

David R. Hawkins, MD, PhD, Author of Power vs Force

CREATIVITY REVEALED

Discovering the Source of Inspiration

Scott Jeffrey



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Foreword

Creativity is intrinsic to the evolution of life. It is the manifestation of the hidden substrate of all existence, termed "consciousness."

Upon examination, it becomes obvious that evolution and creation are actually one and the same phenomenon. The essence of life as creation is an expansion of the "Light" of Divinity. This creativity, which is a function of the Self, reflects the soul of mankind.

As explained further in this erudite book, creativity is an innate biological engine. It results in growth via the constant process of learning and assimilation of experience. Creativity is the result of the assimilation and progressive organization of information. Even a simple plant "knows" how to assimilate chemical or light energy for its survival. Creativity is the result of evolutionary learning that produces the linear from the ever-present energy field of the nonlinear.

Each human life is a result of a unique consequence of Creation. Through choices arise the probabilities of propensities classically termed "karma," or destiny. Thus, choice is a priority for the human condition.

Also innate to creativity is inspiration, which has historically been referred to as the "muse" whose influence is often primarily subliminal. Classically, the muse has been associated with the arts, but it is equally a critical factor in the sciences as represented, for instance, by Albert Einstein or the development of quantum physics. Creativity is thus representative of the basic quality of "emergence" by which "becoming" is innate to the expression of intelligence. The mind of man is the energy field out of which arises the creation of a wide range of possibilities and solutions. Thus, whether to create that which is heavenly or hellish is the constant human option.

Creativity is thus the expression of freedom of the will and the arena of multitudinous options and choices. In the final consequence, the soul creates its own ultimate destiny. Thus arises the famous quotation from the *Rubaiyat of Omar Khayyam*:

I sent my Soul through the Invisible Some letter of that After-life to spell: And by and by my Soul returned to me, And answered, "I Myself am Heaven and Hell."

> David R. Hawkins, MD, PhD Director, Institute of Advanced Spiritual Research

Preface

Be prepared for anything. If I've learned anything on this journey, it's that the landscape keeps changing. Holding onto "what seems to be" only blocks a deeper understanding of what is. As Ralph Waldo Emerson aptly noted in his essay "Circles," "Everything looks permanent until its secret is known."

With the willingness to learn and grow, what we *think* we know often morphs into a higher realization. From this higher viewpoint, or what we'll call Higher Ground, everything you thought you knew looks completely different—your thoughts and beliefs hold new meaning within the profound re-contextualization of Higher Ground.

So all I can say is be prepared.

This book was originally a text on results planning and strategic thinking for executives. As the topic was pursued further, it became obvious that an explanation of the nature of thoughts and the act of thinking was needed. This led to the realization that an innate, but often hidden quality of creativity is a more pertinent topic to explore for today's highly-intelligent, ultra-busy professional. By understanding what makes up or determines our creative nature, we can more freely manifest our greatest human potential.

This book is not an academic look at creativity—there are far more qualified researchers to write such a book—nor is this designed to be a workshop on creativity. Instead, this book presents the concept of creativity from an expanded, philosophically-unique lens that incorporates advanced theoretical science, the so-called New Science, and a spiritual understanding of consciousness (or subjective awareness). To fully understand our creative nature, this unusual dialogue will require us to examine the nature of our perception, our thoughts, and even existence itself.

Thoughts, as we all know, are powerful. There's good reason why we say, "Be careful what you wish for." Our thoughts tend to manifest in the physical world—for better or for worse. We want to understand how this manifestation unfolds and the role we play in this manifestation. Understanding the nature of creativity will help us attract it more effortlessly into our lives, for the betterment of humanity.

Much of this information requires a foundational understanding to make it relevant and comprehensible. As a conesquence of a book's linear page-by-page nature, it's difficult to present the necessary context for each core idea without toggling back and forth between sections. To help you assimilate these concepts, the work has been divided into two parts or Books. Book I: The Farthest Reaches of Thought provides the framework for understanding your thoughts as they relate to perceiving both your inner world and the observable, physical domain. We'll discuss the old paradigm that pervaded our Western thinking for the past three centuries, as well as the new paradigm that has emerged over the last 80 years. The discussion on creativity in Book I is limited. Instead, we'll focus on understanding the mind, how thinking manifests, and the phenomenon of consciousness itself. Book I provides the necessary framework for comprehending the creative process as outlined in Book II: Uncovering the Creative Impulse. These two sections should be read sequentially. (My apologies to all you highly nonlinear creative types who hate following a predetermined order. Wading through the far-reaching content of Book I will be worth the payout of Book II.)

The appendices and additional notes are provided for advanced students or those interested in delving deeper into the information. Concise definitions of the terms used are provided in the glossary (appendix D).

Exploring the nature of thought is exhilarating for some, frightening for others. This journey requires us to lay aside our beliefs and assumptions—to suspend what we've presumed to be true. We've become accustomed to believing what others tell us and what we read. We all observe, however, the errors mankind continues to make through its evolutionary journey. The alternative approach to the hearsay of others is the inward search through the process of self-inquiry—an introspective stance that allows insights to arise from an inner knowingness as opposed to an intellectual connection of thoughts.

Self-knowledge guided by universal truths can help remove certain inner barriers that exist within our belief systems and reality distortions (beliefs we have about "how things are" based upon our experience) that hinder our growth and evolution. Techniques for creativity are useless if the blockades to the creative impulse aren't removed. We want a deeper understanding to clear our path.

How you apply this knowledge is up to you. I hope that it enriches your life experiences, and uplifts the lives of those around you.

> To your Creative Journey, Scott Jeffrey Upstate New York

Introduction

A brief introduction of today's cultural climate and the emerging Creative Professionals

The Dawning of the Creative Age

Have you considered what differentiates Man from the rest of the animal kingdom? Appearances aside (we share over 98% of our genetic makeup with chimps¹), the most noteworthy difference between Man and other animals is the intellect—the capacity for thinking and higher functioning—rooted in the prefrontal cortex.² This intelligence gives Man the prowess to "dominate" the rest of the animal kingdom, despite being surrounded by creatures of far greater strength, speed, stamina, and sensory acuity.

This capacity for thinking is more pronounced in today's hyper-advancing society than in any prior period in history. The currency we exchange is no longer tangible like produce, machines, or even technology. In the past, farmers learned how to farm from their ancestors, the "secrets of the land" passed down by family members for generations. Factory workers were trained step-by-step how to perform their jobs. Today, we exchange information—words, systems, abstract concepts, thoughts and ideas. (Consider the 21st-century value of a company like Google.com, which helps us search, find, catalog, and target information more efficiently.)

What of today's knowledge workers, whose jobs are primarily to gather information, interpret data in new ways and draw new conclusions? Basically, knowledge workers are paid to *think* and manifest new ideas, yet ironically, in the Age of Information, we aren't taught how to *create* the currency that dominates our lives,

causing modern thinkers like Abraham Maslow and David Bohm to acknowledge our "crisis of creativity."

The father of humanistic psychology, Abraham Maslow, was passionate about the exploration of creativity:

Only recently have we become aware, fully aware, from our studies of healthy people, of the creative process, of play, of aesthetic perception, of the meaning of healthy love, of healthy growing and becoming, of healthy education, that every human being is both poet and engineer, both rational and nonrational, both child and adult, both masculine and feminine, both in the psychic world and in the world of nature. Only slowly have we learned what we lose by trying daily to be only and purely rational, only "scientific," only logical, only sensible, only practical, only responsible. Only now are we becoming quite sure that the integrated person, the fully evolved human, the fully matured person, must be available to himself at both these levels, simultaneously.

Maslow understood the need to let go of the intellect from time to time to allow what William Blake called "Poetic Genius" to flow through us. Creativity represents a profound quality of what it is to be human while also connecting us to that Source beyond humanness. As anyone who has ever experienced even a moment of true inspiration can attest, creativity is the gateway to the Divine.

Perhaps what lies beyond the Information Age is the Creative Age. With complete access to a virtually unlimited database of worldwide, cross-cultural information (thanks in large part to the Internet), isn't it only natural that we would continue to evolve, liberating the mind to dream, adapt, change, and pioneer?

Interestingly, creativeness, the quality of being creative, is one of the reasons why it's impossible to predict future events, especially in terms of the economy and overall marketplace. The definition often used for economics is the allocation of scarce resources. Economist Paul Zane Pilzer astutely debunks this definition, explaining that it doesn't take into account human ingenuity. Human creativeness and ingenuity change the playing field from a finite list of possibilities to a new context of unlimited potentiality. For example, we turned whale blubber into a source of fuel before discovering oil, and we transformed sand into silicon chips that power our computers.

There may have been an era when creative thinking was unnecessary, when just "doing your job" as prescribed by convention was enough. Not today. This Creative Age is governed by new paradigms: with the information age charging ahead at an everincreasing speed, we must become Masters of the Mind to navigate the demanding, turbulent current toward our chosen ports.

WHO IS TODAY'S CREATIVE PROFESSIONAL?

This book is written especially for the Creative Professional—today's knowledge worker who *thinks* for a living. Surprisingly, a great many of us fall into this category. Business executives, marketers, technologists, educators, designers, managers, small business owners, organizational leaders, psychologists, writers, speakers, coaches, consultants—the list of today's "thinkers" encompasses more than philosophers and scientists.

As Creative Professionals, we often have specialized knowledge in niche arenas. As the collective knowledge of mankind increases, the ability to master an entire field is becoming more difficult. As a consequence, we now have fields within fields of specialization. For example, thirty years ago, an alternative healthcare practitioner may have utilized acupuncture, body work, energy medicine, herbology, and even psychotherapy. Now, an alternative healthcare practitioner likely specializes in one of these interdisciplines because of the vast body of knowledge required for training and certifications, which generally restricts "mastery" of the entire alternative healthcare field. A "renaissance" person like Leonardo da Vinci, who studied topics as diverse as art, science, anatomy, botany, and engineering, is uncommon in our modern, information age.

In a chaotic, ever-changing society, many Creative Professionals are paid to combine their knowledge and creative intuition to help their clients, customers and team members achieve a desired result. The standard corporate hierarchy with specific roles and responsibilities for its employees is not the optimal model. Instead, smart businesses are now moving toward a highly flexible project team infrastructure where individual responsibilities rotate based on the needs of a particular project.6 This development towards a "systems theory" approach to business—where the team operates in an organic fashion with less rigidity and fragmentation—is a natural corporate evolution to help keep up with an increasingly complex, dynamic world.7

Additionally, Creative Professionals aren't driven exclusively by personal gain. Instead, we receive great satisfaction from supporting the entire team. Anita Roddick, founder and president of the Body Shop International, exemplifies this shift: "I don't want our success to be measured only by financial yardsticks.

What I want to be celebrated for is how good we are to our employees and our community. It's a different bottom line."8

Beyond financial gain, Creative Professionals want to feel a sense of appreciation, connection, and belonging. When the team wins, everyone wins. Essentially, the corporate ladder is collapsing. Sure, there are still those driven solely by personal achievement and financial gain, but they represent a dying breed.

Creative Professionals are motivated to contribute and to serve others. As a consequence, organizations are governed less by control and delegation since Creative Professionals typically possess internal accountability for solving problems and completing projects.

Creatives also tend to gravitate toward a higher quality of life, with less stress and more freedom. The go-go-go days of the 80s and 90s seem to be morphing into an appreciate-the-beauty mentality. We once stood impatiently, waiting for our microwaves to defrost a frozen dinner. Now, our kitchens are becoming culinary laboratories to test and delight in exotic cuisine (the Food Network is distributed to over 90 million households in the United States⁹).

We once took pride in late hours at the office. Now, we're prone to leaving work early to pursue some form of personal exploration: yoga, dance, art, music, martial arts, foreign languages, cooking, wine tasting, sports, meditation, volunteering, or walks with our dogs. (Think about the wild proliferation of specialized classes at your local gym over the last decade. Also, distance-learning and continuing education programs at universities have become a multi-billion dollar industry.)

A profound shift in ecological awareness is guiding the Creative Professional. Feeling connected to the planet and having concern for future generations, we are turning away from the strictly profit-driven enterprise model, as testified by the proliferation of "green companies" that support the environment while still growing profitable businesses. The emergence of energy companies utilizing recycled material and global organizations dedicated to environmental preservation as well as the growing move away from pesticides to organic farming are all signs of this ecological shift in awareness.

As a collective, we've also embraced the notion of "spirituality," although we often don't label it as such (especially in business). Instead, we use terms like integrity and trust. Customers and investors alike are fed up with deceptive corporate maneuvers that lack integrity (think Enron, Worldcom, and Martha Stewart), and are choosing instead to conduct business only with companies they trust. This explains why corporations like Apple and Southwest Airlines continue to grow profitable businesses in highly competitive markets—they love their customers and continue to deliver their promises on a consistent basis.

The Creatives are responding to a higher calling that has been awakened in their collective soul: a return to simplicity, beauty, growth and nature, and a longing for a life filled with richness beyond monetary and material gain. A person's lifestyle is becoming increasingly more important than his or her status in the business community. Thanks to the connectedness provided by the Internet, over 20 million American business owners telecommute.10

Authors Sherry Anderson and Paul Ray have profiled a new category of people, termed the "Cultural Creatives," which, according to their study, represents roughly 50 million progressive men and women in the U.S. alone (approximately 26% of the population and growing) who are prioritizing a shift toward a

more peaceful, spiritual life.¹¹ The Creative Professional is likely to resonate with this segment of the population.

The Creatives share a new frustration with society's intrinsic structure: our longing for freedom clashes with the boundless onslaught of information in the form of major projects, back-to-back meetings, conference calls, emails, instant messages (IMs), text messages, and telephone interruptions that relentlessly command our attention. We are required to achieve more significant objectives (often requiring greater creativity) on shorter deadlines, and we are completely swamped! As a consequence, we're overwhelmed, fighting against time, pushing deadlines, barely staying afloat. Further, as we'll learn in this treatise, our innate drive to "stay busy" conflicts with our desire for freedom. It's truly amazing we survive at all.

Our overall level of productivity is, in many ways, determined by our ability to achieve creative results in the wake of chaotic events involving family, work, politics, or world affairs. Those that have learned to attune to a higher degree of creativity can focus on their craft without becoming distracted by the infinite attentiondemanding obstacles of daily life that never stop materializing. How does one attune to higher creativity? And what exactly does that mean? We'll explore these questions in what follows.

A deeper understanding of the creative impulse helps today's knowledge workers transcend distraction and tap into higher creativity. Let's begin ...

AUTHOR'S NOTE

If we attempt to examine creativity under the dominant lens through which most of us view the world, this topic is likely to remain mysterious and confusing. So before we begin exploring the creative impulse, it's helpful to first understand our lens. To do this, we must set our beliefs and assumptions aside—at least momentarily. A great deal of what will be discussed throughout this text may directly contrast with what you firmly believe to be true. I don't expect you to take these words as truth simply based on my recommendation; rather, consider this perspective with an open mind and heart, only accepting new knowledge as provisionally true until you seek the answers from within.

BOOK I The Farthest Reaches of Thought

We begin with an exploration of the ethereal nature of thought. Understanding the nature of perception and how we think helps reveal unconscious, limiting "programs" that control our worldview. Bringing these programs to light paves the way for an understanding of our conscious awareness, which is the precursor to discovering the anatomy of the creative impulse.

The subject of creativity covers a magnificently vast landscape. To attempt to understand this expansive field, we must first build a high tower with a strong foundation so we can climb up and view the entire landscape. Book I provides this necessary infrastructure, so the discussion about the creative impulse will be limited until we reach Book II. Then, we can survey the wondrous fields with reverence and marvel.

Chapter 1 Collective Mind

There is a theory which states that if ever anyone discovers exactly what the Universe is for and why it is here, it will instantly disappear and be replaced by something even more bizarre and inexplicable.

There is another which states that this has already happened.

-Douglas Adams, The Restaurant at the End of the Universe

BONDS OF PERCEPTION

At first glance, there appears to be two worlds: the external "out there" world and our internal "in here" experience. As human beings, we have a tendency of assuming these two worlds are one and the same even though they are not. The external world is translated for our internal experience via perception. Let's explore how perception works.

Consider the eyesight of the red-tailed hawk: his range is over ten times greater than our human range, allowing the hawk to identify mice and other prey where we would see only grass and fields. Peer over this book to your surrounding environment. Focus on a particular object like a glass of water or a tree you can see through a window. Now, imagine magnifying that image, doubling its size. What features would you notice? How would your peripheral vision change? How would your experience of the object and everything else in the room be altered? Obviously, the

hawk's experience of the world as a consequence of this single difference (vision times ten) is difficult for us to comprehend.

A more startling comparison of perception is found between humans and our canine companions. Dogs have approximately 200 million sensory receptors in their noses, while we have only around five million. Like the hawk's enhanced vision, it's difficult to imagine what our overall sensory experience would be like if our sense of smell doubled, let alone increased by 40 times. When a dog inhales an autumn breeze, he's taking in a world beyond our experiential reality. We can't accurately conceptualize how this sensory difference would affect our perception of something as simple as smelling an old couch.

What about the sensory experience of each human being? Do we each experience the same reality? Human perception requires an organ like the eye or nose to communicate information from the outside world for our internal interpretation. We tend to believe that our perception of things and events is what's real. We think we each observe the same events in the same way. From our mind's perspective, our perception represents an accurate reality.² Consider, however, that DNA testing has demonstrated that over 50 percent of eyewitness accounts have resulted in wrongful convictions.3 Our individual perception is actually a weak interpretation of what can be called Reality (with a capital "R").

Professor of Psychiatry at Duke University Roy Mathew explains:

Contrary to popular belief, perception is highly subjective. The brain attempts to make sense out of the crude sensory information decoded from the electrical impulses it receives. Expectancy, anticipation, mood, and so on determine

perception to a considerable degree. What the brain sees and what falls on the retina are often not identical. There is a whole lot more to seeing than simple image reconstruction.⁴

Sensory signals from our five senses interacting with environmental stimuli like the wind current, sunlight, or a unique aroma are sent to the brain via the nervous system. In a matter of milliseconds, the brain processes and translates this information from the outside world. The process of perception utilizes *space* to evaluate qualities like distance, direction, dimension, and size, as well as *time* to process the information it assimilates from the outside world. Both space and time, as Einstein noted, are *relative*, leading him to call our experience of reality "a kind of optical delusion."⁵

Through our perceptual filters, we are unable to see things as they truly are. For example, when you look at the book you're holding, what do you *really* see? When you look at this book, are you not instantly accessing past experiences that include sitting and reading books? Doesn't your mind spontaneously associate memories of other books you have read and the meanings you've linked to those books? How else would you know to call it a book, what its function is, or what to do with it? Consider how a baby would interact with this book: putting it on his head, trying to eat the pages, drooling on the cover, ripping it apart.

Memories of past experiences, assumptions, projected meanings, beliefs, stored information, and significant connections happen so quickly in our mind that we're generally unaware of the process. With all of these internal connections firing sub-consciously, how can we experience things "as they are"? As bizarre as this may sound, we're not experiencing Reality—rather, we're processing our perception of reality, a poor simulation at best.

The Buddhist story of the six blind men and the elephant demonstrates our experience of reality. Six blind men who had heard about the massive size and demeanor of an elephant wanted to experience one firsthand. Coming upon the great beast, one man reached out and touched the animal's leg. "The elephant is like a tree," he exclaimed.

A second blind man felt the breeze from the flapping of the elephant's ear. "An elephant is like a fan."

Another man bumped into the animal's flank, declaring, "It's solid as a wall!"

A fourth man related the squirming trunk to a snake. The fifth man grasped the elephant's swinging tail and likened the elephant to a rope. And the sixth man caught hold of the tusk and announced, "The elephant is like a spear."

All six blind men who experienced a very real part of the elephant assumed they knew elephant. Based on a very limited perspective, their minds made associations to other objects available in memory and then applied those connections to the new experience. Elephant was now cataloged into groups like tree or fan, which have their own projected meanings based on beliefs and past experiences.

It's easy to say, Yeah, but I don't do that. I see the whole elephant. The story illustrates a fundamental flaw in perception. Due to the nature of our thoughts, experienced through the lens of perception, we're restricted to experiencing only a fragment of reality.

Plato gave us another powerful illustration of the limiting qualities of perception with his famous cave allegory.6 A group of human beings having their bodies and heads bound since birth face the back wall of a cave. They can't see each other or what's behind them. Growing up bound in the deep, dark cave, they've

never experienced life outside. Far behind them, a fire rages and in front of the fire is a path where free people frequently pass. The light from the fire projects images of the passersby onto the cave wall that our restrained friends are able to see.

So what do our friends observe? Seeing the projection of these people onto the wall, wouldn't they perceive the images to be "real"? With no prior experience of three-dimensional people (because they were bound with their heads facing the cave wall, not toward each other), how could they distinguish between the projected, two-dimensional images on the wall and the actual, three-dimensional people walking behind them in the distance?

Plato effectively illustrates the challenge we face with perception. Could we, as human beings, be the ones bound and tied, observing the projections on the wall and considering them reality? Certainly, we couldn't be that blind to our own ignorance. For millennia, sages from all the great traditions—those rare Self-realized souls—have been telling us the answer is YES!

You may be familiar with the optical illusion called "My Wife and My Mother-in-Law." Take a moment to focus on the image on the following page. When you look at the image for the first time, you'll either see a young lady or an elderly woman. The young lady is turning her head away from you, wearing a hat with a feather and a necklace. Refocusing on the image, an old woman emerges, facing you. The young lady's chin morphs into the elderly woman's nose and the necklace changes into the older woman's mouth. Magic!



MY WIFE AND MY MOTHER-IN-LAW

With practice, you can consciously shift back and forth between the two women. Which perspective is "real"? Well, whichever one you're experiencing at the moment, of course. But does that negate the reality of the other image? Don't both images exist simultaneously?

Why is this discussion important? First, an understanding of the faulty nature of perception tends to foster humility, which is a prerequisite for understanding creativity. The mind secretly thinks it's infallible, but honest observation and logical inquiry reveal otherwise. Plato's teacher, Socrates, accurately noted that man is intrinsically innocent because he can only choose what he perceives to be good, unable to discern the true good from the false illusions of the world.9 Ever consider how two seemingly intelligent people can hold diametrically opposing positions on controversial topics like politics or religion? Or consider how some people are able to justify acts of violence with rationalizations devoid of basic logic.

With humility, we are less likely to canonize our thoughts and experiences. We are less likely to say, "This is how it is. I'm right and you're wrong." Old perceptions fade into greater awareness with an expanded perspective—Higher Ground. We're even able to "see" or notice things we didn't see before. My mother is always amazed by my father's inability to see things right under his nose. If you don't want to see the saltshaker, it's very possible to make it disappear from perception through a lack of focus of what is present.

The fragmented experience of the mind can be transformed into an array of infinite colors and hues. Think of a purple wildflower growing on the side of the road. To a botanist or nature lover, this is a wondrous flower—a symbol of beauty, variety, and splendor. To a landscaper, it's a weed. With greater awareness, we are able to see and appreciate both perspectives, along with their various shades of reality in between.

By staying flexible in your perspective, you open yourself to discovering a vastly different world that's right under your nose. With humility, our perception can transform to accommodate a Reality of boundless beauty. As Blake envisioned, "If the doors of perception were cleansed, everything would appear to man as it is, infinite."

For right now, keep in mind that perception can be tricky and often inaccurate, giving us a little less certainty that we're experiencing true Reality.

WHAT ARE THOUGHTS?

Thought is the primary tool employed by our perceptual faculties to interpret the world around us. Have you ever considered the structure or plethora of thought? Psychologists estimate we each have approximately 50,000 thoughts per day. (If this sounds inconceivable, close your eyes and try counting all the random thoughts that float through your awareness in 60 seconds.) When you consider this staggering number, it's amazing that we can defy distraction to communicate coherently or accomplish any task at all.

Asking What are thoughts? seems to present a kind of paradox or circular dialogue. To answer the question requires the very thing we're trying to define—thinking. Thinking is the act of using thought. Well, that's a nice distinction, but it brings us no closer to understanding what thinking or thoughts are. The question and the answer are comprised of thoughts as well. This dilemma is similar to one created when we try to define a word using the same word, like defining sculpting as the act of making a sculpture.

Thinking generally happens in the background. Thinking, like breathing, seems so innate to us that we rarely take time to understand or examine its subtle nature. We know we constantly have thoughts. We also have the sense that not all thoughts are equal. Higher quality thoughts are generally associated with intelligence; novel thoughts may be linked to creativity; and truly extraordinary thoughts are often associated with genius. Still other thoughts can be viewed as harmful to oneself and possibly others. In business, we might say that higher quality thoughts about better serving the customer can help a business grow, while exploitative or greedy thoughts can lead a company to bankruptcy. Society

seems to value the utilitarian function of thoughts, but it doesn't occur to us to inspect the nature of our thoughts: What are they? How do they arise? Do they have a true function? What is their meaning?

In *Hamlet*, William Shakespeare proposed, "For there is nothing either good or bad but thinking makes it so." Roman Emperor, Marcus Aurelius Antoninus said in *Meditations*, "The world is nothing but change. Our life is only perception."

The world's great traditions seem to teach a similar concept. Buddha said, "Our life is shaped by our mind; we become what we think." The Bible gives us the proverb, "For as he thinketh in his heart, so is he."

Literature throughout the ages, from every religion and philosophy around the world, has preached this tenet: *thoughts are things*, a kind of bridge from the invisible to the visible.

Still, this doesn't seem to sufficiently answer the question, What are thoughts? Perhaps the only way to understand the nature of thought is experientially.

* * *

Experiment: Watch Your Thoughts

Finish reading this paragraph, put down this book, take a deep breath and close your eyes. For sixty seconds, simply watch your thoughts. Do your best not to participate with them. Just watch the thoughts arise and then move on to watching the next thought as if you were watching a movie theatre screen.

Begin now ...

* * *

So what did you learn? First, you probably noticed that thoughts flow continuously. You can't stare at the mental blank screen for too long before another thought pops up. If your mind is clever, it will trick you into thinking that you're not really thinking when, in fact, you're thinking about that movie screen.

What else? If you didn't get "hooked" by a particular thought, which leads to a series of related thoughts, you probably noticed the utter randomness of your thoughts. It's quite fascinating how many seemingly meaningless, irrelevant thoughts constantly pass through our awareness. Like fish jumping out of a lake, thoughts constantly rise and fall.

If you've never meditated before and you actually completed this experiment, congratulations! You just meditated. If you already meditate, you're most likely better acquainted with the nature of thought than you realize. Regardless, we're now ready to delve deeper into thought's peculiar terrain.

THE COLLECTIVE MIND

Where do thoughts come from? Most of us would find such a question silly. Our mind, obviously, we might say. The next logical question would be, What is the mind? Is the mind the same as our brain, the physical organ located in our skulls? Does the brain fuel the mind or vice versa?

Nobelist Eric Kandel defines mind as "a set of operations carried out by the brain, much as walking is a set of operations carried out by the legs, except dramatically more complex." So where exactly is this "set of operations" located? The assumption we all subconsciously make is that we each have a personal mind located in or around our brains which creates personal thoughts, unknown to others unless we communicate them.

Yet, we also have evidence of a *collective mind*, a shared pool of thoughts, ideas, beliefs, and assumptions. We can observe the effects of this collective mind in various cultures, ethnicities, religions, social groups, and even the stock market. Consider that competing companies often launch similar products and services simultaneously. It is easy to assume that the secret was leaked or both companies caught onto the same trend through research, but the collective mind is likely the culprit.

It's not a coincidence that people of various races, ethnicities, and religions have their own unique customs. Jewish people, for example, seem to have similar characteristics whether you're in Israel, New York City, or Minnesota. One can observe consistent mannerisms, a love for food, a near addiction to worrying, and at least a loose adherence to basic traditions. Again, one may assume these customs are passed on through learned behavior, from generation to generation, as opposed to being transmitted through a collective mind.

Science probably has the most blatant examples of a collective mind. Charles Darwin and Alfred Russel Wallace independently postulated the theory of evolution (natural selection) within a short period of time of each other. Sir Isaac Newton and Gottfried Wilhelm Leibniz independently invented calculus in two different parts of the world and had to defend themselves throughout their lifetimes as to who actually originated the concept. Physicists Erwin Schrödinger and Werner Heisenberg each wrote the wave equation for quantum mechanics without conferring with the other. Neurosurgeon Karl Pribram and physicist David Bohm

formulated a holographic framework for the brain and the universe, respectively. 17

Carl Jung encountered many "meaningful coincidences" which he termed synchronicity during his psychoanalytic work.¹⁸ He postulated the existence of a collective field of human experiences—a communal pool to which everything is connected, existing beyond the physical dimensions of time and space. Myths, dreams, hallucinations, and religious visions, Jung believed, all spring from this source, shared by all conscious beings.

The meticulous work of the late mythology expert Joseph Campbell offers further support for a collective unconscious. Where most historians and comparative mythologists highlight the differences between cultures, religions, and myths, Campbell focused on the striking similarities throughout all of them. In A Hero with a Thousand Faces, Campbell demonstrates how the same "Hero's Journey" has been told throughout time, across all myths, legends, and religions.¹⁹ Identifying the same archetypal patterns woven throughout classic and modern storytelling further reveals the existence of this collective mind.

COLLECTIVE MEMORY

Our beliefs, recurring questions, ideas, world and life views, references, and behaviors are all filters of perception, which collectively make up our unique, subjective experience. These "Thought Systems" include a set of social programs and bundles of concepts, little of which we consciously create. There are subsets of social programs and conditioning that are cultural, societal, and religious, and others that appear more "personal."

Social programming, consisting of beliefs and concepts propagated by a specific culture, varies in different parts of the world. In corporate America, we often take lunch at our desks to save time and keep working. In many warm-climate, Spanish-speaking countries and various other cultures, work comes to a dead halt in the middle of the day for a *siesta*. Each culture has rites, customs, and rituals that are propagated via social programming beyond the individual's conscious choice.²⁰

One may assume that customs and beliefs are passed on through word-of-mouth and learned observation, from generation to generation. In fact, these ritualistic tendencies are actually encoded in the collective mind. These specific encodings are sometimes referred to as morphic fields, a concept developed by theoretical biologist Rupert Sheldrake. This concept provides an interesting model to demonstrate the collective behavior in nature.

According to Sheldrake's Hypothesis of Formative Causation, each species has its own morphogenetic field and within each organism is a composite of many fields.²¹ The concept of morphogenetic (form-shaping) fields arose in 1920s biology to try to explain how form arises. How does an embryo develop from a fertilized egg, for example? The traditional notion was that a miniature version of the form was contained in the egg, so for example, a miniature oak tree was contained in the acorn. In this theory, everything that needed to create the oak tree was contained in the neat little package of the acorn.

In Sheldrake's view, morphogenetic fields both within and around all organisms explain their evolutionary development. Within the human body, for example, there's an all-encompassing morphogenetic field for the entire body, plus morphogenetic fields for each limb, muscle, organ, and cell, all the way down to

the molecular levels. Each of these morphogenetic fields contain their own "memory," derived from former similar life forms. In this view, the *field* of the mighty oak tree is contained in a tiny acorn, just like the DNA of an entire human being is encoded in a single human cell.

The morphogenetic field of an oak tree is patterned after previous oak trees and is dormant, but present, in the acorn. The human body generates an entirely new stomach lining approximately every five days. The morphogenetic field of the stomach lining is patterned after the field of previous stomach linings. These fields resonate with each other via a process Sheldrake calls morphic resonance. While morphogenetic fields refer to physical attributes, morphic fields refer to nonphysical characteristics like memory, beliefs, cultures, traditions, and rituals.

For thousands of years, man tried to run a mile in under four minutes. Prior to May 6, 1954, this feat was considered impossible. On that day, Sir Roger Gilbert Bannister broke the four-minute barrier in a meet between British AAA and Oxford University. Forty-six days later, Bannister's rival, John Landy of Australia broke Bannister's record. Once Bannister broke the four-minute mile, a new morphic field was formed.²² Every time a new runner broke the four-minute mile, the field became energized, paving the way for future runners. Now, over 50 years later, many high school and college athletes run a mile in under four minutes. What to perception appeared impossible is now viewed as a viable potentiality.

The etymology of *mind* reveals something interesting. "Mind" comes from Old English gemynd, which is akin to Old High German gimunt, meaning memory, Latin monere to remind, and Greek mimneskesthai to remember. So the origin of our word "mind" refers to memory and recall, with an emphasis on past "programming."

Morphic fields explain a kind of "collective memory" exhibited throughout the world in groups of animals and humans sharing similar characteristics. The concept of morphic fields helps demonstrate the nonpersonal, collective nature of our thoughts (a concept that will greatly advance our understanding of the creative condition discussed in Book II).²³

ENTRAINMENT

Morphic resonance also helps explain another extraordinary phenomenon that occurs in nature. Have you ever seen a flock of geese flying in a perfect "V" formation? Or perhaps a flock of birds sporadically taking off and landing in the trees, or a school of fish darting in unison back and forth through the water?

A National Geographic special featured a type of dolphin that feasted on sardines. The dolphins positioned themselves along the perimeter of a school of over a million sardines. The sardines instinctively formed a blockade. The dolphins then took turns diving into the blockade to feast on the sardines. What was fascinating was how the sardines responded to the attack. As soon as a dolphin retreated from the mangled blockade, the sardines immediately and perfectly repositioned themselves within the wall.

It is easy to assume that the sardines were somehow communicating with each other through physical cues, implying an observable, local connection. The same assumption might be made regarding a flock of birds flying in "V" formation, making hairpin turns as a collective group. We assume the lead bird must somehow be signaling the other birds when it's time to shift directions. Biologist Wayne Potts, however, discovered that the conscious response time (via muscle movements) of flocking birds is too slow to account for the ultra-fast course corrections these birds can make.24

This phenomenon seen throughout nature is called entrainment. The flock of birds and the school of fish are entrained to a nonlocal (not in any one position in space), collective mind. Under the appropriate conditions, if you fill a room with pendulumoperated cuckoo clocks set to various times, eventually, the clocks will synchronize.²⁵ In a large concert hall, tumultuous, chaotic clapping at the end of opera and theatre performances often shifts to a harmonious, rhythmic applause at a slower tempo.²⁶

Gazing at a field lit up by hundreds of fireflies is enchanting. For centuries, there were tales of the synchronous flashing of scores of fireflies, especially in Southeast Asia. All of these accounts were anecdotal until the research team of John and Elizabeth Buck studied the phenomenon at the great Chao Phraya (Meinam) River south of Bangkok. They observed this peculiar synchronous firefly flashing, which led to an inquiry into how fireflies adjust their rhythms in response to other flashing fireflies.²⁷ To test, they mimicked the flash of a firefly with an artificial light, and exposed it to a real firefly in a laboratory. The Bucks and their colleagues found that the individual firefly somehow shifted its flashing to sync up with the outside stimulus. Steven Strogatz, author of Sync, concludes, "Thus we are led to entertain an explanation that seemed unthinkable just a few decades ago-the fireflies organize themselves. No maestro is required, and it doesn't matter what the weather is like. Sync occurs through mutual cuing, in the same way that an orchestra can keep perfect time without a

conductor."²⁸ Once again, we see the phenomenon of entrainment to a collective morphic field in nature.

The so-called 100th Monkey Phenomenon, proposed in the 1950s, provides a fun metaphor to illustrate entrainment to morphic fields. On the island of Koshima off the coast of Japan, scientists observed the Macaca Fuscata monkey.²⁹ The scientists dropped sweet potatoes in the sand for the monkeys. The monkeys enjoyed the taste of the sweet potatoes, but didn't like the coarse texture of the sand. An 18-month-old female monkey discovered a solution: wash the sand off the sweet potato in a stream. She taught this trick to her mother and her peers who, in turn, taught their mothers.

Six years later, roughly 99 Macaca Fuscata monkeys were washing their sweet potatoes in the stream. Then, something peculiar occurred—almost ALL the monkeys on the island began washing their sweet potatoes. Even more bizarre is that colonies of monkeys on distant islands and the troop of monkeys at the main island of Takasakiyama began washing their sweet potatoes. Once a critical mass is entrained to a particular field, the field washes over the collective like a strong ocean current.

Entrainment through the collective mind isn't a phenomenon restricted to Mother Nature. It is also observable within the retail industry, whereby products like the Pet Rock, Beanie Babies, Tickle Me Elmo, Pokemon, and Webkinz become consumer obsessions overnight. The effect of this phenomenon is well documented in Malcolm Gladwell's *The Tipping Point*.

The phenomenon can also be detected at the ethereal level of thoughts and emotions. The Global Consciousness Project, for example, is attempting to demonstrate this phenomenon through the use of a synchronized network of random number generators. Led by Roger Nelson, former research coordinator of Princeton Engineering Anomalies Research (PEAR) at Princeton University, the purpose of the project is "to examine subtle correlations that reflect the presence and activity of consciousness in the world."30 Random number generators (RNGs) are connected to computers running specialized software at over 60 sites around the world including the United States, Canada, India, Fiji, New Zealand, Japan, China, and Russia. Each RNG continuously collects data at a rapid 200-bit trial per second. Each local system comprised of a RNG and a computer is connected to a network via the Internet, sending synchronized information to a central server in Princeton, New Jersey. There, the packets of data are archived and later analyzed.

The hypothesis is that the collective intentions and emotions of humans around the globe can affect the randomness of a RNG in a statistically-relevant way-essentially bringing a degree of organization to the seemingly random numbers. Imagine a straight, horizontal line going across a standard chart where the line represents pure randomness. Anything above or below this baseline signifies a leap beyond the realm of chance. The farther away you go from baseline, the less likely an event is random.

The results of this project, which began in 1998, are promising. During highly-emotional events like New Year's Eve at the turn of the 21st century, the funeral ceremony of Princess Diana, the first hour of NATO bombing in Yugoslavia, and 9/11, there's an observable shift out of randomness. These ongoing studies and others of a similar vein, help point to a unified, collective mind.³¹

ACCUMULATING DEVIATION OF RESULTS FROM CHANCE EXPECTATIONS

The jagged line shows the accumulating excess of significant events relative to chance. The Project estimates that the odds against chance are about a million to one.

We unknowingly become entrained to belief systems all the time. A news report leads to hysteria in the public, and each person who adopts the belief energizes the belief's morphic field. Over 150 years ago, Charles Mackay documented a myriad of entertaining cases of mass hysteria in his classic, Extraordinary Popular Delusions & the Madness of Crowds.

Like the Macaca Fuscata monkeys, humans are constantly being entrained to positive and negative collectively-influential thought fields. With this basic awareness of perception, thoughts, and the collective nature of memory and beliefs, we now turn our attention to the *content* held within the collective field.

Chapter 2

Concepts of the Old World

For many confused scientists and philosophers, the equation, the concept, or the blueprint have become more real than the phenomenological reality itself.

—Abraham Maslow, The Farther Reaches of Human Nature

OLD PARADIGMS

Even though we might intuit the collective nature of our thoughts, we often feel suspicious of the notion, believing that our thoughts are private. But wait a second, you may be thinking, I know I'm thinking my thoughts. I know my thoughts are mine. When a bizarre, even violent or sadistic thought crosses our awareness, the assumption is that we originated the thought, leading to feelings of guilt or shame. In our narcissism, we believe we are the first person to conceive such a horrendous thought, even though rationally, we know this is not likely.

We'll delve into the mechanisms behind "personal" thinking in chapter 4. For now, it's only important to remain open to the idea that our perception is often misleading and there's a collective mind linked to collective memory. With this awareness, we can surmise the existence of different assumptions, beliefs, or *programs* in the collective mind beyond our conscious choice.

Examining some of these programs helps us remove hidden mental barriers to a larger worldview. Aware of potential limitation, we can explore our assumptions and beliefs, and choose whether or not they support our way of viewing the world. For example, if we believe that our religious affiliation is the "right" one and all others are "wrong," we create a wall of separation from the whole of humanity, exclude the possibility that errors exist within our religion, and deny the potentially-higher truths of other teachings. Scholar Joseph Campbell's life work demonstrated the obvious and remarkable parallels that exist throughout all religions and myths for thousands of years, bringing a sense of uniformity and appreciation for *all* the world's traditions.¹

Our viewpoints often further fragment our experience by separating us from large segments of the world's population via nothing more than a belief system. In his classic study of scientific discovery, *The Structure of Scientific Revolutions*, Thomas Kuhn defined a paradigm as a set of common practices and assumptions that scientists (and others) share about a scientific discipline or the meaning of particular problems during a period of time.² For example, for decades, neurologists believed—or rather, *knew*—that no new neurons are created in a developed brain. Despite reports to the contrary, it wasn't until Princeton professor and neuroscientist Elizabeth Gould conclusively demonstrated that new brain cells are indeed created by the mature animal brain that the exciting field of neurogenesis emerged.³

A paradigm can be so dominant and pervasive that it falls below our awareness, while still influencing and limiting the way we think or perceive reality. This leads to what we might call "paradigm blindness" or "paradigm allegiance." Examples of paradigm blindness are seen throughout history. We once *knew* the earth was the center of the galaxy; we once *knew* the earth was flat; we once *knew* the atom was the smallest building block of matter.

And today, science still *knows* the universe is explainable through the deterministic or reductionistic paradigm. As former president of the Institute of Noetic Sciences Willis Harmon, and human behaviorist Howard Rheingold wisely explain:

Since we can easily observe that other cultures, past and present, have their hidden biases and blind spots-from societies that tolerate slavery or cannibalism, to those that worship cats or live in fear of eclipses—it is reasonable to assume that our culture probably has its own biases. But to anyone with years of scientific training, all through which the conviction was thoroughly drummed in that conventional science is our surest guide to truth, it can come as a shock to realize that science itself (or unreasoning belief in its unlimited power) might be seriously biased.5

Before we can transcend an old paradigm, we must uncover it, and this discovery process often leads to new insights. As Arthur Koestler aptly determined, "Discovery often means simply the uncovering of something which has always been there but was hidden from the eye by the blinkers of habit."

Experiment: Uncovering Blindness

Contemplate on the following questions:

[1] What do you hold to be true? What do you *know* is true (as opposed to what you read or heard about from someone else)?

- [2] What do you believe about the world? About your country? About your culture? About the fate of humanity?
- [3] What are your beliefs about people in general?
- [4] Are you aware of any destructive beliefs you may have about yourself, your community, your religious affiliation, or any other aspects of your identity?

Simply surveying or contemplating any of these questions reveals a host of positions and belief systems that may be limiting one's understanding of reality.

* * *

SCIENCE'S OLD WORLD

The word "science" comes from the Latin root scire meaning "know." Although science is now used mainly in the context of examining the physical world, a broader definition of science might be explained as the systematic pursuit of knowledge or truth.

Science plays a larger role in our lives than we realize. In addition to increasing our understanding of the physical world (which leads to breakthroughs in our understanding of nature and technological advances affecting our quality of life), science greatly impacts the collective thinking of our culture.

First, we're going to explore the dominant paradigm of the past three centuries: the *Old World* of classical physics. Then, in the following chapter, we'll contrast this paradigm with the *New World* view of advanced theoretical science.

The Old World was comforting. Scientists believed that everything in the world followed precise, observable laws. The right intellectual maneuvers coupled with mathematical computations would help us uncover how the entire universe started, how it all works, and with the same precision, how it will all end.

In the Old World, we believed if you couldn't see or measure something, it wasn't real. This was actually a critical belief for Old World thinkers because if there were things beyond measurement, how could we ever hope to fully comprehend what things were and how they worked? There seemed to be a lot of data and experience to support this what-you-see-is-what-you-get perspective. You could use formulas to accurately predict where a ball would land based on its velocity, weight, and trajectory. Impressive, indeed.

Unexplainable anomalies lurked in the shadows, however. Unpredictable data that fell outside the understanding of this worldview were labeled as errors, chaos, or noise. Phenomena including psychic abilities like telepathy,8 synchronistic occurrences,9 spontaneous healings, prodigies, and near-death experiences all fell outside the model. The Old World dealt with the overwhelming evidence of these "anomalies" by sweeping them under the rug or simply rationalizing them away with remarks like, It must have been a misdiagnosis or miscalculation, or Something else must have caused it.¹²

Perhaps there were more obvious flaws in Old World thinking: How can you measure your love for someone else? What is the meaning of a sunset? What is the meaning of a flower's beauty? Or as we addressed in the previous chapter, how does the mind work? Or where do thoughts form? While the external, objective world of science is measurable, there appears to be another domain, an internal, subjective one, that science has trouble understanding. The belief of the Old World is that everything—which would include both the

objective and subjective world—is definable, measurable, and knowable. As His Holiness the Dalai Lama explains:

In addition to the objective world of matter, which science is masterful at exploring, there exists the subjective world of feelings, emotions, thoughts, and the values and spiritual aspirations based on them. If we treat this realm as though it had no constitutive role in our understanding of reality, we lose the richness of our own existence and our understanding cannot be comprehensive. Reality, including our own existence, is so much more complex than objective scientific materialism allows.¹³

Moreover, the varied-yet-unifying testaments regarding an experiential and subjectively verifiable Oneness of existence from mystics and sages across every culture and tradition worldwide for the last 5,000 years is difficult for even a scholar to deny. These similarities were documented by William James in *The Varieties of Religious Experience*, Joseph Campbell in *The Hero nith a Thousand Faces*, and Aldous Huxley in *The Perennial Philosophy*, among others.

DYNAMIC DUO OF THE OLD WORLD

Over a century ago, the father of modern psychology, William James, warned us of our ignorance: "[U]nderstand how great is the darkness in which we grope, and never forget that the natural-science assumptions with which we started are provisional and revisable things." ¹⁵

Two brilliant minds of the 17th Century are generally given credit for the discovery of Old World: French philosopher and mathematician René Descartes and English physicist and mathematician Sir Isaac Newton. 16

René Descartes (1596-1650)

A pioneering thinker of his time, René Descartes realized the need for establishing guidelines or rules for the study of truth. To that end, he crafted four rules for finding truth in his famous Discourse on Method in 1619: 17

Never accept anything as true that one does not clearly know to be such.

As we observed in our discussion on perception, this rule poses numerous problems. What we think we know is based on a set of beliefs, experiences, thoughts, memories, and meanings. Anything that is processed through the mind—contained in the form of thought—is not knowledge, but rather theory and belief. As the Sages reveal, the mind cannot know anything—it can only know about something. 18 To know something requires you to be it as a consequence of subjective realization. For example, you can know everything there is to know about being a bird; however, a human being can never know what birdness is like.

[2] Divide each of the difficulties under examination into as many parts as possible.

The underlying assumption here is the sum of the parts equals the whole. This law forms the foundation for a machine-like (mechanistic or deterministic) worldview.

By this "rule," if you dissect an ant into all of its individual parts, you can learn everything there is to know about an ant. Science's current understanding of complexity theory concedes that you cannot accurately comprehend a particular organism isolated from the environment and other contextual factors in which it exists.¹⁹ Although the parts tell certain aspects about the "whole," they do not communicate the entire story.

[3] Begin with the simplest and easiest, then work step-by-step to the more complex.

Again, we see a linear, mechanistic thought process that assumes if we break something complicated into individual steps, we'll be able to understand the complex system as a whole. The development of nonlinear dynamics (the mathematical aspect of chaos theory) discussed later demonstrates a reality far more sophisticated than a "step-by-step" linear approach can reveal.

[4] Make enumerations so complete and reviews so general to be assured nothing is omitted.

If the world is governed strictly by mathematical laws, as the Descartes worldview held, it must be completely knowable, provable, and definable. A strictly physical world governed by strictly physical laws would negate the reality of inner subjective experience, which is nonlinear (in that it does not follow a cause-and-effect relationship as there is no beginning, middle or end), and generally unprovable, yet verifiable through conscious awareness.

Descartes realized thoughts and the elements of the mind didn't fit his rules. He viewed physical matter as a substance that occupies space, while the mind consisted of a "thinking substance" that does not occupy space. The nature of body (matter) and mind were so different that there was no basis for a relationship between them (even though experience tells us otherwise). This dilemma was explored in his inability to reconcile res cognitas (the cognitive, internal experience) from res extensa (the objective, external world as it is)20—which has come to be known as Cartesian Dualism. The nature of the mind and of the physical, material world was so different to Descartes that there was no basis for a relationship.²¹

As Bohm explains:

Descartes solved the problem by assuming that God, who created both mind and matter, is able to relate them by putting into the minds of human beings the clear and distinct thoughts that are needed to deal with matter as extended substance. It was also implied by Descartes that the aims contained in thoughts had somehow to be carried out by the body, even though he asserted that thought and the body had no domain in common.²²

To summarize, Descartes saw the world as a machine (or "the whole"), where the collective pieces equaled the sum of its parts. This material, mathematically-organized world is seen as limited, finite and definable. As such, this world is knowable, explainable, and understandable. This deterministic philosophy has become known as Cartesian thinking and is still highly-pervasive throughout the sciences (as well as in the collective thinking of mankind).

Sir Isaac Newton (1643-1727)

Another genius of that era who helped solidify the roots of Old World science was the English physicist Sir Isaac Newton. Newton is considered the founder of classical physics (also known as Newtonian physics), calculus, and a host of other foundational areas of science. In his pioneering *Philosophiae Naturalis Principia Mathematica* in 1687, Newton identified three laws of motion and a description of universal gravitation from which the physical world appeared to operate. Classical physics is based upon the notion that the material world is comprised of tiny bits of matter/energy interacting in definable, measurable ways, where every event is preceded by an observable cause.

Newton's three laws of motion formed the foundation of classical physics:

[1] Objects in motion tend to stay in motion, and objects at rest tend to stay at rest unless an outside force acts upon them.

Force. Counter-force. Action. Reaction. This linear, cause-and-effect relationship in matter forms the basis for the reductionistic model of the Old World. As we'll demonstrate shortly, the belief that events have a direct "cause" is an error of perception. From an individual's perspective, cause and effect appears to be an actual phenomenon; however, quantum mechanics has demonstrated that this is not the case at the subatomic level.

[2] The rate of change of the momentum of a body is directly proportional to the net force acting on it, and the direction of the change in momentum takes place in the direction of the net force.

Newton believed all motion is created by *force* initiated in the observable universe. This has been the predominant assumption of classical physics for the last three hundred years. Recently, physicist Efthimios Harokopos demonstrated that a power operating outside the physical domain (rather than *force* initiated in the physical universe) governs motion in the universe.²³

To every action (force applied) there is an equal and opposite reaction [3] (equal force applied in the opposite direction).

Once again, we note the same deterministic, linear, cause-and-effect thinking still prevalent today. (See "Beyond Causality" below for an in-depth discussion on this topic.)

Using Newton's laws, physicists calculate events in the observable world with reasonable accuracy—a truly extraordinary achievement. The observations of Newtonian science are relatively consistent with our senses. We can visually see the response when a cue ball smacks into a rack of billiard balls—the balls scatter in predetermined patterns based on the trajectory and velocity of the cue ball and the positions of the other balls.

Newton, despite his accomplishments and advancements in scientific investigation, was humbly aware of the limitations of his worldview. "I do not know what I may appear to the world; but to myself I seem to have been only like a boy playing on the seashore, and diverting myself now and then finding a smoother pebble or a prettier shell than ordinary, whilst the great ocean of truth lay all undiscovered before me."24

SYMBOLS, WORDS & THEORIES

As we've stated, the mind is incapable of seeing Reality as it is. Bohm called this "fragmented thinking" one of mankind's greatest obstacles to solving the world's problems because it leads to a limited worldview. The mind operates with fragmented abstractions, mistaking the concepts or symbols it uses for the real thing instead of what they represent. The mind confuses essence with appearance, believing the description of something represents what a thing actually is or means. We also noted the mind's inability to know anything; it can only know about things because to know something requires being it. The dog knows what dogness is as a consequence of being a dog, an experiential state beyond language and concepts. A human being can only know about what it is to be a dog.

A "theory" or "word" points to something, but in itself, the theory or word holds little meaning. For example, if someone asks why plants are green, the basic answer is chlorophyll. If we ask, *How do plants capture the energy of light, process it, and store it as energy?* the answer is photosynthesis, and we could go on to explain the process we've come to understand. Our minds then assume that photosynthesis is a "real" thing, objectively-defined by science, as opposed to a term representing a naturally-occurring phenomenon. Photosynthesis is a concept—a symbol we use in language. Reality requires no words.

Take a banana peel, an empty can of tuna, and a container of leftover food and place them on the kitchen counter. Each of these items may have their own meaning; however, if they are placed in a receptacle with a plastic bag, they merge into a fourth concept we call "garbage." Garbage holds different meaning than the individual objects it contains.

Scratch your arm when it's dry and you'll notice an accumulation of dead skin cells under your fingernails. Now, scratch your head and the same white, powdery substance will flake off your scalp as "dandruff," which, at least in American culture, means something different than, say, your standard household dust found in the corner of a room, largely comprised of the same dead skin cells. This dust, which floats around the room via tiny air currents, is breathed in through your nose where it is caught by tiny moist hair follicles. When enough of this dust (dead skin cells) accumulates, it forms another concept with a completely different meaning: snot or boogers!

Constellations offer a proficient way of highlighting the mind's ability to abstract based on information from the external world. Looking up at the night sky, we can observe patterns formed by the stars. We give these formations names like Andromeda, Orion, Pegasus, and Ursa Minor. These patterns, in reality, are arbitrary points of light and not actual forms observable from a spacecraft.²⁸

Two foundational concepts are worth noting here because they form not only the basis for science, but also, our daily experience: time and space. Einstein's discovery of the relativity of time ushered in a new perspective for understanding the cosmos. Time is a necessary concept for perception with no independent existence in the physical world. As physicist Peter Lynds observes, "[A] 'flowing' time and progressive present moment are the products of our subjective perceptions and underlying neurobiology, without actual physical foundation in nature."29 Time is merely a concept we project onto the world. A Course in Miracles cautions, "Time is a trick, a sleight of hand, a vast illusion in which figures come and go as if by magic."30

Mystical poets like William Blake intuited the illusionary nature of time:

Till the Heavens & Earth are gone
Still admired by Noble minds
Followed by Envy on the winds
Reengraved Time after Time
Ever in their Youthful prime
My Designs unchanged remain
Time may rage but rage in vain
High above Time's troubled Fountains
On the Great Atlantic Mountains
In my Golden House on high
There they Shine Eternally³¹

Similarly, *space* is an illusionary concept with no independent existence used by the mind to facilitate perception and cognition.³² Causality, the law of cause and effect, is also a concept, not an actuality. For our later discussion on creativity, it will be helpful to examine the concept of causality as well as the notion of opposites in order to better comprehend their innate limitations.

BEYOND CAUSALITY

The Old World of Newtonian science solidified the notion of causality: condition A *causes* condition B. For centuries, mankind believed Newton's laws of cause and effect to be irrefutable laws of nature.³³

The concept of causality can be observed across the full range of disciplines. In medicine, we look for the *cause* of disease. In law,

we look for the perpetrator or cause of the crime. In psychology, we look for what causes the mental illness, like socioeconomic conditions or childhood trauma. In natural science, we look for the cause of the universe, like the "Big Bang."34

Every action has a resulting consequence (Newton's Third Law of Motion) is the commonly-held belief. For example, it is assumed that if someone has a cold, you can "catch it" through the transmission of germs. Does this always happen? Of course not. Why not? There are innumerable additional factors, like the state of the person's immune system, their nutritional constitution, their white blood cell count, and their emotional and mental health. If the person is in prime physical condition and manages stress effectively, they are less likely to "catch a cold" regardless of how much direct contact they have with the ill individual. The germs don't cause the cold—the conditions for the cold to arise must first be present before the cold can manifest.

What causes a flower to grow and bloom? One might say the soil, sun and water cause the flower to bloom, but this is an error. Nothing causes the flower to bloom. It is the flower's nature to bloom when the right conditions are present: the right amount of light, sufficient nutrients in the soils, and adequate rain or water. When the proper conditions are present, the flower blooms as a consequence of its essence, but those conditions cannot be said to cause the flower's blooming.

The concept of causality is deeply rooted in our business thinking. Let's say a marketer runs a particular radio advertisement and sales spike over 10% during the period the ad runs. The marketer's mind assumes a cause-and-effect relationship: the ad caused the sales spike (the effect). Then, the marketer runs a

similar ad, but this time, there's no correlating sales spike. What happened?

There are an infinite number of possibilities. The ad may represent a particular condition that helped lead to a sales increase, but it is not an *independent cause*. Deeper insight may reveal factors like the specific market the ad ran, the exact tone and energy of the ad, market timing, and its underlying strategy collectively produced the optimal conditions needed for customer acceptance or rejection of the company's products.

Now let's apply this notion to the topic we are going to explore: creativity. Creativity researchers generally approach their studies by trying to uncover the psychological, environmental, social, neurological, or relational *causes* of creativity. Just because a creative genius like Sigmund Freud may have had mentors or confidants in his early years of development and periods of isolation in the later years of his creative work should not imply a *cause* for his creativeness or even prerequisite factors.

Even if this pattern is consistent in ALL creative geniuses, this pattern could only imply two approximate conditions when genius manifests. Furthermore, if one is able to uncover all the apparent external, observable conditions of creativity, he still lacks the elusive, inner conditions needed for creativity to manifest. All the external traits may be present, but if the nonlinear, unmeasurable aspects of creativity are not, creativity will not manifest. The challenge with academic approaches to the study of creativity is that within the Old World paradigm, you can't see the whole picture because there is no *cause* for creativity. 36

As will become apparent in Book II, an examination of the inner conditions is infinitely more useful. When the subjective, inner conditions are appropriate, the creative impulse has a greater

possibility of emerging. All the external "causes" for creativity like an individual's personality, their physical environment, and the overall culture can be present and creativity may not arise. Uncovering the inner conditions necessary to foster creativity is more useful in helping us to understand the mystery of creativity.³⁷

Professor Emeritus of Physiology at the University of California, San Francisco Benjamin Libet's relevant discovery in neurobiology helps demonstrate the illusionary nature of causality. The brain needs a relatively long period of activation before an event can be registered in awareness, according to Libet's research. He and his colleagues have experimentally demonstrated that "awareness of a sensory event does not appear until up to 0.5 seconds after the initial response of the sensory cortex to the arrival of the fastest projection to the cerebral cortex."38 When you tap your finger on a table, you believe you experience the event in real-time; however, you have conscious awareness of the finger tapping only after the brain has adequate time to process the event. Unconscious brain processes precede sensory awareness; the external world is not being experienced in real-time as we assume. This unperceived sensory delay leads us to believe we make a decision and then act, simulating a causal sequence that does not necessarily exist. Essentially, we are experiencing reality (via perception) through a time delay. We assume that we are controlling events as independent causal agents of our actions; however, Libet's research is suggesting otherwise.

Chaos theory has arrived at a similar conclusion as authors John Briggs and F. David Peat noted, "The scientists of change have learned that the evolution of complex systems can't be followed in causal detail because such systems are holistic: everything affects everything else."39

The mind sees an object moving through space. The mind projects motion onto the object, assuming the force of the prior moment is causing the position in the current moment. This illusion is similar to our experience with a picture flipbook. Although each image is self-contained on an individual page, when you flip through the book quickly, the ordering of the images gives the illusion of movement.

Why do we so readily see "causal" connections? The mind processes "events" linearly, from a starting point to an end point, assuming the prior point is the cause of the next point. This linear sequencing gives rise to a perceived causal relationship of events. What is actually happening is *emergence*—an unfolding of Creation from instant to instant.⁴⁰ In Reality, everything in this observable domain is happening of its own accord, when the conditions are appropriate.⁴¹ Nothing is *causing* anything else to happen.⁴²

A popular illustration from quantum mechanics, a common simplification of Bell's Theorem, derived by physicist John Bell, will underline this acausal understanding. Imagine a small explosion of light in front of you, which emits two special kinds of particles called photons. These two particles are motionless when they emerge, meaning they aren't spinning at all. Now, imagine one particle stays where it is, say, somewhere in the United States, and the other finds its way to the coast of Australia. You decide to observe the particle in the United States. Amazingly, that particle begins to spin clockwise. More amazingly, the particle that remains in Australia simultaneously begins spinning counter-clockwise, even though there's no local connection between the two.

Observing the particle in the United States doesn't cause it to spin, nor does the spinning particle in the United States cause the particle in Australia to spin in the reverse direction. All of these events arise on their own and occur simultaneously or, to borrow the Jungian term, synchronistically. This illustration, which continues to baffle scientists, demonstrates how human observation in the form of consciousness affects the subatomic world.44 This new understanding of the quantum reality, discussed further in the next two chapters, has led theoretical science to a revised perspective about causality.45

Observing conditions, instead of looking for "causes," can be a fruitful perspective in any field. For example, let's say you own a business and you want to have more loyal customers as opposed to constantly generating "new business." Can a business determine the characteristics of a brand on its own, or does it need the customer to embrace the desired brand experience? Although designing a logo and touting the benefits of your company are nice, the experience of the brand is mainly in the hands of the customer, not the company. Can the Disney Corporation make someone have fun at Disney World? Of course not. All they can do is present the right conditions: a clean park, rides that work, fresh cotton candy, friendly employees including Mickey and the gang to mingle with the visitors. These conditions increase the likelihood of a positive customer experience. Ultimately, building a brand is a "co-authored experience" with the customer. 46

TRANSCENDING THE OPPOSITES

The mind is dualistic by design. The mind believes itself to be the subject and everything outside of itself is the object. Think about how perception operates, taking in information through the

five senses from the *outside* environment. The mind's dualistic wiring, where a "this" is observing a "that," is the core obstruction in one's ability to move beyond the Old World perspective to a more expansive worldview.

In dualizing reality, the mind sees everything as separate from itself. A this-or-that, you-or-me, subject-or-object, either-or relationship is always perceived. The mind sees things as black or white, hot or cold, on or off. Think back to high school algebra: A+X=B. You're given two different variables and asked to solve for X. The mind tends to think in terms of concrete variables like A and B, good and bad, right and wrong.

From the Higher Ground perspective, however, there is only one variable, not two. For example, let's take light and dark. There's no such quality as darkness—just the absence of light. There is either light or no light, and there are infinite gradations of light like blinding light, bright light, strong light, subdued light, dim light, and dusk light. Even "darkness" contains various degrees of the absence of light like dark and pitch black.⁴⁷

Similarly, there is no duality between black and white. There's only the color white and its infinite gradations. Each gradation is experienced by the mind as being separate from every other degree. When light hits a prism, the light breaks into a vibrant spectrum of color. A color is nothing but a concept or a label—a name you give something. Red, orange, yellow, green, blue, indigo, and violet are colors, but they are really just manifestations of an all-encompassing quality called light.

As another example, consider water. Water can take various forms: liquid, vapor, or ice. Although each of these forms appears different, they're simply qualities of H₂O.⁴⁸

And electricity—when you turn a light switch on, electricity courses through the wire. What happens when you turn the light switch off? Does no-electricity flow through the wire? There's no such quality as no-electricity. Similarly, the switch is either on or not on-there's no quality called "offness."

Fritjof Capra, in his classic book paralleling the lessons for quantum physics with Eastern philosophy, The Tao of Physics, explains:

Opposites are abstract concepts belonging to the realm of thought, and as such they are relative. By the very act of focusing our attention on any one concept, we create its opposite ... Mystics transcend this realm of intellectual concepts, and in transcending it become aware of the relativity and polar relationship of all opposites. They realize that good and bad, pleasure and pain, life and death, are not absolute experiences belonging to different categories, but are merely two sides of the same reality; extreme parts of a single whole.⁴⁹

The challenge with opposites runs much deeper than mere linguistics. The black and white, dualistic thinking of the Old World presents a nearly insurmountable barrier to understanding the nonlinear, subjective domain required for understanding creativity.⁵⁰

You can catch the mind any time it tries to judge an event through its dualistic lens by saying, "This is good" or "This is bad." The mind assumes there are only two positions: the one it's holding and another of opposite value, with no possibilities in between.

Becoming aware of the mind's dualistic proclivity, we begin to transcend this illusion and notice a continuum of possibilities instead of an either-or scenario. An opposite is merely perceived as such from the position of the observer. The context of what is being perceived by the observer changes the meaning of that which is observed. The conditions of an event change the appearance of the event. What appears to be an opposite at one level is seen as *degrees* or *gradations* of possibilities from a higher level of understanding.

By turning inward to an awareness of one's subjective reality, one has the potential of transcending the duality of the opposites, revealing a new understanding of Reality.

* * *

Both Descartes and Newton were true geniuses of their time. Their contributions catapulted mankind into a new era of science, paving the way for the modern, technologically-driven society we enjoy today. Now, the collective knowledge and discoveries of the past century require us to let go of many Old World assumptions. Operating from a 300-year-old paradigm limits our understanding of the world around us. The Old-World view is now called the "mechanistic paradigm" (also called the Newtonian paradigm, scientific determinism or atomistic thinking). Those who still preach it are labeled "material reductionists" because they reduce everything down to the material, physical, observable world and deny or negate the potential truth inherent in an inner, subjective, "mathematically unprovable" experience. The Newtonian paradigm is not "wrong"; rather it is limited and contained within a larger, more expansive paradigm we'll now explore.

The Flat Earth Society, founded in 1547, still maintains the belief that the earth is flat, 500 years after Christopher Columbus's discovery. The organization still exists today and accepts new membership.⁵¹ Indeed, old belief systems are often hard to release. Our need to better understand our creative nature, however, requires the surrendering of the Old World paradigm.

Chapter 3 The New World and Beyond

The kingdom of God cometh not with observation. Neither shall they say, Lo here, lo there! For the kingdom of heaven is within you.

—Luke 17:20-21

WELCOME TO THE NEW WORLD

Today, quantum mechanics and the New Science represent the emergence of a New World that began in the early 1900s, and required restructuring how we understand reality. One might think the Old World paradigm would have faded with the development of the New Science. A century later, however, the mechanistic paradigm of the Old World still grasps the collective mind in its weakening clutch.

When physicists broke down the atom into its basic form, they discovered that subatomic particles were actually *vast regions of empty space*. Take a book, table, rock, tree, or even a human cell, and when you break it down to its core substance, there's only empty space. The basic stuff of the entire universe—the building blocks of the physical world—has no dimension. (Yes, it's difficult to fathom and strange indeed.)

Things became more confusing when scientists made another unforeseen discovery: when they observed the subatomic particle

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Scott Jeffrey has been a crucial part of my development as an author. But now, having just read *Creativity Revealed*, I finally understand how he has been able to guide me so successfully. In this unprecedented book, Scott reveals the facts about creativity's own origins. Perhaps of greater significance, however, he explains how I can at last begin to harness the creative impulse. Unexplained bursts of energy and fleeting thoughts now hold new meaning. I will read this book again ... immediately.

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Creativity Revealed will simply transform the way you think. Both inspiring and provocative, its applications in business and every other field are endless.

Julie Gardner Chief Marketing Officer, Kohl's Department Stores



Creativity: the most precious gift you can give yourself and those you love. The principles contained herein will change your understanding of the true nature of reality.

Creativity Revealed is for layperson and scientist alike. No matter what your calling, gaining a deeper understanding of how to set the conditions necessary to unleash creativity will change your life in wonderful ways you can't predict.

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