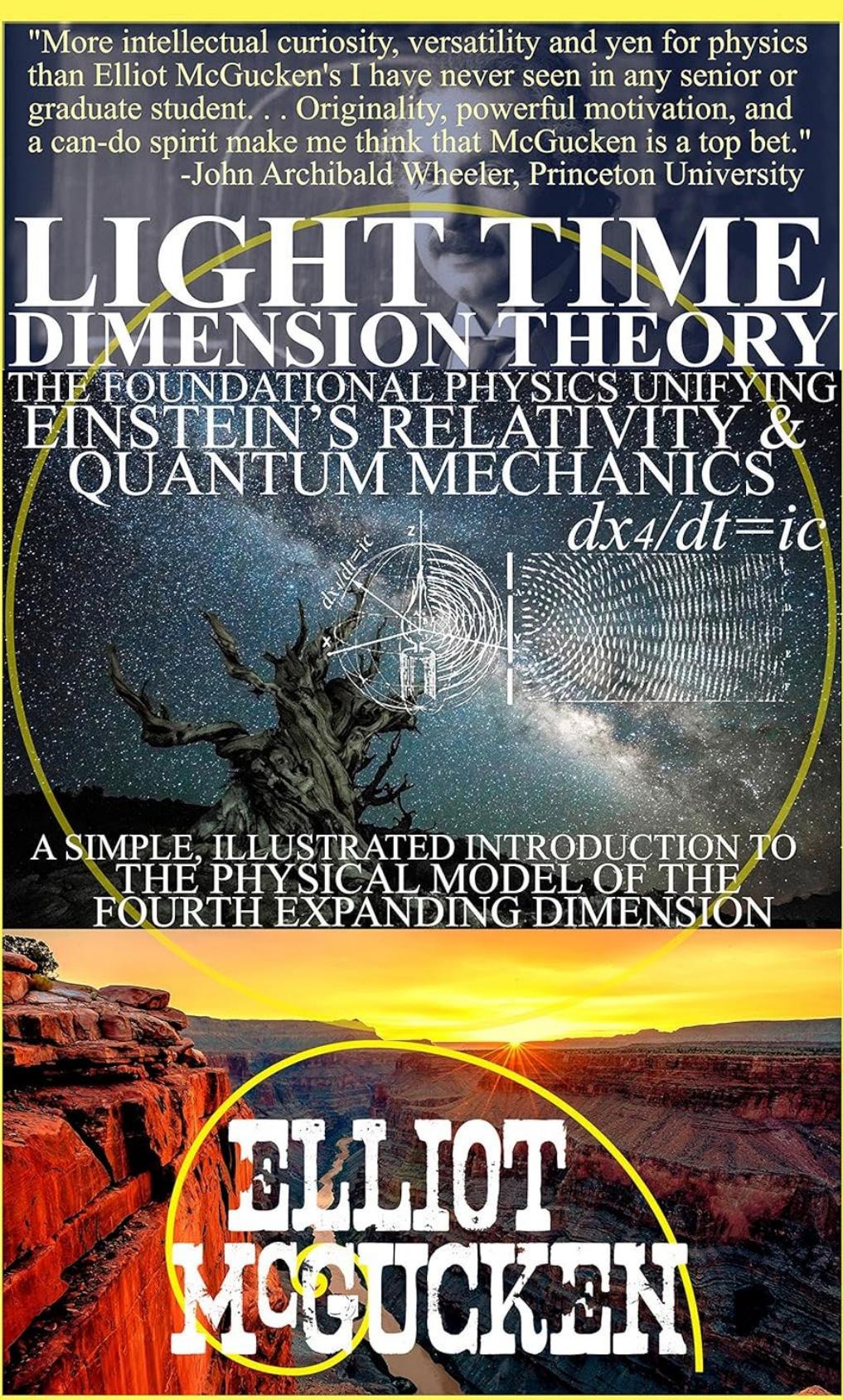
"More intellectual curiosity, versatility and yen for physics than Elliot McGucken's I have never seen in any senior or graduate student. . . Originality, powerful motivation, and a can-do spirit make me think that McGucken is a top bet."

-John Archibald Wheeler, Princeton University

LIGHT TIME DIMENSION THEORY

THE FOUNDATIONAL PHYSICS UNIFYING
EINSTEIN'S RELATIVITY &
QUANTUM MECHANICS

$$dx_4/dt = ic$$



A SIMPLE, ILLUSTRATED INTRODUCTION TO
THE PHYSICAL MODEL OF THE
FOURTH EXPANDING DIMENSION

ELLIOT
MCGUCKEN

Regarding the award-winning physicist Dr. Elliot McGucken at Princeton University, the late John Archibald Wheeler stated, "More intellectual curiosity, versatility and yen for physics than Elliot McGucken's I have never seen in any senior or graduate student. . . Originality, powerful motivation, and a can-do spirit make me think that McGucken is a top bet."

Dr. E would go on to heal the blind with his NSF-funded, award-winning Ph.D. dissertation which also laid down the foundations of Light Time Dimension Theory. Over the years, LTD Theory added foundational *physical* postulates, principles, and equations en route to becoming numerous books, with this one forming the simple, illustrated introduction.

In this commonsense volume penned for the layman and advanced scientist alike, Dr. E's LTD Theory provides a unifying, foundational *physical* model underlying relativity, quantum mechanics, time and all its arrows and asymmetries, and the second law of thermodynamics. The detailed diagrams demonstrate that the great mysteries of quantum mechanical nonlocality, entanglement, and probability naturally arise from the very same principle that fosters relativity alongside light's constant velocity, the equivalence of mass and energy, and time dilation.

One fine afternoon while Dr. E was lunching with J.A. Wheeler at the Princeton Institute for Advanced Study (IAS), a bespectacled gentleman joined them. Wheeler introduced the fellow as Ed Witten--one of the leading pioneers of string theory and inventor of M-theory. Dr. E had been contemplating pursuing string theory, but there were some finer details he could not wrap his head around. "Great!" Dr. E thought to himself, "This guy can help me along my odyssey!"

So halfway through lunch Dr. E asked Dr. Witten, "What are string theory's postulates, principles, and equations?"

Witten thought about it, smiled, and said, that well, it depended on who you asked, and well, it was a young theory.

So Dr. E followed up with, "When do you think string theory might get postulates, principles, and equations?" Ed stopped smiling.

And so, instead of studying string theory, Dr. E pursued LTD Theory on that "road less taken," healing the blind along the way with his award-winning dissertation titled Multiple Unit Artificial Retina Chipset to Aid the Visually Impaired and Enhanced CMOS Phototransistors. In the latter part of the dissertation, Dr. E placed the first iteration of LTD Theory, born of his days studying with the great PJE Peebles, Nobel Laureate Joseph Taylor, and J.A. Wheeler. Like Einstein and Feynman, they were all rugged, kind, intense men who valued hands-on physics and *physical* reality over mere math and mysticism--over spurious speculation and outlandish hype.

Unlike string theory, inflation, multiverse mania, and LQG, LTD Theory is a *physical* theory in the spirit of Copernicus, Galileo, Newton, Faraday, Maxwell, and Einstein. At Princeton Dr. E learned to think of the geometry of spacetime as a physical entity which could bend, curve, and

move. He learned to think of the photon as a real, physical entity described as probabilistic, spherically-symmetric wavefront expanding at velocity c. Dr. E learned to think of entanglement as a real, *physical* effect connecting distant entities in an instantaneous relationship, and he learned to think of the second law of thermodynamics not as a mere mathematical formula, but as a foundational, physical law governing the universe. And by thinking of these diverse phenomena in terms of *physical* pictures, Dr. E conceived of LTD Theory--the simple, physical model common to them all.

How do light, time, the quantum, and relativity all emerge from LTD Theory? Enjoy this epic odyssey as you realize the deeper, foundational, unifying, *physical* model! And too, the book is graced with Dr. E's fine art landscape photography offering a parallel *physical* celebration of light and time.

THE TRIUMPH OF LTD THEORY AND PHYSICS OVER STRING THEORY, THE MULTIVERSE, INFLATION, SUPERSYMMETRY, M-THEORY, LQG, AND FAILED PSEUDOSCIENCE



DR. ELLIOT
MCGUCKEN

STRING
MULTIVERSES, THEORIES,
INFLATION

RELATIVITY & QUANTUM MECHANICS
UNIFIED BY THE EXPANSION OF
THE FOURTH DIMENSION: $dx_4/dt = ic$

DR. ELLIOT McGUCKEN

John Archibald Wheeler: More intellectual curiosity, versatility and yen for physics than Elliot McGucken's I have never seen in any senior or graduate student. . . Originality, powerful motivation, and a can-do spirit make me think that McGucken is a top bet. (J.A. Wheeler, Princeton Joseph Henry Professor of Physics)

The great Albert Einstein stated, "The development of Western Science is based on two great achievements, the invention of the formal logical system (in Euclidean geometry) by the Greek philosophers, and the discovery of the possibility to find out causal relationships by systematic experiment (Renaissance)."

Unfortunately, the string theorists and multimillionaire multiverse maniacs have abandoned both experiment and formal logic. In order to sustain their failed regimes, they exiled the two pillars of Western Science, alongside simple truth and beauty. And so it is that theoretical physics ground to a halt.

But yet, hope springs eternal, and Light Time Dimension Theory, born of the noble spirit of Galileo, Newton, Faraday, and Einstein, is based on a simple postulate that has been physically observed and formally proven.

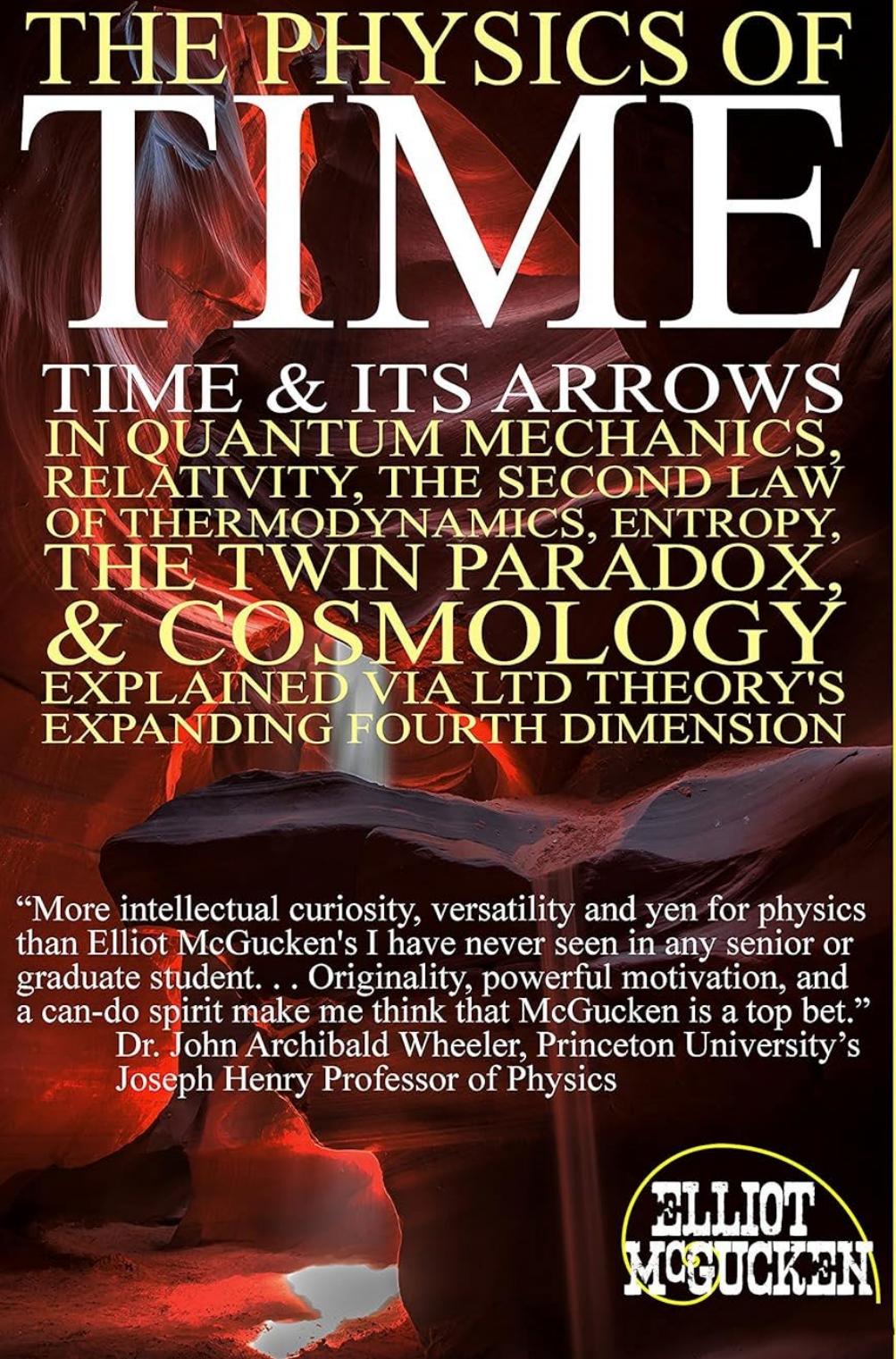
LTD's Postulate: The fourth dimension is expanding at the rate of c relative to the three spatial dimensions, or $dx_4/dt=ic$.

From this simple postulate, a physical model emerges accounting for and exalting all of relativity, time and all its arrows and asymmetries, quantum mechanics' nonlocality, probabilities, and entanglement, and the second law of thermodynamics. Thus LTD provides a vast and resounding unification of physics, while finally characterizing the deeper nature of the stage underlying both quantum mechanics and relativity.

However, the massively failed regimes cannot admit their failure, and thus simple truth and beauty must be castigated, impugned, and exiled. But like Tom Brady and Odysseus, Dr. E just won't give up. The bold book exalts in the words and wisdom of dozens of Nobel Laureate physicists, Giants such as Newton, Galileo, Copernicus, and Einstein, and other contemporary luminaries who, although vastly outnumbered by the string theory click-bait blogger, multiverse maniacs, and televangelists of pseudoscience, take a stand with Dr. E.

So come enjoy a fantastic, heroic odyssey that not only examines the soul of science, but also exalts its higher, historical nature alongside a brand new theory born of the higher scientific spirit celebrated by Einstein and Newton.

THE PHYSICS OF **TIME**



**TIME & ITS ARROWS
IN QUANTUM MECHANICS,
RELATIVITY, THE SECOND LAW
OF THERMODYNAMICS, ENTROPY,
THE TWIN PARADOX,
& COSMOLOGY
EXPLAINED VIA LTD THEORY'S
EXPANDING FOURTH DIMENSION**

“More intellectual curiosity, versatility and yen for physics than Elliot McGucken's I have never seen in any senior or graduate student. . . Originality, powerful motivation, and a can-do spirit make me think that McGucken is a top bet.”

Dr. John Archibald Wheeler, Princeton University's
Joseph Henry Professor of Physics

**ELLIOT
MCGUCKEN**

D R . E L L I O T M C G U C K E N

"More intellectual curiosity, versatility and yen for physics than Elliot McGucken's I have never seen in any senior or graduate student. . . Originality, powerful motivation, and a can-do spirit make me think that McGucken is a top bet." Dr. John Archibald Wheeler, Princeton University's Joseph Henry Professor of Physics

AT LONG LAST, TIME'S FOUNDATIONAL, UNIFYING SECRETS REVEALED!

Join Dr. E on a fantastic journey on towards the hitherto unsung secrets of time, whence time's arrows and asymmetries across all realms are exalted and unified via the novel physical principle of a fourth expanding dimension. The principle also naturally gives us all of relativity and quantum mechanics.

LTD Theory liberates us from the frozen block universe while granting us free will. As this book's epic journey spans time's far-ranging presence throughout all of physics, it naturally includes forays to the edges of multiple frontiers including relativity, space-time diagrams, entropy, the second law of thermodynamics, cosmological time, and the quantum. Wherever time flows, this book goes, ultimately demonstrating that all notions of time are yet unified by a simple, physical principle.

Time throughout all realms--from quantum mechanics, to relativity, to the second law of thermodynamics, to psychological time, to cosmological time--are all unified via a deeper physical reality. Relativity and quantum entanglement are both shown to spring from this very same foundational reality which also exalts time.

There exist many books which promise deep insights into the "physics of time." But none of them deliver anything in the way of an actual physical mechanism powering and driving time and all its arrows and asymmetries. Unlike this book, none of them give a deeper, causal apparatus for time's flow throughout all realms.

Sadly, all too many prominent physicists use the misconstrued "Block Universe" interpretation of relativity as a sledgehammer to try and deny time. They go so far as to even deny time's obvious arrows and its constant, one-way flow. They deny any difference between the past, present, and future.

Well, Light Time Dimension Theory acknowledges and celebrates time in all her glory. Beginning with a simple principle, this book exalts all that is known about time's arrows in relativity and quantum mechanics, the steady increase of entropy, the second law of thermodynamics, and relativity. LTD Theory agrees with the Standard Model and all observable physics. And LTD defines time thusly:

Time: Time and all its arrows and asymmetries are defined by irreversible physical occurrences resting upon and driven by the expansion of the fourth dimension relative to the three spatial dimensions at the rate of c , as given by $dx^4/dt = ic$.

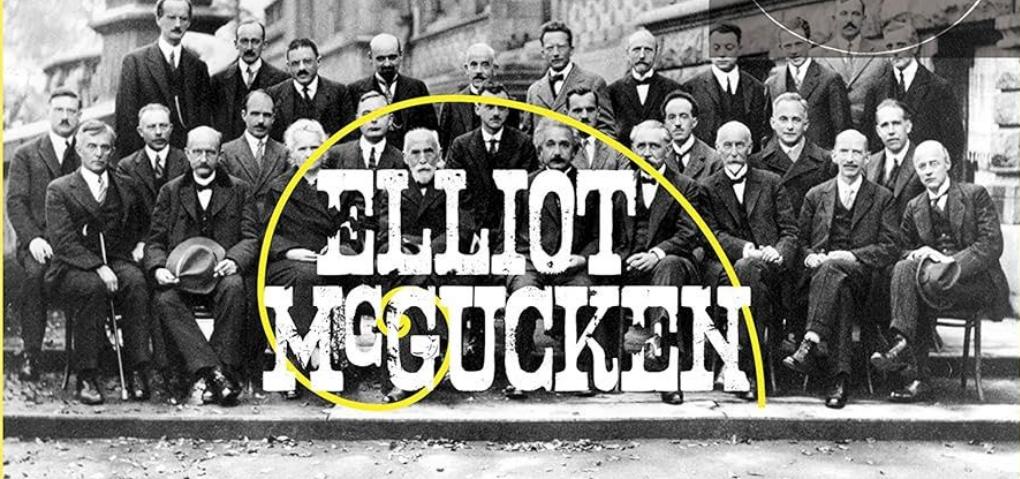
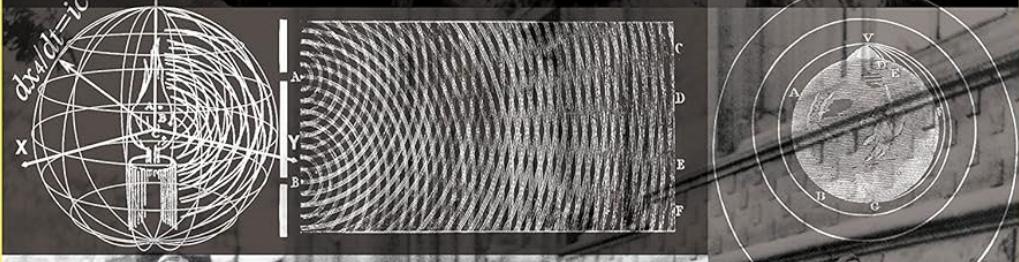
The Principle of LTD Theory: The fourth dimension is expanding at the rate of c relative to the three spatial dimensions.

Throughout the rugged, exalted book, we will celebrate the far-ranging, physical unifications of this simple, *physical* model. We will use the simple principle to exalt a wide range of physical mechanisms and commonsense explanations for time and all its arrows and asymmetries, from quantum probability, nonlocality, and entanglement, to relativistic time dilation and length contraction, to the equivalence of mass and energy, to the second law of thermodynamics, to dark energy and the vacuum energy, to so very much more!

In physics and photography alike, award-winning physicist Dr. E has always chased the light. Dr. E received the Judith Resnik Memorial Scholarship which helped him attend Princeton University to study physics. Dr. E's Ph.D. research on an artificial retina for the blind, titled Multiple Unit Artificial Retina Chipset to aid the Visually Impaired and Enhanced Holed-Emitter CMOS phototransistors, received several Fight-for-Sight and NSF grants, as well as a Merrill Lynch Innovations award. The technology is now helping the blind see.

RELATIVITY & QUANTUM MECHANICS UNIFIED IN PICTURES

A SIMPLE, ILLUSTRATED, INTUITIVE
INTRODUCTION TO LTD THEORY'S
UNIFICATION OF EINSTEIN'S RELATIVITY,
BOHR'S QUANTUM MECHANICS, AND TIME'S ARROWS



"More intellectual curiosity, versatility and yen for physics than Elliot McGucken's I have never seen in any senior or graduate student. . . Originality, powerful motivation, and a can-do spirit make me think that McGucken is a top bet."

-John Archibald Wheeler, Princeton University

ELLIOT McGUCKEN

J.A. Wheeler: More intellectual curiosity, versatility and yen for physics than Elliot McGucken's I have never seen in any senior or graduate student. . . Originality, powerful motivation, and a can-do spirit make me think that McGucken is a top bet . . . I say this on the basis of close contacts with him over the past year and a half. . .(.-J.A. Wheeler, Princeton's Joseph Henry Professor of Physics)

Arthur Schopenhauer: Talent hits a target no one else can hit; Genius hits a target no one else can see.

Bernard Baruch: Millions saw the apple fall, but Newton was the one who asked why.

Albert Szent-Györgyi: Genius is seeing what everyone else sees and thinking what no one else has thought.

Steve Jobs: Think different.

Early on in the book, a most simple, remarkable, revolutionary drawing is shared. The figure is Sir Isaac Newton's revolutionary drawing of a cannonball being fired off a mountaintop at the North Pole. The drawing depicts what happens as the cannonball is fired with higher and higher velocities. At first, the cannonball lands fairly close to the cannon. Then, with a higher velocity, it lands farther away upon the earth's curved surface. Ultimately, as Newton's figure shows, if the cannonball is fired with a great enough velocity, it will orbit the earth and return to point on the mountaintop from whence it began. Via a simple drawing, Newton showed that the same force which draws objects to the earth can also keep objects in orbit. And so it is that Newton's famous theory and law of universal gravitation was born.

The Greeks, from Pythagoras on down, knew the earth was round. They also knew that objects fell towards the earth. Thus Plato, Socrates, and Aristotle could have drawn Newton's figure. Bruno or Copernicus could have drawn it. Galileo could have drawn it. Kepler could have drawn it, and perhaps he should have! But none of them did. It was Newton who drew it.

Not only does this book celebrate how simple drawings have ever advanced and revolutionized physics, from Thomas Young's sketch of the double slit experiment to Faraday's sketches of the electric and magnetic fields, but it also exalts a brand new theory--Light Time Dimension Theory--exalting and advancing science by these very same, simple methods rooted in simple, physical pictures and ideas.

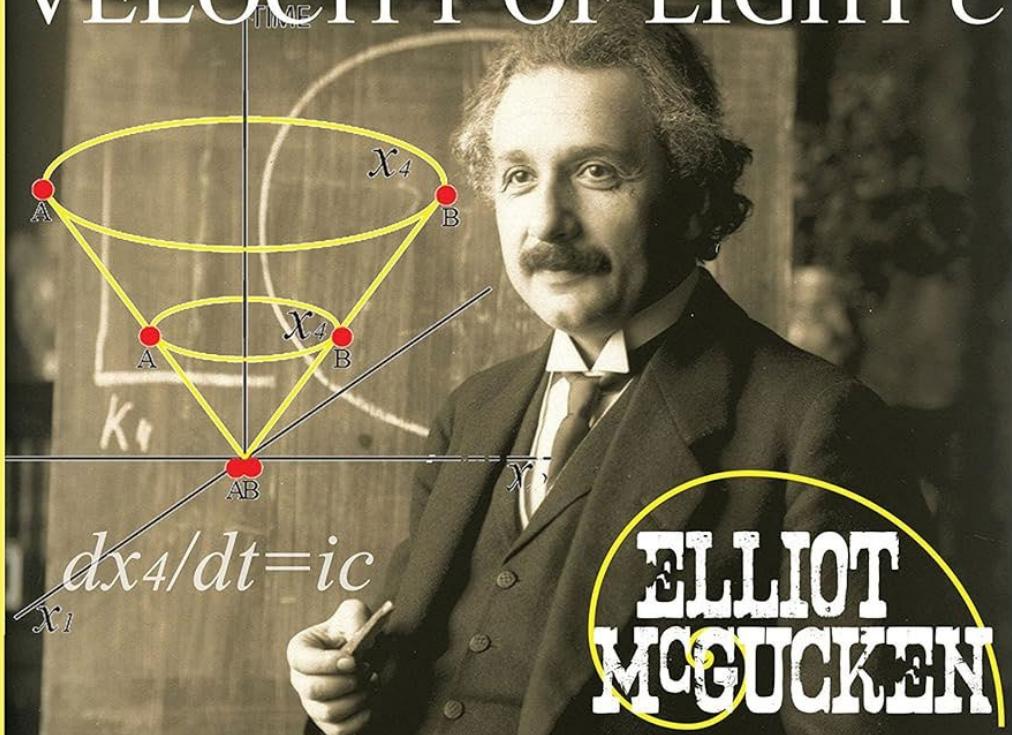
Just as Newton revolutionized our understanding of gravity via a remarkably simple physical picture, so did Einstein, writing, "I was sitting in a chair in the patent office at Bern when all of a sudden a thought occurred to me: "If a person falls freely he will not feel his own weight. I was startled. This simple thought made a deep impression on me. It impelled me toward a theory of gravitation." This simple thought lead to Einstein's General Theory of Relativity, wherein space

and time bend and curve. Unlike string theory, Light Time Dimension Theory acknowledges the fact that dimensions move, and it simply extends the general principle by stipulating that the fourth dimension is expanding at the rate of c relative to the three spatial dimensions.

In the same way Newton was the first to sketch the gravitational orbits of cannonballs and Faraday was the first to sketch electric and magnetic fields and the invisible "lines of force," Dr. E the first to draw the expansion of the fourth dimension. And in doing so, he recognized that x4's expansion was responsible for the basic characteristics of quantum mechanics, relativity, and the second law of thermodynamics. Via the simple sketch, Dr. E found a doorway to the deeper physical reality underlying and unifying relativity, quantum mechanical behavior, and time's arrows and asymmetries.

Join us on this epic odyssey through not only the beautiful simplicity of science's greatest revolutionary thoughts and drawings from the likes of Feynman, Einstein, Faraday, Newton, Galileo, and Copernicus, but from Dr. E too.

EINSTEIN'S RELATIVITY DERIVED FROM **LTD THEORY'S PRINCIPLE:** THE FOURTH DIMENSION IS EXPANDING AT THE VELOCITY OF LIGHT C



$$dx_4/dt = ic$$

**ELLIOT
MCGUCKEN**

THE FOUNDATIONAL PHYSICS OF RELATIVITY,
QUANTUM MECHANICS, TIME, & ENTANGLEMENT

"More intellectual curiosity, versatility and yen for physics than Elliot McGucken's I have never seen in any senior or graduate student... Originality, powerful motivation, and a can-do spirit make me think that McGucken is a top bet."

-John Archibald Wheeler, Princeton University

D R . ELLIOT M c G U C K E N

Regarding the award-winning physicist Dr. Elliot McGucken at Princeton University, the late John Archibald Wheeler stated, "More intellectual curiosity, versatility and yen for physics than Elliot McGucken's I have never seen in any senior or graduate student. . . Originality, powerful motivation, and a can-do spirit make me think that McGucken is a top bet."

Leonardo da Vinci: Simplicity is the ultimate sophistication.

At long last, a simple, foundational theory has risen above the fray so as to finally unify relativity and quantum mechanics in a simple, physical model premised upon the principle of a fourth expanding dimension. This heavily-illustrated book delights in deriving all of Einstein's relativity, both intuitively and mathematically, from LTD Theory's simple postulate and equation. Unlike many other books, it takes us beyond the stringy swamp to new, pristine territory where simple postulates and principles again reign supreme, as they did throughout the original development of quantum mechanics and relativity. In the grand spirit of Einstein, the book celebrates the simplicity of physics, and thus makes for a straightforward, exalting read for the expert and layman alike.

Albert Einstein: A theory is the more impressive the greater is the simplicity of its premises (LTD Theory's principle of the fourth expanding dimension), the more different are the kinds of things it relates (relativity, the quantum, time, the second law of thermodynamics, dark matter, dark energy, entanglement) and the more extended the range of its applicability.

Arthur Schopenhauer: Talent hits a target no one else can hit; Genius hits a target no one else can see.

Few know that Einstein yet sought a deeper foundation for his relativity. Regarding relativity, Einstein wrote, "A physical theory can be satisfactory only if its structures are composed of elementary foundations. The theory of relativity is ultimately as little satisfactory as, for example, classical thermodynamics was before Boltzmann had interpreted the entropy as probability."

At long last, Light Time Dimension Theory hath found the elementary foundations underlying not only relativity, but all of quantum mechanics too, as well as time and its arrows and asymmetries. As physics has ever been furthered via *physical* principles and postulates, as opposed to string theory press releases, LTD Theory exalts the hitherto unsung postulate of a fourth expanding dimension given by $dx^4/dt=ic$. And the very heavens open up.

By the end of this book, you will see how LTD Theory replaces Einstein's two postulates of relativity with a simpler, more foundational principle of nature—the universal invariant of the fourth expanding dimension also seen in LTD Theory's simple equation $dx^4/dt=ic$. And you will see that this principle has the added benefit of also providing a simple, natural, *physical* mechanism for quantum mechanics, time, and the second law of thermodynamics.

The fast-paced book takes the reader on a fantastic odyssey beginning with the simple, intuitive proofs that light remains stationary in the fourth dimension, leading to the remarkable fact that the fourth dimension is expanding relative to the three spatial dimensions at c. Einstein's drawing of the light cone is celebrated alongside all the aspects of relativity it exalts. And too, quite remarkably, for the first time in the history of physics, the foundations of quantum mechanics are also seen in the nonlocal expansion of the light cone.

Einstein's simple, intuitive derivations of the Lorentz transformations are shared and discussed. And it is shown that the Lorentz transformations, and thus all of relativity, naturally emerge from LTD's deeper principle of a fourth expanding dimension, right alongside the quantum and time and all her one-way arrows.

Unlike the dominant string theory and multiverse mania, LTD Theory exalts in simple postulates, principles, and equations.

QUANTUM ENTANGLEMENT & EINSTEIN'S SPOOKY ACTION AT A DISTANCE EXPLAINED

THE FOUNDATIONAL PHYSICS
OF QUANTUM MECHANICS'
NONLOCALITY & PROBABILITY

ELLIOT
MCGUCKEN

THE NONLOCALITY OF
FOURTH EXPANDING DIMENSION

D R . E L L I O T M C G U C K E N

THE FOUNDATIONAL PHYSICAL REALITY UNDERLYING QUANTUM NONLOCALITY & ENTANGLEMENT REVEALED!

"More intellectual curiosity, versatility and yen for physics than Elliot McGucken's I have never seen in any senior or graduate student. . . Originality, powerful motivation, and a can-do spirit make me think that McGucken is a top bet." --Dr. John Archibald Wheeler, Princeton University's Joseph Henry Professor of Physics

There exist many excellent books on Quantum Entanglement, but so far, none of them have presented a *physical* means nor mechanism accounting for quantum entanglement.

What is quantum entanglement? Why is entanglement? How is quantum entanglement? All these questions, and many more banished ones, are asked and answered in this revolutionary book which humbles itself before the giants of the quantum ranging from Planck, to Einstein, to Bohr, to Schrodinger, to Heisenberg, to Dirac, to Wheeler, to Feynman.

How is it, exactly, that two photons sharing a common origin can yet remain entangled no matter how far apart they travel? How can two photons separated by the width of our galaxy yet be connected in such a manner so that measuring one of them *instantaneously* influences the other?

While no useful information can yet be transferred faster than the velocity of light, both quantum theory and dozens quantum experiments now exalt the physical effect of entanglement's instantaneous influence which travels faster than light.

How can this be? What is entanglement's deeper source? What physical mechanism underlies quantum nonlocality? What foundational physical reality exalts entanglement?

Dr. E turns towards his Princeton days working with the Noble J.A. Wheeler and Nobel Laureate Joseph Taylor, and he invokes the geometry a fourth dimension expanding at the rate of c relative to the three spatial dimensions. The expansion distributes locality into nonlocality, so that even as two photons travel apart from a common origin, they yet remain entangled as they share a common locality exalted by the fourth expanding dimension.

At long last, a *physical* mechanism is presented which accounts for quantum nonlocality and entanglement.

And it turns out that this very same *physical* mechanism of a fourth expanding dimension also accounts for special and general relativity, time and all its arrows and asymmetries, and the second law of thermodynamics, as well as quantum probability, which is shown to walk hand-in-hand with quantum nonlocality and entanglement.

Albert Einstein: A theory is the more impressive the greater is the simplicity of its premises

$(dx^4/dt=ic)$, the more different are the kinds of things it relates (relativity, the quantum, time, dark matter, dark energy, entanglement) and the more extended the range of its applicability.

Sir Isaac Newton: Truth is ever to be found in simplicity ($dx^4/dt=ic$), and not in the multiplicity and confusion of things (string theory's 40+ dimensions, multiverse mania).

Albert Einstein: Any intelligent fool can make things bigger (the multiverse), more complex (the string theorists' landscape), and more violent (the multiverse televangelist's violence against simple Truth and Beauty). It takes a touch of genius—and a lot of courage—to move in the opposite direction ($dx^4/dt=ic$).

Recently the LIGO/VIRGO collaboration detected the existence of gravitational waves, thusly affirming Einstein's predictions that the geometry of the space-time dimensions bend, curve, and move. Einstein's general relativity showed that space-time was not just a stage, but that it was part of the performance, as it too could move in arbitrary manners.

Gravitational waves propagate via undulations of space and time. LTD Theory builds upon this firm foundation of mobile dimensions by postulating and proving that the fourth dimension is expanding at the rate of c relative to the three spatial dimensions, as given by $x^4=ict$ which naturally implies $dx^4/dt=ic$.

4. Nature Photographers: Poet-Warriors on the Front Lines of *The Battle for the Soul of Capitalism*

Jack Bogle (to Dr. E): Your message to our nation's young students—a message of idealism and enlightenment—is a breath of fresh air that must—and will—find its way into the musty corridors of our colleges and business schools. Perhaps your happy acronym—CREATE (Center for Renaissance Entrepreneurship, Art, Technology, and Economics).will help. Keep up the good work! --John C. Bogle, Founder & Former CEO of the Vanguard Group

Regarding Jack Bogle, the legendary investor Warren Buffet stated:

If a statue is ever erected to honor the person who has done the most for American investors, the handsdown choice should be Jack Bogle. For decades, Jack has urged investors to invest in ultra-low-cost index funds. In his crusade, he amassed only a tiny percentage of the wealth that has typically flowed to managers who have promised their investors large rewards while delivering them nothing – or, as in our bet, less than nothing – of added value. . . In his early years, Jack was frequently mocked by the investment-management industry. Today, however, he has the satisfaction of knowing that he helped millions of investors realize far better returns on their savings than they otherwise would have earned. He is a hero to them and to me. —Warren Buffet

“The risk-taker ought get the reward,” is a most foundational premise of moral capitalism, and thus artists ought reap the fruits of their labor—a simple tenet which the Constitution celebrates and which Bogle’s Vanguard exalted. Artists are the small, common investor whom Bogle served. As Vanguard is a large or even majority shareholder in numerous “AI” efforts, one would hope that the CEOs would study Jack’s simple, commonsense business philosophy that “the risk-taker” ought get the reward, but this is not immediately apparent. Perhaps the CEOs would be wise to read up on Homer’s *Odyssey*, where they’ll see Odysseus teaching, “Fair dealing leads to greater profit in the end,” to the false suitors living in Odysseus’s home.

In a speech delivered at the Princeton Varsity Club titled *Aspiring to Build a Better Financial World Remarks* by John C. Bogle Founder and former chief executive of the Vanguard Group (<https://boglecenter.net/wp-content/uploads/Princeton-4-30-09.pdf>), Jack Bogle kindly saluted the class I was teaching:

. . . Elliot McGucken, Princeton Class of 1991, has lifted my spirits on the culture of the humanist. Dr. McGucken received a B.A. in Physics from Princeton, and earned a Ph.D. in physics at University North Carolina in Chapel Hill. Now teaching at Pepperdine University, he has created a business school course entitled “Artistic Entrepreneurship and Technology,” linking

today's Information Age to the great values of Western Civilization. His required reading list includes Homer's *Odyssey*, and Dante's *Inferno*.

Dante, as a master poet, naturally had a special fondness for fellow artists, and he placed those who were "violent against art" in the seventh circle of Hell. There are nine levels. Fine art nature photography is a celebration of Dante, as sure as Dante stipulated, "Art, as far as it is able, follows nature, as a pupil imitates his master."

Fine art nature photography allows us to celebrate Locke's notions of copyright, as we come to own the "The labour of our body, and the work of our hands," married to our soul's unique vision and creativity:

Sect. 27. Though the earth, and all inferior creatures, be common to all men, yet every man has a property in his own person: this no body has any right to but himself. The labour of his body, and the work of his hands, we may say, are properly his. Whatsoever then he removes out of the state that nature hath provided, and left it in, he hath mixed his labour with, and joined to it something that is his own, and thereby makes it his property. It being by him removed from the common state nature hath placed it in, it hath by this labour something annexed to it, that excludes the common right of other men: for this labour being the unquestionable property of the labourer, no man but he can have a right to what that is once joined to, at least where there is enough, and as good, left in common for others. —Locke, CHAPTER. V., The Second Treatise of Government

The great director Sergio Leone, who launched Clint Eastwood as an international star in his *The Good, the Bad, and the Ugly* trilogy, stated, "Probably the greatest writer of westerns was Homer." The eminent Martin Scorsese (*The Wolf of Wall Street*, *Good Fellas*, *The Untouchables*) opined in *Fast Company*, "I'm concerned about a culture where everything is immediate and then discarded," he says. ". . . I just read her (his niece Francesca) a children's version of *The Iliad*. Thomas Jefferson, who knew a thing or two about the poetry of liberty, penned, "as we advance in life these things fall off one by one , and I suspect we are left with only Homer and Virgil, perhaps with only Homer alone." On March 6th, 1887, *The Philadelphia Press* shared a story about a young, "smooth-shaved" Abraham Lincoln from around thirty years earlier in 1857: (Lincoln) was reading Homer's *Iliad*, in a translation, of course. Lincoln held the book out at arm's length after a word or two had passed, when he laughed and said: "I have made up my mind that I have got to read Homer's *Iliad*," and the quaint look which has become historical spread over his face. "You know a man might as well be out of the world as not read Homer's *Iliad*."

Aristotle wrote, "As, in the serious style, Homer is pre-eminent among poets," and our good friend Dante described Homer as "Omero poeta sovrano."—Homer, the sovereign poet.

Bogle continued:

Believe it or not, “Dr. E.” discovered my 2005 book, *The Battle for the Soul of Capitalism* when he was browsing in a bookstore. It formed one of three foundations for reading in his course. When he told me that, of course I was thrilled. (Heck, truth told, astonished!) But hear the concern McGucken expresses as he explains what is happening to Humanistic education, in words far better than my own:

“When I first embarked on this venture four years ago, I had thought that common sense would be a bit more common, and that Homer and Bogle would naturally and immediately prevail in the academy with nary a battle. Well, amongst the students a vast market exists for the words that speak to the immortal sensibilities of their souls (and thus time is on our side!), but the modern university’s bureaucracy has evolved to oppose classical wisdom, as has Wall Street and our government, which all too often see more profit in trying to purchase virtue and enduring wealth via mere money; rather than focusing first on virtue and ‘doing the right thing,’ reminding us of Socrates belief that we should ‘care about the greatest improvement of the soul . . . 13 virtue is not given by money, but from virtue comes money and every other good of man.’ During each faculty meeting, he continues, I need to justify why I am teaching Homer and Socrates in a business class of all things. I have been tempted to ask the question, ‘Well, can you find anything of greater and more-enduring value?’ But I have refrained . . . despite the daily news which screams at us regarding the epic failures of the current system and all that the soulless MBA curriculum hath wrought, the contemporary academy yet refuses to see, because the MBA is a license to partake in the \$500 billion of innovation-free, annual wealth-transfer [to the financial sector] that compromises, erodes, and opposes capitalism’s moral premises. The risk taker ought to get the reward, and the primary purpose of an institution ought to be to serve—not to tempt and take.”

In many ways my Fine Art Photography is a hedge against the postmodern, bottom-line focused, Natural-Law-denying ethos. Fine Art Photography offers a realm where honor can yet be pursued via noble, relentless action in Nature’s yet untamed elements, and where Gold can be mined via one’s very own blood, sweat, and tears, as opposed to strip-mining/scraping the internet. Fine Art Photography affords me an opportunity to celebrate the Constitution, which so many modern CEOs scoff at and seek to circumvent to as to enrich themselves at the honorable artists’ expense.

The Golden Ratio is a classical compositional technique that is naturally found throughout nature and all living forms, acutely celebrated in Botticelli’s Venus, Michelangelo’s David, and the Sistine Chapel.

Bogle continues:

Quoting from *Who Killed Homer*, McGucken notes that “This ignorance of Greek wisdom should be of crucial interest to every American. The Greeks bequeathed us constitutional government, individual rights, freedom of expression, an open economy, civilian control of the military, separation of religious and political authority, private property, free scientific inquiry and open dissent. But it is foolish—and dangerous—to embrace these conventions . . . without understanding that the Greeks also insisted that such energy was to be monitored and restrained by a host of cultural protocols that have nearly disappeared: civic responsibility, philanthropy, a world view that is rather absolute, a belief that life is not nice, but tragic and ephemeral . . . an entire way of looking at the world, a way diametrically opposite to the new gods that now drive America: therapeutics, moral relativism, blind allegiance to progress and the glorification of material culture.”

So you can see why Dr. E and I get along so well! We have reached common ground in loving the classics and in seeking the triumph of virtue and ethics—and even fiduciary duty!—over the vanishing values of the day. It is time to accept our responsibility to reverse the recent triumph of unfettered business conduct, and fight to restore the professional conduct that once permeated our society.



In a speech delivered at the Princeton Varsity Club, Jack kindly saluted the class I was teaching:

... Elliot McGucken, Princeton Class of 1991, has lifted my spirits on the culture of the humanist. Dr. McGucken received a B.A. in Physics from Princeton, and earned a Ph.D. in physics at University North Carolina in Chapel Hill. Now teaching at Pepperdine University, he has created a business school course entitled "Artistic Entrepreneurship and Technology," linking today's Information Age to the great values of Western Civilization. His required reading list includes Homer's *Odyssey*, and Dante's *Inferno*.

Dante, as a master poet, naturally had a special fondness for fellow artists, and he placed those who were "violent against art" in the seventh circle of Hell. There are nine levels. Fine art landscape photography is a celebration of Dante.

Fine art nature photography allows us to celebrate Locke's notions of copyright, as we come to own the "The labour of our body, and the work of our hands," married to our soul's unique vision and creativity :

Sect. 27. Though the earth, and all inferior creatures, be common to all men, yet every man has a property in his own person: this no body has any right to but himself. The labour of his body, and the work of his hands, we may say, are properly his. Whatsoever then he removes out of the state that nature hath provided, and left it in, he hath mixed his labour with, and joined to it something that is his own, and thereby makes it his property. It being by him removed from the common state nature hath placed it in, it hath by this labour something annexed to it, that excludes the common right of other men: for this labour being the unquestionable property of the labourer, no man but he can have a right to what that is once joined to, at least where there is enough, and as good, left in common for others. —Locke, CHAPTER. V., The Second Treatise of Government

Bogle continues:

Believe it or not, "Dr. E." discovered my 2005 book, *The Battle for the Soul of Capitalism* when he was browsing in a bookstore. It formed one of three foundations for reading in his course. When he told me that, of course I was thrilled. (Heck, truth told, astonished!) But hear the concern McGucken expresses as he explains what is happening to Humanistic education, in words far better than my own:

"When I first embarked on this venture four years ago, I had thought that common sense would be a bit more common, and that Homer and Bogle would

naturally and immediately prevail in the academy with nary a battle. Well, amongst the students a vast market exists for the words that speak to the immortal sensibilities of their souls (and thus time is on our side!), but the modern university's bureaucracy has evolved to oppose classical wisdom, as has Wall Street and our government, which all too often see more profit in trying to purchase virtue and enduring wealth via mere money; rather than focusing first on virtue and 'doing the right thing,' reminding us of Socrates belief that we should 'care about the greatest improvement of the soul . . . 13 virtue is not given by money, but from virtue comes money and every other good of man.' During each faculty meeting, he continues, I need to justify why I am teaching Homer and Socrates in a business class of all things. I have been tempted to ask the question, 'Well, can you find anything of greater and more-enduring value?' But I have refrained . . . despite the daily news which screams at us regarding the epic failures of the current system and all that the soulless MBA curriculum hath wrought, the contemporary academy yet refuses to see, because the MBA is a license to partake in the \$500 billion of innovation-free, annual wealth-transfer [to the financial sector] that compromises, erodes, and opposes capitalism's moral premises. The risk taker ought to get the reward, and the primary purpose of an institution ought to be to serve—not to tempt and take."

In many ways my Fine Art Photography is a hedge against the modern, bottom-line focused, business models which scoff at artists' rights and Natural Rights. Fine Art Photography offers a realm where honor can yet be pursued via action—via blood, sweat, and tears—via tireless, relentless, *action*.

Quoting from *Who Killed Homer*, McGucken notes that "This ignorance of Greek wisdom should be of crucial interest to every American. The Greeks bequeathed us constitutional government, individual rights, freedom of expression, an open economy, civilian control of the military, separation of religious and political authority, private property, free scientific inquiry and open dissent. But it is foolish—and dangerous—to embrace these conventions . . . without understanding that the Greeks also insisted that such energy was to be monitored and restrained by a host of cultural protocols that have nearly disappeared: civic responsibility, philanthropy, a world view that is rather absolute, a belief that life is not nice, but tragic and ephemeral . . . an entire way of looking at the world, a way diametrically opposite to the new gods that now drive America: therapeutics, moral relativism, blind allegiance to progress and the glorification of material culture."

So you can see why Dr. E and I get along so well! We have reached common ground in loving the classics and in seeking the triumph of virtue and ethics—and even fiduciary duty!—over the vanishing values of the day. It is time to accept our responsibility to reverse the recent triumph of unfettered business

conduct, and fight to restore the professional conduct that once permeated our society.

I had opened each semester of my class *The Hero's Journey in Arts Entrepreneurship & Technology* by having the students read Jack Bogle's *Battle for the Soul of Capitalism* alongside Homer's *Odyssey*, as both recounted similar stories about a protagonist trying to save his men, his home, and his country. And as "AI" takes images from artists without compensation, credit, or consent, we again find ourselves battling for the soul of capitalism against the one-eyed Cyclops which sees not the higher ideals, but only the bottom line.

The greatest innovations in AI oft seem innovations in the use of language. One sees hundreds, if not thousands, proclaiming that AI "learns just like human artists." Were this true, I would have seen the "AI" robots, or at least their developers, out in the field, learning from the ultimate master—Nature.

Rembrandt: "Choose only one master - Nature."

Dante: Art, as far as it is able, follows nature, as a pupil imitates his master.

Leonardo Da Vinci: Do not imitate one another's style. If you do, so far as your art is concerned you will be called a grandson, rather than the son of Nature.

AI does not go into nature to learn from the Masters, but instead it copies our photographs of nature, and ignores Leonardo da Vinci in imitating our styles.

Virtue has ever been defined as the pursuit of excellence and moral service, and I love fine art photography in that it affords me the opportunity to pursue virtue. Fine art photography is a hedge against all the AI hype, as AI is unable to pursue excellence, it can only copy.

James Madison wrote in Federalist #43: THE FOURTH class comprises the following miscellaneous powers:1. A power "to promote the progress of science and useful arts, by securing, for a limited time, to authors and inventors, the exclusive right to their respective writings and discoveries. "The utility of this power will scarcely be questioned. The copyright of authors has been solemnly adjudged, in Great Britain, to be a right of common law. The right to useful inventions seems with equal reason to belong to the inventors.

John Locke: The state of nature has a law of nature to govern it, which obliges every one: and reason, which is that law, teaches all mankind, who will but consult it, that being all equal and independent, no one ought to harm another in his life, health, liberty, or possessions... (and) when his own preservation comes not in competition, ought he, as much as he can, to preserve the rest of mankind, and may not, unless it be to do justice on an offender, take away, or impair the life, or what tends to the preservation of the life, the liberty, health,

limb, or goods of another. John Locke, [Two Treatises of Government](#), ed. Thomas Hollis (London: A. Millar et al., 1764). 12/16/2019.

Nature photography is a most unique art form in that it combines the physical with the artistic. No other art demands that one first humble themselves before the natural elements--both physically and mentally--before venturing forth into those elements to create. Many great artists have credited nature as being the ultimate teacher, with Rembrandt stating, "Choose only one master - Nature."

Thus, by its very nature, nature photography is perhaps one of the highest art forms, as in order to truly exalt it, one must directly participate in the natural landscape and become one with it. One must become one with Rembrandt's "one master"--*nature*--first in mind by assessing the wind, waves, and weather (and sometimes the volcanic elements!), and then in body by diving into the rugged, elemental beauty and traversing the miles by land, air, and sea, oft enduring physical and mental fatigue so as to get "the shot" which Ansel Adams taught us to previsualize in our mind's eye. We are but guests in Nature's grand studio, and our schedule is dictated by both its immutable periodicities and fantastical and even ferocious whimsies, thusly demanding an enduring patience balanced with the ability to suddenly turn on a dime and react in a microsecond, lest the shot we waited hours and even days for eludes us forever. This classic struggle of "human versus nature," from Homer's *Odyssey* on down, is the crucible wherein the fine art of landscape and nature photography is most naturally forged and exalted as epic poetry and mythology.

Perhaps it should come as no surprise that nature photography is a most foundational art of primal origins, as photography literally means "light writing," and both science and religion agree that it all likely began in light--with a "Big Bang" of light or with the simple sentiment, "Let there be light." The great psychologist and mythologist Carl Jung noted, "When the great night comes, everything takes on a note of deep dejection, and every soul is seized by an inexpressible longing for light." And so our humble task as nature photographers becomes to *serve* with light--with all the natural truth it has ever carried, and the beauty that it is heir to

As a picture is "worth a thousand words," we photographers write our biographies and novels a thousand words at a time. Aristotle noted that "story is the soul of a work," tand he stories our photographs tell over time by and by exalt the soul of nature in the record of our very own odysseys, whence all can see both where we stood and what we stood for. Socrates noted that the soul alone is immortal, and as that original, relentless poet-warrior Achilles demonstrated throughout the *Iliad*, we artists are drawn towards the archetypal, immutable eternities of the higher forms, as we are driven to set our spirits free via noble *action*. And so we go without sleep for over twenty-four hours while walking over twenty miles with all our gear, all to render the fleeting beauty of an erupting volcano permanent, for simply put, it is the honorable thing to do.

Do not take my word for it that art is born of nature, but listen to those greats who have noted thusly throughout history:

Michelangelo: Nature did all things well.

Cicero: Art is born of the observation and investigation of nature.

Paul Cezanne: Art is a harmony parallel with nature.

Vincent Van Gogh: Everyone who works with love and intelligence finds in the very sincerity of his love for nature and art a kind of armor against the opinions of other people.

Dante: Art, as far as it is able, follows nature, as a pupil imitates his master.

Leonardo Da Vinci: Do not imitate one another's style. If you do, so far as your art is concerned you will be called a grandson, rather than the son of Nature.

Frank Lloyd Wright: Study nature, love nature, stay close to nature. It will never fail you.

Albert Einstein: Look deep into nature, and then you will understand everything better.

Henri Matisse: An artist must possess Nature. He must identify himself with her rhythm, by efforts that will prepare the mastery which will later enable him to express himself in his own language.

Georgia O'Keeffe: I decided that if I could paint that flower in a huge scale, you could not ignore its beauty.

Auguste Rodin: Art is contemplation. It is the pleasure of the mind which searches into nature and which there divines the spirit of which nature herself is animated.

Rembrandt: Choose only one master - Nature.

Leonardo da Vinci: "He who despises painting has no love for the philosophy in nature."

And so it is that nature photographers have ever been the poet-warriors on the front lines of the artistic battle to exalt and inspire with that truth that is beauty, and that beauty which is truth. In this age of AI which must first take in order to make, we must be sure to remember, now more than ever, all those who begin by giving freely, powered and propelled by their love and passion to learn firsthand from art's greatest master--Nature--before returning on home with the elixir—to teach, inspire, and serve others.

