

# Cracking the Synergy Source Code

*Finding Meaning & Purpose in Your Life*

*What We Didn't Learn in School –But Should Have!*

Volume TWO

## Dynamic Differential Energy

*Revolutionary Discoveries  
of the Greeks*

The secret sources of synergy have been virtually hidden for over two thousand years.

Through some deep investigative analysis, we've uncovered the remarkable insights of the ancient Greeks that unleashed the greatest spurt of innovative thinking humankind has ever seen.

Travel back into the minds of some of the best thinkers the world has ever produced to see how they thought; learn how their thinking can change your life today.

*By Robert Porter Lynch*

# Revolutionary Discoveries of the Greeks

---

## *Preface*

For years I have been searching for the “secret code” to the source of synergy.

The Greeks invented two words: *synergy* (to join energies) and *zyzygy* (to align or yoke together). If they had named the process, they must have had more in-depth thinking about it.

In writing my next book, *Trusted to Lead*, I wrote a number of “Thought Pieces” on key themes. This volume emerged from that research for my book, as well as earlier work done with my colleague Ninon Prozonic about the Greek innovation process and how they discovered the secrets of “synergy.” I also thank my friend, Jerry Dell Ehrlich, one the finest scholars and author of several insightful books on Plato’s deep spiritual constructs that are now the foundation of much of modern thinking about divinity.

My original purpose was to understanding why the Roman Empire failed to produce the *level of innovation* of their Greek predecessors, along with the exploration of the early Christian Church and its Greek roots.

What came forth out of the exploration was a set of discoveries and inter-connections and themes that surprised me as a wonderful spiritual source code began to be unveiled. Because I had never seen it written before, I was compelled to put it to paper and pen.

For sure, there have been a few others who have been down this path before. In recent history the names one might recognize are Albert Einstein, Carl Gustav Jung, and Buckminster Fuller. I hope this exploration adds to their pioneering body of knowledge.

Robert Porter Lynch

Naples, FL

June, 2012

# Dynamic Differential Energy

---

## DEDICATION

This volume is dedicated to the memory of Paul R. Lawrence:

Thought Leader, Mentor, and Friend who first introduced me to the idea differential energy, and whose modern development of differential energy over the last half century has made a massive contribution to the successful functioning of organizations and strategic alliances.

In his last two decades on this planet his personal dedication to developing a useful model of the interactive causes of human behavior exemplifies how “dynamic differential energy” operates in the human brain. Paul epitomized the qualities of the finest Greek criteria of human character: rigorous thought, virtuous action, commitment to the greater good, courage of convictions, humble humility, and deep wisdom.

An enlightened realist, Paul’s contributions were always aimed at one ultimate objective:

*Raising the World to a Higher Level*

\*\*\*\*\*

Please Note: This is still in a DRAFT form, for comment only.

Please send your comments to:

[RobertLynch@warrenco.com](mailto:RobertLynch@warrenco.com)

Further Note: There are still typos, grammatical errors, and lapses in logic which the reader may spot. Please forgive any such errors. Permissions for use of materials have not been requested.

Not for Distribution

June 10, 2012

# Revolutionary Discoveries of the Greeks

---

## CONTENTS

Chapter ONE: In Search of Synergy in the Greek Culture .....	8
Prelude.....	8
Impact of Culture .....	10
Quest for Synergy.....	11
Cracking the Code.....	11
Reaching Back to the Future .....	13
Chapter TWO: Discovering Dynamic Differential Energy....	14
Search for the Essence of Creation .....	14
Differentials & Greek Quest for Synergy .....	15
Unity & Polarity in Ancient China.....	17
What Created a Cluster of Thought Leaders? .....	18
Pythagorean Harmonies.....	19
Golden Spiral .....	21
Heraclitus & the Dynamic Power of Polarities .....	22
Crisis & Change.....	26
Differentials in Thinking .....	27
Harmonizing Differentials .....	28
Joining Harmonies & Polarities.....	30
Unity, Diversity & Adaptation.....	31
Beethoven's Harmonies & Polarities .....	32
Dynamic Energy .....	34
Synergy .....	34

# Dynamic Differential Energy

---

Truth .....	35
Trust is More Important than Life Itself .....	36
Courage, Character & Relationships.....	37
Linking Ethics to Friendship .....	37
Friendship & Creationship .....	41
The Three Treasures .....	42
Aligning Forces of Greek Innovation System.....	43
Why Alignment is Essential to Trust .....	43
Destructive Potential of Differentials.....	44
Chapter THREE: Core Values of the Greeks.....	46
Six Core Values .....	46
1. ARÊTE --VIRTUE .....	47
2. PHILOTIMO --LOVE OF HONOR .....	48
3. SOPHIA -- WISDOM .....	51
4. KOINONIA --COMMUNITY .....	52
5. METANOIA - MIND SHIFTING .....	57
6. HISTORIA -- DEEP INQUIRY.....	60
Conclusion & New Beginning .....	62
Chapter FOUR: Digging Deeper into the Magic of Synergy ..	65
Power of Progression .....	65
Cultural Impact on Innovation & Co-Creation.....	68
Diabolical Impact of Fear on Creativity.....	72
Power of Expression of Ideas in Language .....	73
Fear and Courage.....	74
The Energy We Receive From Trust .....	75
What Kind of Quest?.....	76

# Revolutionary Discoveries of the Greeks

---

Chapter FIVE: Differential Energy Rediscovered.....	78
Heraclitus Revisited.....	78
Albert Einstein: Polarities and Relativity.....	80
Carl Gustav Jung & Human Psyche Polarities.....	83
Kurt Lewin and Dynamics Force Fields.....	85
Lawrence-Lorsch – Differentiation & Integration.....	87
Emergence of Strategic Alliance Synergies.....	88
Polarities in the form of Four “Drives” .....	92
Comparing the Four Drive Model to Maslow.....	94
Reconciling Behavior and Personality.....	95
Application of the Four Drive Model: Trust.....	96
Chapter SIX: .....	97
Competition, Cooperation & Creative Destruction.....	97
Are humans Competitive or Collaborative?.....	97
Collaborate Internally, Compete Externally .....	99
Air War Over Texas .....	100
Innovation & Forces of Creative Destruction.....	103
Innovation & Forces of Creative Destruction.....	103
Cognitive Diversity & Differential Thinking.....	105
Differentials & DNA .....	107
Differentials in Thinking Source of Innovation Flow	108
Diversity in an Acquire & Defend World .....	109
Differential Energy & Metanoic Shift .....	110
Is Synergy a Natural Act? .....	112
Buckminster Fuller .....	112
Gyorgi Doczi.....	113

# Dynamic Differential Energy

---

Peter Corning .....	115
Chapter SEVEN: The Next Horizon.....	119
Business Attempts to Achieve Synergies .....	119
High Failure Rates in Mergers & Acquisitions .....	119
How Strategic Alliances Achieve Synergy .....	123
Classical & Synergistic Trust.....	125
Nissan Case Study in Synergistic Trust .....	127
Conclusion .....	128
Differential Synergy & Unity in Diversity Flaws .....	129
Core Elements of Synergistic Thinking .....	131

# Revolutionary Discoveries of the Greeks

---

## CHAPTER ONE: IN SEARCH OF SYNERGY IN THE GREEK CULTURE

### *Prelude*<sup>1</sup>

Innovation is one of most important competitive advantages any organization can possess. To understand innovation in a new light, our study team realized we could gain a valuable and unique perspective by exploring innovation in a wide variety of contexts. One era we knew would be fertile territory was the period in

---

<sup>1</sup> My deepest thanks to Ninon Prozonc for her unflagging devotion in helping me “Crack the Ancient Greek Synergy Code.” Her profound insights into the thinking of Ancient Greece enabled us to engage in “process archeology,” which had not been addressed by other scholars. We began the search for understanding synergy seeking the answers to two questions:

- How did the Greeks, in a short period of just 300 years and with a small population and no basis of precedent, create so much innovation so fast? (There appears to be no culture in history that produced so much innovation so fast with so few people, including today’s modern society)
- If the Greeks created the word “synergy,” they must have had a process for it? What was it? We believed if we could shed some light on these two questions, we could have a major impact on the process of today’s innovation.

In addition, Jerry Dell Ehrlich, author of *Plato’s Gift to Christianity* and the *Platonic Bible* became a wonderful friend and a great advisor to me to gain a very deep appreciation of the spiritual dimensions of Greek society.



# Dynamic Differential Energy

---

Greece from about 510 BC to 146BC – the time known as the Golden Era of Hellenic<sup>2</sup> Invention. This time is particularly intriguing for several reasons:

1. There is no period in the history of the world where, on a per-capita basis, there was more intense innovation. It was during this era that the Greeks invented new language, new architecture, new medicine, new literature, new philosophy, new theatre, new mathematics, new astronomy, and many great scientific inventions, such as the steam engine and the first geared chronometers, new engineering, and especially new insights into the nature of the world.
2. There was very little precedent for what the Greeks did. While the Hellenistic era followed their Egyptian predecessors, the Greek epoch was a breakthrough from their Egyptian antecedents. In other words, the Greek innovation was a massive shift in thinking from any other civilization that preceded or co-existed with it.
3. The heart of the innovation center was Athens, which was populated with a relatively small number of people, probably not more than 40,000, which would make it just a very small city by today's standards. What emanated from that city and the surrounding regions is staggering, even by today's standards.

Taking the study of innovation out of the realm of our modern era forced the authors to look at innovation through the eyes, mind, and heart of an ancient Greek.

---

<sup>2</sup> The Hellenistic Era is formally considered beginning at the time of Alexander the Great (323 BC). However, for the purposes of this article, we are also including the earlier Greek Classical Era (beginning about 510 BC). Some scholars advocate that, despite the fall of Greece to the Romans, the vestiges of Hellenistic culture continued, though somewhat diminished, until 180 AD with the death of Marcus Aurelius, the last of the great Roman Emperors, who was not only a military general, but a philosopher of Greek tradition.

# Revolutionary Discoveries of the Greeks

---

While innovation did not start with the Greeks, there is no question that, until the modern era, there is no precedent in history for such a burst of creativity in such a narrow time window of only three hundred and fifty years, from approximately 500BC to 146 BC.

## *Impact of Culture*

We wanted to know what unique characteristics of the Greek culture spawned such a massive outburst. What innovations were created from individual effort and what from collective collaboration, we shall never know. But what can be stated with certainty is that culture nurtures innovation; innovation seldom occurs independent of culture. If it did, innovation would occur randomly throughout the world and throughout time. For this reason, we made it a point to examine the cultural underpinnings that enabled a few Grecian City-States to create breakthrough innovations so discontinuous from anything that preceded it.

When the Greeks were conquered by the Romans about in the second century BC, this great era of innovation slowed dramatically, retrogressed horribly during the Dark Ages after the fall of Rome in 455 AD, not to be resumed until the Renaissance, a millennia later.

# Dynamic Differential Energy

---

## ***QUEST FOR SYNERGY***

Our quest began a few years ago. We all know that words “name” things, events, or processes. We asked ourselves this fundamental question:

*“If the Greeks created the word ‘synergy,’ then they must have had a process enabling its manifestation or genesis. What, then, was the process for creating synergy that produced so many magnificent breakthroughs in thought, science, architecture, and politics?”*

We did not realize this was a singularly unique question. From our search through the literature and questions to academics, we came to realize this question had not been asked before. In fact, what we were doing was somewhat out of the ordinary, that, remarkably to our knowledge, no one had ever tried before. We called our quest: “process archeology.”

As we searched through reams of Greek writings and commentaries by scholars over the millennia, we hoped we could discern the process for creating an innovative culture in Greece.

More importantly, we believed that such a comprehension could be used to propel modern innovation teams. Synergy produces innovation. In today’s world, more often than not, innovation occurs in teams, and alliances, where communities of interest attempt to channel the synergies of interaction, and, particularly utilized unique but compatible differentials in thinking to trigger breakthrough innovation. What “collaborative culture” did the Greeks design or discover over two thousand years ago that we can utilize today?

## ***Cracking the Code***

What we did not understand at the beginning of the project was how deeply the Greek code was buried. A search revealed there was no “best practices” handbook that had been written by a student of Socrates that addressed this issue. Like most issues of

# Revolutionary Discoveries of the Greeks

---

culture, the “code” was imbedded in the invisible subconscious – something that every citizen just knew and took for granted.

After several years of digging into the culture we came to realize that the ancient Greeks had evolved into a highly sophisticated society – an evolutionary strain that has probably never been duplicated before anywhere on the face of the earth, even in modern times.

This evolutionary strain slowed dramatically about in the second century BC when the Romans conquered the Greeks, but its aftermath lingered in early Rome for another two or three hundred years.

If one might imagine the Greek culture being a mountain, with the most precious gems located in the top of the mountain, the Romans lopped off the top of the mountain because it was impractical to access the real heart and soul of the culture. What remained was a flattened mountain where the practical uses of Greek innovation remained. Much like a modern corporation acquires a smaller, more entrepreneurial company, gains access to its current technology, but drives those who are the real source of its innovation away by imposing a lugubrious culture upon the entrepreneurs, so the Romans suppressed the Greek innovators.<sup>3</sup>

We found the evidence of the synergy process buried in the word structure and the philosophy of the Greeks. Sadly, many of the Greek words never made it into the Roman language, thus nearly becoming lost forever. Some words passed into Latin, but were either “flattened” of their depth and richness, or were never passed through the old French into English.<sup>4</sup> And much of the

---

<sup>3</sup> Perhaps the only Roman Emperor to recognize the real value of the Greek culture was Marcus Aurelius. However, during his 20 year reign, he was tied up fighting to protect the outer perimeter of the Roman Empire, and was thus unable to enact real reforms to the Roman system of governance.

<sup>4</sup> Upon closer examination of Greek and Roman word structure, one finds that the truly spiritual words in the English language originate from the

# Dynamic Differential Energy

---

philosophy has been the secret realm of academics, never put to practical test, as it was intended.

By delving deep into the original Greek language to explore the true richness of meaning, we found a virtual treasure trove (“thesaurus” in Greek) of coded meaning. We believe we may have cracked the code on how the Greeks created synergy.

## ***Reaching Back to the Future***

Archeology searches for lost artifacts from a by-gone age. We approached archeology a bit differently – searching for *lost processes and practices*. We looked into the writings of ancient Greeks, such as Plato and Aristotle, from about 500 to 150 BC, but did not find what we were looking for. We examined the works of many of those Greeks who wrote in the early Roman Era, such as Plutarch, Ptolemy, Galen, and Epictetus, finding few clues. Apparently, after several hundred years of daily usage, many of the key process issues had already migrated into the invisible aura of “context.”<sup>5</sup>

Surprisingly, the massive amount of innovation was produced by a very small number of people. Athens, the by far the largest of the Greek City-States had a population of 40,000. Only 6-8,000 were members of the educated male elite; the rest were women, children, and slaves. The wealth both financially and culturally, attracted many of the best and brightest of the times to study and live within its bounds.

---

Greek, while the more practical words come from the Latin, German, or Anglo-Saxon roots of English.

<sup>5</sup> Context is something everyone knows and understands, but does not need to talk about. For example, every corporate culture has a rewards system that is just “known,” and seldom discussed. Thus, as Carl Gustave Jung observed, the “collective unconscious” becomes “invisible.” And, because it is invisible, it can easily become lost, foreign, and inaccessible.

# Revolutionary Discoveries of the Greeks

---

## CHAPTER TWO: DISCOVERING DYNAMIC DIFFERENTIAL ENERGY

From the earliest of human civilization, people have gazed into the sky to fathom the secrets of creation. As a species, we have continually questioned our meaning, purpose, and the cycles of birth and death.

These questions were deep in the minds of early civilizations. As soon as we mastered language and writing, the question of creation was put to pen and paper.

### *SEARCH FOR THE ESSENCE OF CREATION*

Man's search for meaning starts with creation<sup>6</sup>, which the ancients believed emanated from a "divine spark" – *Energies of God* – a mystery just beyond the normal human being's grasp. The objective was to convey this energy to humans through transcendence, giving us the power and spirit of the divine. Our reverence for inventors, such as Leonardo da Vinci or Thomas Edison, continues our long tradition marveling at creative energy.

*Man's search for meaning starts with creation, which the Ancients believed emanated from a "divine spark" – Energies of God*

---

Deep inquiry was the hallmark of many ancient thinkers and their philosophic followers. The path of knowledge would lead

---

<sup>6</sup> The theme continues today: Schiller's *Ode to Joy*/Beethoven's 9<sup>th</sup> (adopted as the Anthem of the European Union) begins and ends with: "Joy, beautiful Spark of Divinity!" The Old Testament evidences the linkage of the creation and the divine: Genesis 1:1 "In the beginning God created ..."

# Dynamic Differential Energy

---

first to wisdom and then to truth and freedom, as early passage written nearly two thousand years ago implies:

*What makes us free is the knowledge  
of what we were  
of what we have become  
of where we were  
of wherein we have been cast  
of whereto we are hastening  
of wherefrom we are being freed;  
of what birth truly is,  
and of what rebirth truly is.<sup>7</sup>*

The two themes that prevailed in both Greece and China (see Figure 1: Chinese Differential Energy) centered on the energies of resonant harmonies and differential polarities – two distinctly different themes. What the Greeks learned about innovation was never truly understood by their Roman conquerors, and was lost to history. What we discovered by sifting through ancient Greek writing revealed a powerful secret to collaborative innovation.

Because this high level *synergistic trust* is both so important to understanding the essence of collaborative innovation, and entangled in a complex paradox, it's useful to take the time to understand the paradox and the thinking required to unravel it.

## ***Differentials & Greek Quest for Synergy***

Collaborative innovation is the effective result of synergy from differential energy. Hence the expression: If two people think alike, one is unnecessary for innovation.

The Greek Golden Age of Innovation begins about 500 BC and lasted until about 146 BC, until they were conquered by the Romans.

---

<sup>7</sup> Hoeller, Stephan; Gnosticism, New Light on the Ancient tradition of Inner Knowing; Quest Books,2002,p 10

# Revolutionary Discoveries of the Greeks

---

During this time short, three hundred and fifty year period, the legacy of new thinking had such a profound effect on the future of civilization that the names of the thought leaders of the day are known to school children now over two thousand years after their passing: Pythagoras, Hippocrates, Socrates, Plato, Aristotle, Aristophanes, Archimedes, Euclid, and many others. Their thinking is imbedded in all our philosophy, democracy, education, science, literature, and mathematics. They invented the block & tackle, the formulations of geometry & trigonometry, the first computers, nutritional medicine, the theory of a planetary solar system, and the basis of the steam engine, among many other accomplishments.

What's more, this revelation opened an insight to another more profound, higher level of trust; one whose path leads to the ever-sought, but so elusive, pinnacle of synergy (another word invented by the Greeks.) We call that level of trust: *synergistic trust* (which we will discuss later)



# Dynamic Differential Energy

---

## ***UNITY & POLARITY IN ANCIENT CHINA***

---

In China, the I-Ching, known as the Book of Changes originated about 500 BC. It explores the natural phenomena of the universe and is based on the concept of Yin-Yang (male-female, light-dark, sun-moon, positive-negative). The ancients derived it from their observations of life along with celestial and seasonal changes

---

The concept of Yin-Yang describes how seemingly opposite, polar, or contradictory forces are actually *interconnected* and *interdependent* in the natural world, and how each actually defines and gives rise to the other, as light defines dark, love defines hate, strong defines weak, or good defines bad. In this way, polarities only exist in relation to or in union with each other.

From the Yin-Yang perspective, opposites are always complementary fields of the a dynamically changing system of the greater whole, where forces ebb and flow, dominate or recede, conflict or unite over the course of time.

The Yin-Yang concept is rooted deeply in the origins of many classical Chinese sciences and philosophies, such as Chinese medicinal energy forces (chi) and acupuncture, as well as the central theme of exercise (tai chi), martial arts, military strategy (Sun Tzu), philosophy (Taoism, Zen) and divine study.

**Figure 1: Chinese Differential Energy**

# Revolutionary Discoveries of the Greeks

---

## ***WHAT CREATED A CLUSTER OF THOUGHT LEADERS?***

What most people don't think about is the size of the City of Athens at the time was only 30-40,000 people – just a large town or small city in the modern era. Why then don't all our small cities today produce as many thought leaders? Other such centers were in Ephesus and Alexandria.

(To jump ahead of our story, it's no coincidence that during this short period of history, the Greek civilization was able to escalate the level of innovation because of the increase in the level of trust in the society associated with first experiments with democracy.)

Understanding how a culture could produce so many breakthrough thinkers a truly worthy endeavor, for if we can replicate their process, we can rapidly conquer many of the problems of our times too. But we must also understand that what the Greeks discovered was buried during the Roman era, and nearly lost during the Dark Ages. Our modern age has never reclaimed the Greek ground around collaborative innovation and trust as exemplified by that which the Greeks had attained. (The United States has come close, and modern Israel is coming closer.)

Today, we are still anchored in belief systems that actually limit our innovation capacity. A few organizations have discovered the Greek methodology by accident or intuition. This "Thought Piece" serves to illustrate the power of the Greek system of trust and collaborative innovation.

The Greek Innovation Age was launched about 500 BC with two great names: Pythagoras and Heraclitus. Both were on an incessant search for the "inner truth," the "underlying law," the "hidden meaning (discovery), the "reconciliation of the anomaly," and the quest for "first cause." They sought to learn the "inner design" or "architecture" of all of life – philosophically, scientifically, practically, and artistically.

# Dynamic Differential Energy

---

## *Pythagorean Harmonies*

Pythagoreans were not just mathematicians, they were seekers of wisdom<sup>8</sup>, and firmly believed that the universe was designed around a set of boundless interrelated *harmonies* which determined how things functioned.

While today we are most familiar with the Pythagorean Theorem for triangles, ( $A^2 + B^2 = C^2$ ), Pythagoreans believed that the limitless of the universe and creation was definable by mathematical progressions or resonances which embraced both the concrete substance and the indefinable voids of the universe.<sup>9</sup> The proper harmony between what was limited and what was limitless gave rise to virtue.

The architectural “golden mean,<sup>10</sup>” which is at the core of all Greek architecture expressed in the Fibonacci curve and manifested in the nautilus shell are all expressions of this mathematical insight. (see Figure 3) The Pythagoreans built our

---

<sup>8</sup> The word “philosopher” (said to have been coined by Heraclitus) means a “lover of wisdom” (from *philo*: love = *sophia*: wisdom)

<sup>9</sup>From the Catholic Encyclopedia regarding numbers: Pythagoreans held that one is the point, two the line, three the surface, and four the solid. Seven they considered to be the fate that dominates human life, because infancy ceases at seven, maturity begins at fourteen, marriage takes place in the twenty-first year, and seventy years is the span of life usually allotted to man. Ten is the perfect number, because it is the sum of one, two, three, and four—the point, the line, the surface, and the solid. Having, naturally, observed that all numbers may be ranged in parallel columns under “odd” and “even”, they were led to attempt a similar arrangement of the qualities of things. Under odd they placed light, straight, good, right, masculine; under even, dark, crooked, evil, left, feminine. These opposites, they contended, are found everywhere in nature, and the union of them constitutes the harmony of the real world.

<sup>10</sup> A ratio that equals 1.618 or roughly a 5X8 relationship

# Revolutionary Discoveries of the Greeks

---

modern musical scales based on the resonances of harmonic scales.<sup>11</sup>

While the Pythagoreans acknowledged that opposites did exist, – odd and even define each other, straight defined crooked, good defined evil -- they contended that opposites gave rise to harmonies that were the foundation of existence. In music, major and minor (unequal) scales can be harmoniously united.

What's important for us today is that the Pythagorean notion of harmony gives rise to our modern notion that trust is based on virtue and harmony. (see Figure 2: Classical Trust)

We'd all like to think that if we could only live in harmony, we would be happy and content. War, divorce, and crime would cease; a perpetual love-in would breakout with the popular song that resonates in our hearts:

*I'd like to teach the world to sing  
In perfect harmony.  
I'd like to see the world for once  
All standing hand in hand;  
And hear them echo through the hills  
For Peace throughout the land!*

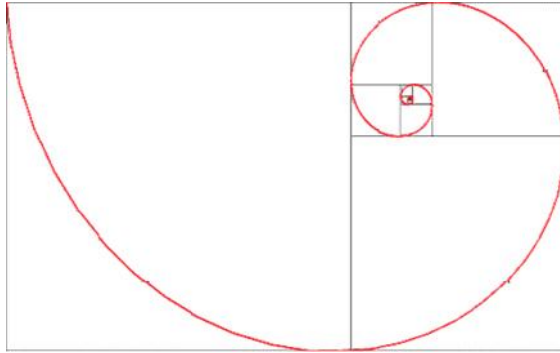
---

<sup>11</sup> From Wikipedia on Pythagoreans: A musical scale presupposes an unlimited continuum of pitches, which must be limited in some way in order for a scale to arise. The crucial point is that not just any set of limiters will do. One may not simply choose pitches at random along the continuum and produce a scale that will be musically pleasing. The diatonic scale, also known as "Pythagorean," is such that the ratio of the highest to the lowest pitch is 2:1, which produces the interval of an octave. That octave is in turn divided into a fifth and a fourth, which have the ratios of 3:2 and 4:3 respectively and which, when added, make an octave. If we go up a fifth from the lowest note in the octave and then up a fourth from there, we will reach the upper note of the octave. Finally the fifth can be divided into three whole tones, each corresponding to the ratio of 9:8 and a remainder with a ratio of 256:243

# Dynamic Differential Energy

## *Golden Spiral*

In geometry, a **golden spiral** is a logarithmic spiral whose growth factor related the golden ratio 5:8. (Not coincidentally the same proportional size of this book). The ratios between these two numbers have remarkably reciprocal features: 5 divided by 8 approximates .6, 8 divided by 5+8 approximates .6, 8 divided by 5 is 1.6, etc. The Golden Spiral or Fibonacci Curve is based on Pythagorean Progressions A:B=B:(A+B).



**Figure 3: Golden Spiral or Section**

There was one major flaw in the Pythagorean thinking, and it had to do with opposites: differentials or polarities were likely to destroy each other, rather than create harmony.

The Greeks had ample experience with this having been in a state of almost perpetual war with the Persians, and even with other Greek city-states at various times.

**Classical Greek Trust**  
is Built upon 8 Foundational  
Principles: (Modernized Version)

**(F.A.R.T.H.E.S.T.)**

**F**airness & Reciprocity  
**A**ccountability & Integrity  
**R**espect & Honor  
**T**ruth & Honesty  
**H**onorable Purpose  
**E**xcellence & Standards  
**S**afety & Security  
**T**ransparency & Openness

**Figure 2: Classical Trust**

# Revolutionary Discoveries of the Greeks

---

## *Heraclitus & the Dynamic Power of Polarities*<sup>12</sup>

Differential energy has a long history of exploration, starting with Heraclitus (~500 BC).

As disciplined thinkers, the ancient Greeks not only sought a philosophy for everything, but also there was always a counter-philosophy.<sup>13</sup> No ideals like the Pythagoreans' could go unchallenged. To counter the Pythagorean flaw emerged another brilliant thinker of the time, Heraclitus, who suggested that life was maintained by a tension of opposites replacing each other in a series of transformations.

Whereas the Pythagoreans had emphasized harmony, Heraclitus's theme seemed discordant.

Heraclitus' lucid thinking is so relevant today that one wonders how he came to these conclusions over twenty five hundred years ago. He coined the word "logos" (from which our English word "logic" is derived<sup>14</sup>) to explain the nature of this search. Logos meant the "truth about the cosmic cause of all things," or the "divine essence of the deepest truth." (The "inner

---

<sup>12</sup> So much of today's description of Greek thinkers by modern philosophic historians tend only to "complexify" (the act of entangling complexity and ambiguity); I hope to elegantly simplify.

<sup>13</sup> For example, the Greeks had two different theories on the nature of the Solar System. One hypothesized that the sun was at the center, the other the earth. It took Renaissance Polish astronomer Copernicus, after extensive study of the two theories, a life-time of observations and calculations to determine the earth and planets revolved around the sun. Competing theories are often quite a conundrum to resolve because they contain paradoxes that are not explained within the current paradigm or level of thinking. For example, the current scientific debate about light being a photon or a wave expresses the duality of this paradox.

<sup>14</sup> (this meaning was grossly mistranslated into Latin as "the Word," as in "the word of God." Our English word "logic" implies that it is "rational," but totally leaves out the "inner truth" or "first cause" connotation.

# Dynamic Differential Energy

---

logic derived from deep root cause analysis” might better approximate the scientific meaning of this word today.)

Observing the forces of nature, he identified a set of Principles of Nature that he believed underlay the universe:<sup>15</sup>

The Heraclitian First Principle of the Universe (cosmos or world order): the *Unceasing Movement and Flux of Change*. *Dynamic change is a causative force in the development of life itself.*

*Strife is the father of all.*

*There is nothing permanent except change.*

*The more things change, the more they stay the same.*

*Cold things warm up, the hot cools off; wet becomes dry, dry becomes wet.*

The dynamic and cyclical interplay of opposing forces forms a transcendent unity that causes all change. He contended that *opposites, or polarities of forces, in tension against each other* (such as joy-sorrow, wellness-illness, waking-sleeping, and life-death) were not just an afterthought, but a central theme in the story of creation and life itself. From today’s practical perspective, this is much like Schumpeter’s description of capitalism’s *creative destruction*, whereby the old is continually being replaced by the new by the tension of competitive forces.

---

<sup>15</sup>While a *governing structure* or set of intelligent *guiding principles* underlies the entire universe, these principles may not be derived by simple analytical, deductive thinking:

*If you expect the unexpected you will find it, for it is not to be reached by search or trail.*

*Man is most nearly himself when he achieves the seriousness of a child at play.*

*The eyes are more exact witnesses than the ears.*

*[However], eyes and ears are poor witnesses to people if they have the uncultured soul of a Barbarian.*

# Revolutionary Discoveries of the Greeks

---

The Second Principle: the *Polarities of Opposites are Essential for Life Itself*, but these polar forces are unified in a System of Balanced or Equilibrious exchanges. He contended that if one force disappeared, the dynamic balance of the universe would be thrown into disarray. Thus opposites create a series of transformations which become interchangeable or "transformationally equivalent." (This does not mean opposites are identical, or the same).

*God is day and night, winter and summer, war and peace, plenty and hunger. Opposition brings concord; out of discord comes the fairest harmony.*

*Couples are wholes and not wholes; what agrees disagrees, the concordant is discordant.*

*There would not be harmony without high and low notes; nor living things without female and male, which are opposites. From all things one, and from one all things.*<sup>16</sup>

The Third Principle: *Character* (the essential quality of trust) is the *Primary Determinative Force in One's Own Fate*. How harmonies and polarities interplay -- co-exist, evolve, destroy, or transcend -- is primarily based on one's character. This underlying *Principle of Nature* manifests as a moral laws for human beings:

## *Destiny*

*Let not a man do what his sense of right bids him not to do, nor desire what it forbids him to desire. This is sufficient. The skillful artist will not alter his measures for the sake of a stupid workman.*

*One who understands Destiny will not stand beneath a tottering wall"*

*One who follows Destiny will live a long and successful life.*

*One who rebels against Destiny will die before his time.*

*- Mencius*

*(Chinese Sage B.C. 372-289)*

---

<sup>16</sup> The motto of the Unites States: "*E Pluribus Unum*" "Out of many, one" is a derivative of the Latin translation of [Heraclitus](#)' 10th fragment, "Out of all things one, one out of all things."



# Dynamic Differential Energy

---

*A man's character determines his destiny.*

*Good character is not formed in a week or a month;  
it is created little by little, day by day.*

*Protracted and patient effort is needed to develop good character.  
If you went in search of the Soul, you would not find the  
boundaries of it.*

The non-deductive elements of Heraclitus' passionate and extreme view seemed "irrational" and bothered many of the intellectual elite of Greece at the time. Believing that there is *nothing* permanent in the universe flew in the face of the belief in material matter.

Reconciling Heraclitus' ephemeral polarities and Pythagoras' mathematical harmonies was a daunting philosophical task. The Greek culture at that time also required embracing harmony of design and beauty in the virtue and perfection of man. As we will see shortly, both Pythagoras and Heraclitus will have a resounding impact on the greatest innovators of the 19<sup>th</sup> and 20<sup>th</sup> centuries (although most of today's innovation teams will ever know where this originated and only a few may fully understand the nature of the process).

The philosophical<sup>17</sup> debate raged for a hundred and fifty years. Finally it took the combined effort of three of the greatest heavyweight thinkers the planet has ever produced -- Socrates, Plato<sup>18</sup>, and Aristotle --to worm their way through the constraints of the paradox.

---

<sup>17</sup> Philosophy means, literally, the love (philo) of wisdom (sophia) in Greek.

<sup>18</sup>Plato was Socrates' student; Plato then taught Aristotle, and later they together formed a joint venture teaching academy.

# Revolutionary Discoveries of the Greeks

---

## *Crisis & Change*

Crisis is a Change poised and ready to happen.

The word “danger” is the emotional word for the rational word “risk”

The Greeks understood that danger/risk was substantially reduced by a culture that honored differences, trusted virtuously, and built a common unity (community).

The Chinese symbol for crisis is a combination of the symbols for Danger & Precarious Moment (sometimes Opportunity).

The Greek word for Crisis is *Krisis*, meaning a critical turning point or moment of critical decision.

The ancients understood that an impending crisis was a critical turning point, when diversity could fragment and turn into dissention, or unify and result in synergy.

*Character builds the trust that makes the difference in destiny's fate.*

# Dynamic Differential Energy

---

## *DIFFERENTIALS IN THINKING*

---

### *The Case of IDEO*

---

IDEO is considered on the foremost organizations that conceives new innovative products for their clients. Thousands of new products have been first conceived by this organization.

They have mastered the whole concept of using *Harmonies & Polarities* -- differential thinking -- for innovation.

Just look at one of their innovation teams. Diversity: in creating teams – gathering insightful, motivated people, with a range of expertise

It is likely to be composed of:

Both men and women, varying in ages

People from highly differentiated backgrounds, such as:

Business (marketing, finance, etc)

Sociology or Psychology

Engineering or Architecture

Design or Art

People also come from different perspectives, some are extraverts, others are introverts, some are thinkers, others are doers.

In each and every team, however, they all cherish the differences within the team and honor each other's point of view. This is the essence of trust. Without it the innovation teams would rapidly implode.

---

Figure 4: Differentials in Thinking

# Revolutionary Discoveries of the Greeks

---

## *HARMONIZING DIFFERENTIALS*

---

### *The Case of IDEO* *How does IDEO bring it together?*

---

It's not great talent or the best brainstorming technique. The "secret sauce" if the truth be known is a soft, squishy thing that makes hard-nosed business executives uneasy: "empathy."

In IDEO's world, innovation doesn't launch out of hair-brained ideas or super-slick graphics. Instead it starts in the heart before migrating to the head with a very sincere connection with people's frustrations, pains, anxieties, as well as their joys and desires.

Step One in the IDEO method is to comprehend and feel the human condition, empathizing with the people who will be using or servicing a new product.

Empathy is at the core of the drive to *Bond* and the essence of the collaborative spirit. Engaging collaboration is the first step in empowering IDEO's drive to Create.

---

*Empathy is essential to trust. It's invisible – you don't see it, but without it, collaborative innovation rings hollow.*

---

**Figure 5: Harmonizing Differential Energy**

# Dynamic Differential Energy

---

Just acknowledging the inherent value of Heraclitus' negative polarities was disturbing to the rational, virtue-seeking Greek minds.<sup>19</sup> They could accept some, but not all of Heraclitus' dynamic views of the universality of change and the nature of tensions between opposites.<sup>20</sup> Socrates<sup>21</sup> did, however, embrace the ideals of polarities in his use of dialectics -- dialogues between two or more people holding often very different views. He advocated that by exchanging ideas or vigorously debating across the differing polarities, one may find the real "truth," Socrates' highest value which should guide all of life. This method of debate forms the core of political discourse and legal argumentation to this day.

While Heraclitus' understanding of the universe came through "insight," Socrates was adamant that truth came from a rigorous use of logic, evidence, and proof, seeking contradictions or incongruities in reasoning, thus freeing the soul from falsehood.

Building on the insights of his mentors, Socrates and Plato, Aristotle<sup>22</sup> was able to formulate the resolution, which accelerated

---

<sup>19</sup> However, the Stoics more readily embraced much of the teachings of Heraclitus.

<sup>20</sup> Socrates and Plato described the dichotomy of dualities in Phaedrus where two opposing drivers in the human psyche pulled in opposing directions, and it was in the development of character that we must let the higher, soulful force harness the force of debased self-interest. The idea of using dialectics - such as pros and cons, (or later in the early 1800s Hegel built on both Heraclitus and Socrates, introducing the process of thesis and antithesis which converged into a synthesis, which would be the springboard for the next level of challenges. Edison used the thesis model, and many modern innovation teams still use this model.

<sup>21</sup> Socrates could be extremely acerbic in his inquiries and moral criticisms. His motto was the maxim he coined: "the unexamined life is not worth living."

<sup>22</sup> Aristotle, considered the first scientist, followed this type of thinking with deductive reason, a method followed by most scientists to this day.

# Revolutionary Discoveries of the Greeks

---

thinking about innovation. It required a set of new ideas that were considered breakthroughs at the time. Today's innovator or scientist is well advised to embrace each of these as the basis of the Collaborative Innovator's Fundamental Mindset, for if even one part of this mind set is missing or defective, the whole system of innovation is in jeopardy, for the chain is only as strong as its weakest link, a fray in a cord is where it will break, a crack fractures under pressure, a divergent course strays farther from its objective over time.

## Phaedrus

Socrates and Plato grappled with the problem of harmonizing differentials in their story about Phaedrus, a charioteer whose destiny was determined by his ability to unify the spirit of his two chariot horses. One horse was a wild and wanton black stallion, representing Phaedrus' inner lustful passions and the other was a pure white honorable steed symbolizing inner beauty and integrity.

Phaedrus' course in life depended upon his ability to harnessing the power of black stallion while enabling the white steed to serve as a guiding light.

## Joining Harmonies & Polarities

First, Aristotle acknowledged the Pythagorean concepts of both *harmonies* and the *power of opposites*,<sup>23</sup> the latter being a core element of the Heraclitus' position. Thus the idea of *differentials* as a causative force in nature and life itself became accepted thinking.

Aristotle grappled with the concepts of "first cause" (today we refer to this as "root cause analysis.") which encompassed causative chain that determined the nature of the universe,

---

<sup>23</sup> Aristotle focused on ten opposites: finite - infinite; odd - even; one - many; right - left; rest - motion; straight - crooked; [light - darkness](#); [good - evil](#); square- oblong; male - female. Why he choose these is not know.

# Dynamic Differential Energy

---

motion, and ethics. Following in the path first laid by Plato, he examined what was eternal, such as the cosmos, and what had a definable cause that made it come into being.

## *Unity, Diversity & Adaptation*

Whereas his teacher, Plato, emphasized unity in his writings<sup>24</sup>, Aristotle expanded, addressing what's been referred to as three of the most enduring puzzles in the study of life:

the *diversity* (differentials/polarities) in all of nature,

how to *unify* (integrate) these differentials in a holistic manner,  
and

the *adaptive transformations* (both negative and positive to humanity) that emerge from the problem of differentiation and integration.<sup>25</sup>

Regarding *diversity*, Aristotle explained that understanding diversity was the central problem to the discovery of the nature of life itself.<sup>26</sup>

---

<sup>24</sup> The theme of unity in diversity was not new with Plato. In the sixth century BC, in addition to the Pythagoreans and the Heraclitians, the Ionians and Eleatics all searched for the essence of reality – another way of saying the unity in the diversity. Plato revered the thinking of the “seven sages” that preceded Socrates, and upon whose work they built their innovative thinking. Einstein spent the latter years of his life seeking the Unification theory of physics. The search for unity in diversity is an underlying theme of collaborative innovation.

<sup>25</sup> Note: the theme adopted by the European Union is *Unity in Diversity*.

<sup>26</sup> According to Aristotle: We must first grasp the differences that belong to all animals as well as their proper attributes, and then attempt to discover their causes; for to proceed in this way with respect to inquiry, beginning with an investigation into the differences between things, is in accordance with nature. (History of Animals [HA] I 6, 491a7-10, cited in working paper by Henry, Devon; Aristotle and the

# Revolutionary Discoveries of the Greeks

---

## *Beethoven's Harmonies & Polarities*

To grasp the harmony-polarity interplay from another dimension, listen to a Beethoven symphony, such as his 9<sup>th</sup>.

It contains miraculous and ever-changing harmonies, melodies, counter-points, oppositions, rhythms, and beats.

Together the harmonies and polarities inter-play; the tension of opposing energies creates an internal synergy that distinguishes this piece as one of the finest ever composed.

A number of music historians maintain that Beethoven was inspired to use the tensions of opposites after becoming familiar with the work of his German contemporary, Hegel, who resurrected Heraclitus' theories in the early 1800s.

Listen to any great music or dancers and you will find a tapestry of interwoven polarities and harmonies that make a symphony a beautiful synergy.

Diversity was a double edged sword in ancient Greece. Each city-state had its own gods and religion.<sup>27</sup>

The search for unity was not just an esoteric quest or a scientific venture; enemies like Xerxes of Persian intended to destroy the Grecian city-states one by one. Through alliances unity had major defensive benefits. Could Greece be the first place in the world that could unite without military force?

Diversity without unity was plagued with other dangers as well. Conflict, then as today, arises when tribal polarities turn vicious, vengeful, and ultimately violent.<sup>28</sup>

---

Unity and Diversity of Life, University of Western Ontario, Jan 2011

<sup>27</sup> Athens revered Athena, Eleusis worshipped Demeter, Samos honored Hera, Ephesus sanctified Artemis, and so forth.

<sup>28</sup> The relationship between city-states was both collaborative and competitive, composed of trade and military alliances on the one hand



# Dynamic Differential Energy

---

Finding the underlying laws that governed all things was an almost obsessive quest of the Greek thinkers. As an independent disciple of Socrates and Plato, Aristotle also sought to find the *unifying* order of the universe itself, whether it be in the solar system, plants and animals, or human existence. Without unity, life would be illogical, disorganized, and without an *inner design*. As Einstein commented more than two millennia later, "God does not play dice with the universe."

The diversity of nature obviously could be attributed to some causative *adaptation* which enabled every plant and animal to function uniquely in its environment. He abounded with questions:

What were the causes of such adaptations?

Why so much differentiation?

What was the force that integrated all of life and its specialized components into a whole?

This query raised an endless stream of even more questions, more than even Aristotle was equipped to answer, especially considering there were no scientists yet. (This is why Aristotle was considered the first scientist).

---

and competitive rivalries and sometimes clashes on the other. The Olympic Games were established to build a more unified view of themselves and turn the rivalries into something less political. The effort to build unity, in 472 BC the Olympic Games were expanded from one to five days and made a truly monumental religious and artistic, as well as athletic, event, including foot races, wrestling, boxing, horse racing, chariot races, a pentathlon. Athletes represented their [native city-states](#). Political alliances were announced at the Games, which were also used to help spread Hellenistic culture throughout the Mediterranean.

# Revolutionary Discoveries of the Greeks

---

## *Dynamic Energy*

In his treatise on *Metaphysics*, seeking the first cause,<sup>29</sup> Aristotle introduced two new ideas that apparently had never been conceived before: *dynamic* plus *energy*.<sup>30</sup> Dynamic meant something had the potential, capability, or power to create change or be changed; and Energy – the first cause which causes motion--described the actual shift/change such as in motion, work, or even human energy such as pleasure.

The two terms are polar in that *to have potential* disappears once *converted into action*; *dynamic* and *energy* are mutually exclusive because the presence of one denies the presence of the other, or as Heraclitus described, the “tension of opposites” (or the tension of opposing energies.) First causes were the forces that transformed potential energy into actualized energy.

*The Chinese symbol for Synergy is a boiling pot on a fire, implying a mixture of different ingredients boiling into a new form when heat is applied.*

## *Synergy*

Next, in *Metaphysics* Aristotle addressed the problem of holistic unity. Heraclitus had proposed that from *all things one, and from one all things*. Aristotle responded by introducing the concept of *synergy*, defining it as *the whole being greater than the sum of the parts*. (*Synergy* comes from the Greek, literally meaning “joined

---

<sup>29</sup> In *Metaphysics*, Aristotle explained the one exception to first cause: The “unmoved mover” which describes a philosophical concept that sets the universe into motion, but not moved by any other action or force. Aristotle describes the unmoved mover as being perfectly beautiful, indivisible, and contemplating only the perfect contemplation: itself contemplating.

<sup>30</sup> In the Greek: *dunamis* or *dynamis*: the potential or capability and *energia* ([actus](#) in Latin): to be in the act of work

# Dynamic Differential Energy

---

energy” and implies working together or co-operating to create more.<sup>31</sup>).

Synergy is *not just the components* of something, but *their interactions* that were important.

Thus the idea of “synergy” encompassed a holistic dimensionality about nature, giving credence – truth and weight (veritas and gravitas) --to the active interplay of both *harmonies and polarities* in nature’s force field.

## **Truth**

The idea of truth also needed to be examined. In *Metaphysics*<sup>32</sup> Aristotle asserted that something is either true or not true, it cannot be both. But truth can be an illusion on the surface. He

### *Truth & Trust*

*To win trust, one must first be true to oneself, first by understanding goodness, which is the way of the Spirit of Nature.*

*A person true to themselves will certainly be trusted and move others.*

*-- Mencius  
(Chinese Sage B.C. 372-289)*

---

<sup>31</sup> While this definition can limit the perspective on the phenomenal breadth and depth synergy can create, it nevertheless became a key element in the uniquely Greek cultural foundation for launching Greece’s “Golden Age of Innovation.” (see Lynch & Prozonis, 2006).

<sup>32</sup> Note: the modern reader who attempts to read Aristotle’s writings today may be somewhat perplexed by what seems to be ambiguities or a lack of detail. This is because, according to Plutarch, [c100 AD] Aristotle’s doctrines of morals and politics were delivered in two parts: one *written* and the other *oral interaction*, which was reserved only for the highly initiated students (what we might consider “post graduates” in today’s vernacular.) Plutarch states: “[Aristotle’s] books on metaphysics are written in a style which makes them useless for ordinary teaching, and instructive only, in the way of memoranda, for those who have been already conversant in that sort of learning.” – p 543. The same evidently occurred with Socrates, Christ, and many other teachers of the period, of which only the oral parables to the common folk have remained.

# Revolutionary Discoveries of the Greeks

---

introduced the concept of *relativity* (something Einstein would later become famous for).

The appearance of something may differ from the true reality of that thing. Moreover, the appearance of something may be relative to the position of an observer, and may depend on the opinions and attitudes of the observer. Things may not appear the same to everyone, and may have contradictory appearances.

Any scientist, innovator, inventor, technician, engineer, or architect must be committed to seeking truth, lest they succumb to being a mere charlatan. A seeker of the truth, looking to solve a problem or invent a new method or create a new product must be searching for this greater truth, or the solution will fail on its own merits. The sages of the past tell us that such truths are only found on the path of trust.

## *Trust is More Important than Life Itself*

*When asked what his politics were, Confucius (551–479 BC) replied:*

---

***It is to provide people food,  
protect people with armaments, and  
gain trust from people.***

---

*When asked further: "Which should we abandon first if our country is forced to abandon food, weapons, or trust?"  
Confucius stated:*

---

***Abandon weapons first, then food.  
But never abandon trust.  
Trust is more important than life.  
More people can be born,  
but trust is never regained.***

---

# Dynamic Differential Energy

---

## ***COURAGE, CHARACTER & RELATIONSHIPS***

Aristotle reinforced Heraclitus' emphasis of character as a "first cause" of one's personal destiny with the idea of *courage*:

*Courage is the first of human qualities  
because it is the quality which guarantees the others.*

Others would contend, however, that *creation is first cause*. This was the principle of the Hebrew tradition (Genesis 1:1) as well as the Chinese believe in the ideals of Yang (creation) and Yin (reception).

But Aristotle takes the game of life and relationships to a much greater height. To be trusted, one must possess character, which he maintains, while is founded on a firm commitment to virtue and excellence (Greek: *arête*), must be taken much further.

### ***Honor***

*The way to gain a good  
reputation is to endeavor to be  
what you desire to appear.*  
-- Socrates (B.C. 469-399)

*In honorable dealing you should  
consider what you intended, not  
what you said or thought.*  
- Mencius (B.C. 372-289)

---

## ***Linking Ethics to Friendship***

What will surprise the modern reader is that Aristotle's approach to ethics is more about *friendship* and *relationships* than the weighty and often dry perspective we hold today, as described by Lorraine Smith Pangle, whose fresh insights into Aristotle's viewpoint are as inspiring as they are elucidating:

*The phenomenon of friendship, with its richness and complexity,  
its ability to support but also at times undercut virtue, and the  
promise it hold out of bringing together in one happy union so  
much of what is highest and so much of what is sweetest in life,  
formed a fruitful topic of philosophic inquiry for the ancients.*

*By far the fullest and most probing classical study of friendship is  
to be found in Aristotle's Nicomachean Ethics, which devotes  
more space to it than to any of the moral virtues, and which*

## Revolutionary Discoveries of the Greeks

---

*presents friendship as a bridge between moral virtues and the highest life of philosophy [love of wisdom].*

*The study of friendship in the classical authors is in many ways a study of human love altogether....[embracing] all bonds of affection, from the closest erotic and familial ties to political loyalties, humanitarian sympathies, business partnerships, and even love for inanimate things.....*

*In the friendships of mature and virtuous individuals we see human love not only at its most revealing, but also at its richest and highest...*

*With the coming of the Christian world, however, friendship fell into eclipse....[with] Christianity's emphasis on humility, chastity .... [while] elevating one particular human bond, that of family, which had received special sanction in the Scriptures....*

*However, friendship has virtually disappeared as a theme of philosophical discourse...*

In a cruel philosophic twist of fate, beginning with Hobbes in the 18<sup>th</sup> century, trust and relationships became decoupled from ethics and innovation.

*This devaluation of friendship is the result of a decisive new turn in [18<sup>th</sup> century] philosophy ...[that] reinterpreted human nature as directed neither to friendship nor virtue [arguing] that man is by nature solitary, and his .. true condition is one of serious, always potentially deadly, competition with other human beings for all that we most need and want....*

*Modern moral philosophy...has conceived of men's most important claims upon one another to lie outside the realm of friendship.... understanding each individual's relations to his fellows to be rooted in self-interest, taught that these relations*

# Dynamic Differential Energy

---

*could be regulated by sensible laws and appeals to rational self-interest.*<sup>33</sup>

The cleaving of relationships from ethics has caused the disassociation of ethics from both trust and compassion – which was never intended and that has mechanized the unique art of building relationships that are capable of sustaining true collaboration for innovation.

Aristotle was clear and emphatic that moral virtue may lead to a dignified life of justice for the greater good, but it certainly does not equate to happiness and the experience of a joyful, creative life. As Aristotle declared: *Friendship are Partnerships* -- the vital alliances that form the bridge spanning between and uniting morality and happiness; the bridge is a higher summit than the two land masses it connects, as Pangle explains Aristotle's insight:

*Friendship ...goes beyond justice, or even renders justice unnecessary. The goodness shown in noble friendship seems higher than justice, not only because its object is so worthy, but because it is entirely dependent on one's own character and choice and is not defined and compelled by law.*

*Paradoxically, acts of friendship seem both more truly generous and more conducive to one's own happiness than acts done strictly because they are moral.....*

*Spontaneous acts of friendship tend to be more pleasant than impersonal acts of virtue for the doer as well as for the recipient.*

...

*Aristotle encourages the hope that in friendship one may find all the nobility of virtuous action at its best without the ultimate sacrifice of happiness, and at least a partial answer to the question of what ...the best life should be.<sup>34</sup>*

---

<sup>33</sup> Pangle, Lorraine S.; *Aristotle and the Philosophy of Friendship*, Cambridge University Press, 2008, p 1-3

<sup>34</sup> Pangle, *Ibid*, P 10

# Revolutionary Discoveries of the Greeks

---

Aristotle also pointed out that:

*Without friends no one would choose to live, although he possessed all material wealth.*

Aristotle also warned that friendships based primarily on personal advantage, not on character, really didn't qualify to be called friendships and would likely falter due to distrust.

More than two millennia later, Charles Darwin would later observe in the *Descent of Man* what Aristotle observed twenty three hundred years ago (as described by Pangle):

*Friendship seems to be ... rooted in our animal nature and that does not aim at virtue at all. Nature has implanted many animals and especially human beings, a love of those who are kindred – of children and parents above all, but also of fellow tribesmen and even of the whole human race.<sup>35</sup>*

Understanding Aristotle's exaltations of friendship as not only the bridge between happiness and virtue, but its capacity to have *transcendent* and metamorphic impact is profound, because it gives us the critical insights to open our understanding of how the Greeks created the synergies that enabled collaborative innovation. Later we will look at how those friendships, using more of the Greek methods, actually become something more elevated; what we will call *Creationships*. (see Figure 6: Friendships & Creationships)

---

<sup>35</sup> Pangle, *Ibid*, P 20



## ***Friendship & Creationship***

Both Aristotle in Greece (384 -322 BC) and Mencius in China (372-289 BC) said

“Friendship is one mind in two bodies.”

Today, we take this to another level beyond friendship. We call it a “*Creationship*.”

Creationship is four minds in two bodies

- your mind,
- my mind,
- the differential potential between our minds,
- the potential of the collective unconscious.

(later we will expand on the idea of Creationships in Volume FOUR)

**Figure 6: Friendships & Creationships**

# Revolutionary Discoveries of the Greeks

---

## *The Three Treasures*

(from Lao Tzu ~500 BC)

The nobility of great wisdom is in its utter simplicity and humility.  
That is the way of the Holy Spirit of Nature....There are three  
cherished treasures to hold and protect;

The first is Compassion,  
By which one finds Courage.  
When a man cares, he is unafraid.

The second is Fairness,  
By which one maintains a reserve of energy  
to reach widely.  
When he is fair he leaves enough for others.

And the third is Humility,  
By which one finds influence  
to assume leadership.  
When he is humble he can grow....

Those who are  
Fearless while discarding compassion,  
Seek extravagance while discarding fairness,  
Lust for glory while discarding humility,  
Cannot endure --  
Living in fatal tension and conflict!

The compassionate warrior will be the winner, and if compassion  
is your defense you will be secure. Compassion is the protector of  
Heaven's salvation.

There is no greater disaster than to underestimate one's enemy.

As long as there be a foe, value him, respect him, measure  
him, be humble toward him;

A leader becomes blinded when he severs connection to the  
Three Treasured Principles: – Compassion, Fairness, and  
Humility.

Arrogant haughtiness thus renders him unable to see the skills  
and cunning of his competitor, endangering the very existence of  
what might remain of the three treasures, As he now must do  
battle with two enemies, one within and one outside.

When evenly matched forces oppose each other, the side that  
holds the three treasures shall win.

# Dynamic Differential Energy

---

## ***ALIGNING FORCES OF GREEK INNOVATION SYSTEM***

In total, Aristotle's magnum opus thinking became a unifying mindset for collaborative innovation, opening up new pathways of collective creation.

While Aristotle did not have a corner on all the intellectual thinking of the times, and the collective thinking of Greece at the time was intense and profound, Aristotle's architecture of collaboration was a massive breakthrough in thinking, especially considering that there was no precedent for such insight anywhere in the world he could readily access (there was no solid intellectual interplay between Greece and China, from what we can gather that would link, for example, Heraclitus and Lao Tzu, who were alive at the same time).

### ***Why Alignment is Essential to Trust***

We know the real power of Aristotle's configuration of the Greek innovation system. It is the Power of Alignment, which is essential for anyone to come to trust the whole – the “*system's integrity*.” As Robinson and Stern emphasize as the first element of success in their book *Corporate Creativity*:

*Alignment is about ensuring that the interests and actions of all employees are directed toward a company's key goals, so that any employee will recognize and respond positively to a potentially useful idea. Companies ... cannot be consistently creative unless they are strongly aligned.*

*Alignment is often overlooked, it is intangible and elusive, and as far as corporate creativity is concerned, its effects are readily visible only when the company is either extraordinarily well aligned or misaligned.*

*Our own research and experience has led us to conclude that corporate creativity is more sensitive to alignment than any other*

# Revolutionary Discoveries of the Greeks

---

*aspect of business or management, and that unless a company is strongly aligned, it cannot be consistently creative.*<sup>36</sup>

Without alignment on the larger vision or purpose and key principles or processes, no leader of innovation can be successful. Alignment is at the core of trust. The Greeks discovered this and we are now re-learning it today.

## ***Destructive Potential of Differentials***

However, there is one powerful, and often overwhelming problem that Aristotle did not address directly: *Differences are often charged with emotion, fear, conflict, and even warfare.* Differentials, polarities, and opposites seemingly have a greater chance of exploding into conflict, not synergizing into innovation. Just look at Arabs and Israelis or Conservatives and Liberals today.

Why didn't Aristotle address these issues head-on, just as he had wrestled with other thorny problems?

The answer is actually quite simple: in the context of Greek culture of the times, these issues were already addressed and considered a "given," imbedded in the cultural context of the time. There were four powerful cultural forces influencing the Greeks in Aristotle's era that were considered a "given" or "self evident" because they were so deeply imbedded within the culture of the day. Some of these forces *directly* contributed to the innovation flows, while others were essential *enabling* forces.

We discovered a number of interacting cultural phenomenon that underpinned the Greek synergy, and several of them we will outline here, as they were highly instrumental in generating innovations.

Substantial research in the world of innovation has concluded that establishing a "culture of innovation" is the most important factor in building an organizational innovation "engine." The Greeks learned that people must "trust" the alignment of

---

<sup>36</sup> Robinson and Stern, Ibid, p 13, 90

## Dynamic Differential Energy

---

principles and processes as much as they trust the alignment of the each organizations unique goals and objective. When there is misalignment, there is conflict and discord as people fragment and then position themselves to defend their positions and possessions.

The idea of imbedded or contextual values is a blessing and a curse. I remember asking a Japanese business executive in 1990: “could you tell me what specific things cause trust?” He looked at me with a querulous, almost jaundiced eye and said: “Why? No. “It should be understood. (meaning that everyone knows this without having to verbalize it and anyone who doesn’t get it shouldn’t be trusted in the first place.)”

When something becomes imbedded or implicit, it doesn’t require thinking or explication – people just do it. But for an outsider, what is implicit is effectively “invisible.”

The Greeks had created an “implicit” culture that was not easily communicated or seen by the Romans who had to have it codified.

The purpose of having a structure or architecture is that one can transfer implicit knowledge and understandings to outsiders and newcomers so that there is no question about its meaning and purpose. Thus civilization can be transmuted to other generations and cultures.

Architecture, then, can be trained, learned, and communicated. Architecture enables the flow from the explicit to the implicit, and the translations of the implicit back into the explicit. Architecture give form, substance and meaning to the implicit, and reveals the inner design and value of the explicit. Without architecture, the implicit can never evolve to higher orders of meaning and thinking. It is the bridge between the implicit and the explicit enabling a perpetual interplay of learning between the two. Architecture also provides the means to shift to higher orders of thinking and understanding, and fundamental shifts required in the principles, laws, and practices embodied between the earliest evolution of the architecture and later evolutions. Architecture also provides the core standards for behavior.

# Revolutionary Discoveries of the Greeks

---

## CHAPTER THREE: CORE VALUES OF THE GREEKS

### *SIX CORE VALUES*

Much of Greek innovative interaction was manifested in their philosophies and embodied in their words and values. We identified several critical words that epitomized the underlying value structure of the core innovation processes:

1. *Arête (Virtue)*
2. *Philotimo (Love of Honor)*
3. *Sophia (Wisdom)*
4. *Koinonia (Spiritual Community)*
5. *Metanoia (Mind Shifting)*
6. *Historia (Deep Inquiry)*

When the combined force of aligned human energy was released with the core values embodied in these words, a burst of co-creative synergy was let loose, much like a lightning bolt discharges when the energy potential reaches a flash point. The power of these values can be seen in modern times, but to a lesser extent because our value structure is much looser, less rich (flatter), vaguer, more politicized, and more confused and conflictive.

Also, it's vital to understand that the ideals embodied in "philosophy" were far important to Grecian society than "philosophy" is to ours. Back then, philosophy was discussed, debated, honored, and idealized. The idea of creation, beauty, and truth manifested and embodied itself all aspects of society: in architecture, art, sciences, and social discourse. These were powerful reflections of the philosophic values of the Greek culture.

The key six values described below we believe were the "core" values (listed in no particular priority order – each was central and symbiotically important to the synergy process as the other) that contributed specifically to innovation.

# Dynamic Differential Energy

---

## I. ARÊTE --VIRTUE

Arête, (known in Latin and English as virtue or excellence), was a pivotal value the co-creative spirit in ancient Greece. One could not perfect one's soul unless virtue was a continual pursuit.

Virtue was dependent upon one's commitment to act in accordance with the dictates of the higher soul, and not forsake oneself to the more prurient, lower level vices such as lust, greed, anger, or revenge. While no one then, nor today, could be expected to be perfect at the practice of virtue, holding this standard as a goal enabled higher order teamwork, intellectual interaction, and co-creativity to take place.

Socrates and Plato introduced the concept of the soul in a profound manner to the Greeks. The soul became a universal connection between people, enabling the sparks of creative energy to flow between individuals without the fear or concern of betrayal, who got the credit, or loss of ownership. Ideas were owned collectively and thus shared and built upon by a group, who cherished the value of regenerative energy.

But virtue could never be achieved unless one practiced honor, sought wisdom, and built community. Ninon Prozonc observes:

*"Arête (virtue) was not a moral virtue only, but it was more an aspiration and endowment of qualities that would result in practical efficiency and public fame. Most young Athenians wanted virtue more than anything."*

In today's world of teams, community, and alliances, virtue should not be neglected as both a price of admission and as a standard of excellence. Differences in opinions can be handled virtuously with compassion, understanding, and acceptance, or, conversely, arrogantly with condemnation, derision, and denial.

Modern day co-creative teams can gain a great edge when a powerful commitment is made by all the members to think, speak, and act in a caring manner. The commitment to exploration and inquiry is an essential component of successful innovation and breakthrough.

# Revolutionary Discoveries of the Greeks

---

## 2. *PHILOTIMO --LOVE OF HONOR*

Philotimo is a critical element in understanding the human creative foundation. Literally it means the “love of honor,” and carries a very special sense of honor, obligation, self respect and teamwork. It was considered as an “extremely sensitive region of men's souls that gives forth gallantry, nobility and moral pride; it is the sense of honor and dignity.”

Unfortunately, neither the word nor the idea has any English equivalent, and thus the concept has been largely lost in our culture. When Virtue (Arête) was joined with Love of Honor (Philotimo), the union created two powerful foundations for innovation: trust and focus on the “greater good.”

As any modern innovation team knows, trust spurs creativity by taking away the fear of betrayal, thus letting the mind expand into imaginative realms. Similarly, by focusing on the “greater good,” a team is able to supersede ego, greed, and self-interest with the faith that all will benefit.

As Alexander Makedon has described, the ancient meaning of Philotimo was complex but essential to the functioning of the culture:

*“In ancient times, there was great public pressure to behave uprightly. It would be unthinkable that someone without integrity (honesty, justice, truthfulness) is admired...”*

*“This emphasis on goodness is perfectly encapsulated in the ancient inscription “kalos k' agathos” on numerous Greek artifacts. Kalos k' agathos<sup>37</sup> means, literally, “good and good,” with one “goodness” referring to the [outward] social and personal “beauty” of the person being depicted on the artifact, usually an amphora, and the other to his [inner] moral and humanitarian excellence. One is inwardly looking to personal*

---

<sup>37</sup> Kalos k' agathos has a number of connotations, including being Noble and Ethically Courageous, and in the 4<sup>th</sup> Century BC carried implications of “dutiful citizenship.”



## Dynamic Differential Energy

---

*improvement, the other outwardly to the quality of his social relations." "The purpose of education was the formation of character" to build a good and virtuous person – kalos k'agathos anthropos"*

*"The term "philotimo" .....may be translated as an internalized inclination to do good, with a strong sense of social responsibility. (Etymologically, philotimo means "love of honor" =philos+timi, although the honor referred to is not merely external, or for "show" purposes, but a psychologically internalized yardstick of goodness, as in the ancient "kalos k agathos."*

*"Few will deny that among modern Greeks, philotimo is not only widespread, but also highly desirable. By now it is considered almost a cliché that if you want Greek men to cooperate with you, then somehow you must appeal to their "philotimo," including their personal worth, or the degree to which what they are about to do is lofty.*

*"Modern Greek culture puts inordinate pressure on young people to acquire philotimo, often through their teacher's rhetorical exhortations to "act with philotimo." At others times, anyone may be asked by someone else such embarrassingly castigating questions as, "How could you act that way? Don't you have any philotimo left in you?"*

*"By making them confront the possibility of their "aphilotimia" (=lack of philotimo, or integrity), they are at once chastised, or, worse, threatened with virtual exclusion from civilized company. Furthermore, and perhaps most painful, to be branded as "aphilotimos" is sometimes even equated as being dispossessed of your true "Greek [culture]."*

The power of Philotimo was extraordinary in that it bound the individual to a very high standard of behavior. Philotimo was not just an admired trait among Greek citizens, it was expected of them. The expectation was that all members of the society or community would first act in the interests of the greater good of the whole, not in their self interest.

## Revolutionary Discoveries of the Greeks

---

And anyone who violated the honor code of Philotimo would be branded a heretic, labeled with the scarlet letter “A” for *Atimia* - which means unscrupulous, dishonest, dishonourable, like a weasel and a fox etc.. The consequences of *atimia* were severe: excommunication - to be ostracized or exiled from one’s community for violating the “common unity.” As my colleague Ninon Prozonc says:

*“In ancient Greece - the very worse thing that could happen to a man was to lose his 'timiotita' (from the word 'atimia') meaning lose his honesty.. men were judged for their moral traits.. and lost their civic rights when accused of 'atimia' They were thrown out of Athens and had no rights..*

*They did not have to be caught killing, or stealing to be branded 'atimos' - Athenians had to cast 6000 votes in order to judge someone.. Everyone voted. If a majority of the 6000 people voted and found you to be dishonourable, you just lost your civic rights and had to leave Athens and go into exile!!*

*“Moral values during that era were far more important to ancient Greeks than anything else! It was very important to them from a religious stand point to live a very honourable and virtuous life. They believed that if they lived and acted honourably, would reach a superior 'level' of virtue, which would give them happiness.”*

Philotimo was a principle source of trust that enabled the group to overcome their fear of betrayal, their fear that one person’s unscrupulous or selfish desire would supersede the greater good of the whole. Aristotle observed that that all human actions have one or more of these seven causes:

Chance   Nature   Compulsion   Habit  
Reason   Passion   Desire

Of these seven, if Reason and “Constructive” Desire were to prevail over compulsion, passion, old habits, chance, and “destructive” desire, then any group must adhere to a code of honor which would form the covenant of cooperation.

# Dynamic Differential Energy

---

The implications of this idea/ideal on any community, team, or alliance today are profound. Those who break the bond of virtue by violating honor, respect, and love for one another can no longer play in the game. Those who play by the rules of honor will cherish the greater good – all for one, one for all – thus being released from the bondage of fear of betrayal, released to explore the unknown together.

### 3. *SOPHIA -- WISDOM*

Wisdom was so vital to the Greeks that it was not embraced by just a word, but honored in the highest manner by dedicating a god to it. The Greeks knew Wisdom as Sophia, a Goddess who brought Truth. The distinction the Greek made between knowledge (gnosis) and wisdom (Sophia) is important – wisdom was divine.

An active mind could bring deep knowledge. But knowledge alone is often empty of real learning, and can carry with it much conceit and narrowness. Knowledge existed in answers, wisdom in questions and in revelations, uniting idea with action. Knowledge is intrinsically self fulfilling, while wisdom creates higher order purposes and new destinies. The pursuit of wisdom created the challenge to grow upward with a spiritual yearning. Wisdom, thus was sacred. As written in the Wisdom of Solomon from the Apocrypha:

*“Wisdom, the fashioner of all things, taught me. For there is in her a spirit that is intelligent, holy, unique, manifold, subtle, mobile, clear, undefiled, distinct, beyond harm, loving the good, keen, unhindered, beneficent, philanthropic, firm, sure, free from care, all powerful, all seeing, and interpenetrating all spirits that are intelligent, pure, and most subtle. For wisdom is more mobile than any motion, and she penetrates and permeates everything, because she is so pure; for she is the breath of the power of God....”<sup>38</sup>*

---

<sup>38</sup> Later versions of the Apocrypha became embodied in the Catholic Church’s Bible (but omitted in the Protestant version). Because gods and

# Revolutionary Discoveries of the Greeks

---

It's this sacred journey that so excited and empowered the Greeks. Wisdom combined knowledge with spiritual transcendence and human compassion and passionate action.<sup>39</sup> Wisdom was not dry like knowledge, but it was dynamic, engaging, vital, and soulful. As Ninon Prozonic points out:

*"Athenians were always excited and happy when a sophist (teacher of wisdom, such as Socrates) would visit Athens so that they could learn those qualities which were a pre-requisite of Arête – to be virtuous, one must also be wise."*

By holding wisdom as a sacred ideal, it unified groups to search, to inquire, to explore, to be open to new ideals. This approach is diametrically different from the arrogance of those who found prideful pleasure in knowing more than someone else, who put others down for some perceived weakness, or treasured a condemnation for lack of superficial wealth or status. (Interestingly, some of the most revered wise men in Greece -- Socrates, Homer, and Aesop -- were actually quite poor; and Epictetus was a slave.)

## 4. *KOINONIA* --COMMUNITY

To unify and manifest these three ideals required a forum for group action. Without joint action, the words would be simply abstract and irrelevant concepts. Today's idea of teamwork had a deep meaning for the Greek. Joint action required a powerful framework for a group of people to produce something unique and potent. For this, the idea of synergy came into being. The word synergy means:

---

goddesses were clearly a pagan belief, the early Christian church struck out the references to "Sophia" from the Wisdom of Solomon, renaming her as the "Holy Spirit," still retaining the sacredness of Wisdom. See John 14 & 16 for more details on this divine connection.

<sup>39</sup> The Greeks did not write obituaries. Instead they asked the question: "Did he live a life of passion?"

# Dynamic Differential Energy

---

- a) The interaction of two or more agents or forces so that their combined effect is greater than the sum of their individual effects.
- b) Cooperative interaction among groups, that creates an enhanced combined effect.

The word itself is derived from the Greek *sunergi*, meaning *cooperative work or unified energy*, and from *sunergos*,<sup>40</sup> meaning *working together in fellowship*. In effect, for the ancient Greek, simply working together would produce an effect far greater than more than the sum of the individuals. This is a critical meaning, because it transcends issues of conflict, dissention, and factionalism.

Did the Greeks believe that when a group adopts the values of honor, virtue, and wisdom, a synergistic effect occurs?  
Were the Greeks that naïve?  
Or did they understand something we have lost?

To answer these questions it's valuable to understand the ideas and nature behind *Koinonia*. The word has such a multitude of meanings that no single English word is adequate to express its depth and richness. It is a derivative of *koinos*, the word for common.<sup>41</sup> *Koinonia*, is a complex, rich, and thoroughly fascinating Greek approach to building community or teamwork.

Because of Virtue (Arête) and Love of Honor (Philotimo) were conjoined, their union produced a strong commitment to *Kalos k' agathos* meaning "good and good," - an *inner* goodness toward

---

<sup>40</sup> The Greeks also used the word *zyzygy* in a similar context, which means to be "aligned" or "yoked together." For the sake of simplicity in modern English, I will use *synergy* to embrace the concepts underpinning *zyzygy*.

<sup>41</sup> "Common" has two different meanings in the Greek and English. It can refer to that which is jointly held by a large group, such as the "town commons." It can also mean something that is commonplace and vulgar (as contrasted with that which is precious and uniquely distinguished). The former meaning is implied here.

# Revolutionary Discoveries of the Greeks

---

virtue, and an *outer* goodness toward social relationships. This laid the foundation for outer goodness to embrace joint participation in something with someone, such as in a community, or team or an alliance or joint venture. Those who have studied the word find there is always an implication of action included in its meaning. The definition of the word is quite rich and flavorful in that there are many connotations because the word used in a variety of related contexts:

- **Generous Sharing:** Koinonos means 'a sharer' as in to share with one another in a possession held in common. It implies the spirit of generous sharing or the act of giving as contrasted with selfish getting. When koinonia is present, the spirit of sharing and giving becomes tangible. In most contexts, generosity is not an abstract ideal, but a demonstrable action resulting in a tangible and realistic expression of giving.

In classical Greek, koinonein means "to have a share in a thing," as when two or more people hold all things in common. It can mean "going shares" with others, thereby having "business dealings," such as joint ownership of a ship. It can also imply "sharing an opinion" with someone, and therefore agreeing with him, or disagreeing in a congenial way. Participation is vital because vital as the members are sharing in what others have. What is shared, received or given becomes the common ground through which Koinonia becomes real.

The Greeks seemed to have known what we know now: "Sharing Expands, Hording Contracts."

- **Partnership:** "Koinonos" in classical Greek means a companion, a partner or a joint-owner. Therefore, koinonia can imply an association, common effort, or a partnership in common." The common ground by which the two parties are joined together creates an aligned relationship, such as a 'fellowship' or 'partnership.' In a papyrus announcement a man speaks of his brother "with whom I have no koinonia", meaning no business connection or

# Dynamic Differential Energy

---

common interest. In the New Testament, (Luke 5:10) James, John, and Simon are called “partners” (**koinonia** ). The joint participation was a shared fishing business.

- **Marriage:** Two people may enter into marriage in order to have "koinonia of life", that is to say, to live together a life in which everything is shared. Koinonia was used to refer to the marriage bond, and it suggested a powerful common interest that could hold two or more persons together.
- **Spiritual Relationship:** In this sense, the meaning something that is held and shared jointly with others for God, speaking to man's "relationship with God". Epictetus talks of religion as ‘aiming to have koinonia with Zeus". The early Christian community saw this as a relationship with the Holy Spirit (see footnote 1). In this context, koinonia highlights a higher purpose or mission that benefits the greater good of the members as a whole. The term *enthusiasm* is connected to this meaning of koinonia for it signifies “*God in Us*,”<sup>42</sup> or *one’s participation in the Divine*.
- **Fellowship**<sup>43</sup>: To create a bond between comrades is the meaning of koinonia when people are recognized, share their joy and pains together, and are united because of

---

<sup>42</sup> Definition: The source of the word is the Greek *enthousiasmos*, which ultimately comes from the adjective *entheos*, "having the god within," formed from *en*, "in, within," and *theos*, "god." **Word History:** "Nothing great was ever achieved without enthusiasm," said the very quotable Ralph Waldo Emerson.

<sup>43</sup> Definition: Fellow is from the Anglo-Saxon and Old Norse 'felagi', comrade or partner.. 'Ship' is a suffix indicating state or condition. Fellowship is a state in which we share as fellows, that is as partners or peers. Fellowship addresses the relationship between people, not between material objects. One doesn't have a fellowship with a house, a companionship with a tree, or a comradeship with a bed. It relates to a state or condition in which such persons interact, thus we speak of friendship, partnership, and fellowship.

# Revolutionary Discoveries of the Greeks

---

their common experiences, interests and goals. Fellowship creates a mutual bond which overrides each individual's pride, vanity, and individualism, fulfilling the human yearning with fraternity, belonging, and companionship. This meaning of *koinonia* accounts for the ease by which sharing and generosity flow. When combined with the spiritual implications of *koinonia*, fellowship provides a joint participation in God's graces and denotes that common possession of spiritual values.

Thus early Greco-Roman Christians had a fellowship God, sharing the common experience of joys, fears, tears, and divine glory. In this manner, those who shared believed their true wealth lay not in what they had, but in what they gave to others. Fellowship is never passive in the meaning of *koinonia*, it is always linked to action, not just being together, but also doing together.

With fellowship comes a close and intimate relationship embracing ideas, communication, and frankness, as in a true, blessed interdependent friendship among multiple group members.

- **Community**<sup>44</sup>: The idea of community denotes a "common unity" of purpose and interests. By engaging in this united relationship a new level of consciousness and conscience emerges that spurs the group to higher order thinking and action, thus empowering and encouraging its members to exist in a mutually beneficial relationship. Thus community and family become closely intertwined, because aiming at a common unity strives to overcome brokenness, divisiveness, and, ultimately gaining wholeness with each of the members, with their environment, and with their God. By giving mutual

---

<sup>44</sup> Definition: from Latin *communitas*, *fellowship*, from *communis*, *common*; **a.** A group of people having common interests. **b.** A group viewed as forming a distinct segment of society. **c.** Similarity or identity: a community of interests. **d.** Sharing, participation, and fellowship.



# Dynamic Differential Energy

---

support, friendship and family merge. Both fellowship and community imply an inner and outer unity. Nowhere in the framework of community is their implied a hierarchy of command and control. While there is leadership, the leader's task is to focus energy, and align interests, not impose control.

Koinonia is a very expansive and meaningful term, for which no single word in the English dictionary can describe.

Koinonia creates a brethren bond which builds trust and, especially when combined with the other three values, overcomes two of humanity's deepest fears and insecurities: being betrayed and being demeaned.

Whether working collectively or individually, the innovators of new thinking in ancient Greece worked for the greater good of the whole – to propel their community forward, to share their understanding with others so that all ships would rise on a rising tide. Thus loftier goals and dreams are more easily manifested in the mind and achieved in reality. The team's sense of Purpose became manifest.

## 5. *METANOIA – MIND SHIFTING*

If one looks up the word Metanoia in a modern dictionary, the definition is typically overly simplistic: *beyond the mind*. Unfortunately, the richness and depth of real meaning has been "flattened" in the English language.

More properly *metanoia* meant:

*Shift the "Heart of the Mind"<sup>45</sup> to a broader/higher/transcendent order of conscious understanding.*

In this sense, metanoia sought to move the level of perception from a more mundane experience to a spiritual one where the

---

<sup>45</sup> The idea of "heart of the mind" has been virtually lost over the last two thousand years. It is reflected in the Old Testament passage from The Book of Proverbs: "As a Man Thinketh in his Heart, So shall he Be."

# Revolutionary Discoveries of the Greeks

---

perceptions of reality embrace the role of God as creator and maker of the highest and deepest truth.

The word is made of two parts:

*Meta* = beyond, in the sense of outside the normal realm of perception, shifting to a higher plane, higher than what the birds that fly might see. Modern English words like meta-principles, metamorphosis, metaphysical, etc embrace this notion.

*Nous* = the highest good, beyond normal being, the “first cause.” When one reaches the level of “nous,” everything becomes natural, obstacles cease to exist, life opens, and one’s soul and mind marvelously unite – giving access to a transcendent universe of “first source,” or “fundamental truth,” referring with reverence to the deepest meaning of life.

*Albert Einstein was well acquainted with these concepts (although perhaps not the word itself) and where such thinking could take him when he said:*

*Creativity is More Important than Knowledge*

*We Cannot Solve Today's Problems  
with the Same Level of Thinking that Created the Problem*

*God Does Not Play Dice with the Universe*

---

When Greeks used the soul to ‘see’ beyond, the ‘mind’ transcended to “the heart of the mind” (in the Greek the word is ‘*nous*’) The *heart of the mind* is more expansive, more powerful, more peaceful, more natural because it operated above and beyond people’s normal experience and expectations – functioning at the level of *divine expectations*.

In the ancient writings, the words *repentance* and *forgiveness* are often closely linked to *metanoia*. While this seems strange to the modern reader today, it must be understood that the word *repent* originally meant to “shift or change one’s mind to a higher order of

## Dynamic Differential Energy

---

thinking.<sup>46</sup> When a person had acknowledged this shift in the mind, they had “repented.” Similarly forgiveness meant to shift from the moribund thinking of anger, hatred, revenge, and vindictiveness, and upward to releasing the pain and hurt one holds within. Forgiveness first heals the forgiver.<sup>47</sup>

As one shifts to a higher view of life, the relinquishing of the old point of view left one to regret the old framework or paradigm, which is now seen as fallacious, incorrect, or regrettable. We then relate to the world and to others in a fresh, innovative way

Thus metanoia connoted a regenerative force. By exercising forgiveness, whether it be self-forgiveness, or with others, the effect is cathartic, cleansing the mind and the soul to enable a blossoming as one figuratively leaves a dark winter to enter a flowering of spring. By shedding the old husk, the human spirit is released from the bondage of anguish, pain, pettiness, and bitterness and reborn anew at a higher level.

This process of renewal was uniquely Greek. The Latin word “revival” (to re-live) was not nearly as fulfilling as its Greek counter-part: Anapterosis (to take flight, to rise above as on the wings of a bird, such as a phoenix rising from the ashes). The Greek word, despite its nearly impenetrable pronunciation, embodies the whole idea of transcendence and transformation lacking in the Latin version.

Similarly, metanoia often required “courage,” a word meaning *a heartfelt conviction*, by which the courageous person put their ideals ahead of their fears, or taking the less comfortable path to

---

<sup>46</sup> Now the word means to acknowledge or pay for one’s sins. In the original versions of the New Testament, which were written in Greek, the term for repentance was “metanoia.” For the ancient Greek, it was simply an acknowledgement that one had been experiencing the world at a lower order of perception.

<sup>47</sup> Christ’s admonition: “*Judge and ye shall be judged, condemn and ye shall be condemned, forgive and ye shall be forgiven*” is a perfect example of such a framework of thought.

## Revolutionary Discoveries of the Greeks

---

stand for what's right, despite the consequences. In the world of the twenty-first century, the rich Greek meaning of courage is used nearly synonymously with the Latin word "valor," meaning fearlessness or bravery.

By shifting the mind to a higher plane, metanoia became a fundamental learning process through which "discovery" (Latin: to uncover) or "anacalipto (Greek: to uncover that which is hidden) was an important piece. Much like Michelangelo, who, after unveiling the Pieta, said he didn't really carve the statue, but simply revealed that which was already in the stone, so metanoia became not a process invention, but a discovery, an unveiling of that which has been hidden. This idea was also expressed by the Wright Brothers on the evening after their first flight in 1903 when Orville Wright said: "Isn't amazing how all these secrets of flight have been hidden for so many years just so we can discover [uncover] them." The Wrights did not "invent" the airplane, they simply uncovered that which was hidden.

### **6. HISTORIA -- DEEP INQUIRY**

The father of inquiry ('h'istoria<sup>48</sup>) was Herodotus (484-425 BC), who travelled in every direction systematically asking questions, making inquiries (*historia*). Always asking "why" and "how," he travelled to Egypt asking how many forms of mummification they used, or in Babylon what healing methods were used by doctors. He was curious about how other cultures lived differently, what practices were forbidden, and why. He produced a large volume called *The Inquiries* that detailed his travels and observations.

A good historian is objective, analytical, and seeks root causes., asking numerous questions about the reports he receives, compares the details with other people's views about the same event, critically analyzing and challenging the data, comparing opposing positions, then using logic and the best other sources to find as much truth about the event as possible. The next generation

---

<sup>48</sup> The origins of the English word *history* stems from the Greek word *to inquire*.

# Dynamic Differential Energy

---

produced Thucydides (460-395 BC), who improved greatly on existing methods. Known today as the father of “scientific history,” his methodical approach and strict standards of evidence-gathering and cause-effect analysis is admired to this day. Military schools still study his history of the Peloponnesian wars. He also pioneered the exploration of human behavior in times of stress, wars, and plagues.

Socrates (469-399BC), a contemporary of Thucydides, was equally disciplined in his approach to inquiry, which is still used today, known as the Socratic Method. There is perhaps no other thinker in the history of the human race that was so filled with deep questions as Socrates. His dialogues, as recorded by Plato, were among some of the most challenging interactive questionings ever recorded. It is reasonable to assume, while Socrates had obviously mastered this method, others had also become quiet adroit at inquiry, which enabled them to dig deep into the depths of scientific investigation. When one reads Hippocrates, for example, one is immediately impressed by his level of insight, investigation, and analysis. Unquestionably Socrates’ student to become thought leader, Plato, and his student to become thought leader Aristotle, were all masterfully disciplined at the art of inquiry.

Were it not access to Polybius’ detailed inquiry and analysis of monarchies, democracies, and dictatorships, the American Founding Fathers would have been severely limited in their thinking about the design of our contemporary republic.

One can read Ptolemy’s<sup>49</sup> scientific inquiry into the nature of the universe and see the tremendous integration of sophisticated

---

<sup>49</sup> Ptolemy was a Greek Egyptian operating outside of Alexandria writing about 100 AD. Using centuries of accumulated data, he had carefully plotted the course of the stars and the planets, and, erroneously concluded that the sun and the planets had revolved around the earth. Without the benefit of telescopes, the Greeks had pondered and debated whether the sun or the earth was central in the solar system. In the late 1400’s, Copernicus, studying under a Greek scholar in Padua, learned of the theories of early Greeks, such as Aristarchus of Samos, Heraclides

# Revolutionary Discoveries of the Greeks

---

observations, trigonometric calculations, and analytical deductions. While Ptolemy's thesis (position) that the world was the center of the universe (and later proven wrong), other Greeks, using the method of deep inquiry, proposed their opposing thesis (antithesis), that the sun was central. This form of debate, called "dialectic" with supporting and opposing modes of inquiry is central to any community of learning.

The idea of dialectic debate was not for one side to "beat" the other or show its intellectual prowess, but to illuminate everyone, to reveal fundamental truths, and reveal inherent weaknesses in thinking, thus allowing all participants to engage in "metanoia" – the co-creation of a new order of thinking that came closer to the truth – today we call this a "paradigm shift."

Fundamentally, inquiry is more than just a process of asking questions. For the Greeks, it was an awe-inspiring journey of discovery that commenced from *wonder* as the first step. This was a somewhat playful, even child-like experience that embraced genesis (creativity), synthesis (system thinking), analysis (observing components), and symphathesis (relating).

## ***Conclusion & New Beginning***

By combining a strong amalgam of Honor (Philotimo), with Virtue (Arête), Wisdom (Sophia), Community (Koinonia), Paradigm Shifting (Metanoia), and Deep Inquiry (Historia), Athenians, Alexandrians, and citizens of other allied city-states were able to work collectively, to co-create, co-operate, and

---

Ponticus, and Philolaus who proposed the first models of a heliocentric solar system: the Earth and all other planets revolving around the Sun, the Earth rotating around its axis daily, the Moon in turn revolving around the Earth once a month. Because those works have not survived (but Ptolemy's have) Copernicus is rightly credited with having proven the sun is central to the solar system. During the early 1500's, Copernicus disproved the theory of an earth-centric universe, and proved the sun was the center of the solar system. (All calculations by Copernicus were made without the aid of a telescope, which was not invented until early in the 1600's and then improved upon by Galileo.)

# Dynamic Differential Energy

---

generate a revolutionary community that exceeded all other tribal nations of that era, and set a standard of excellence that, in many ways, as never been duplicated.

*This was the essence of how the Greeks created synergy.*

Synergy is the deepest yearning of the human soul. Few people do not have a heartfelt desire to create a synergistic relationship between others, their God, nature and, ultimately their inner selves.<sup>50</sup>

Sadly, at the very time these Greek values were being transformed into a Christian context, in the late fifth century the Roman Empire was in precipitous decline. In a misguided last-ditch effort to save the fast-failing Empire, control-obsessed fanatical fundamentalists tried to impose a regime of mindlessness on the realm, while simultaneously the Empire's perimeter was punctuated with tribal incursions of Barbarians. Spiritual Christianity succumbed to the regimented dogma of the hard-line prelates. Lost were what was left of the traditions, culture, and practices of the ancient Greeks, buried in the dearth of inspiration by the arduous death-march of the Dark Ages. (See Volume Five for more explicit information on how this tragic loss occurred)

In the modern world, a concerted (but unknowingly superficial) effort was made to resurrect a few of the symbols, edifices, and teaching of some of the values and principles of the

---

<sup>50</sup> It therefore should be no wonder that, when Christ preached the overarching commandment

*"Love God with thy whole mind, and whole spirit, and  
love thy neighbor as thy self,"*

He was exhorting people to engage in synergy. Thus early Greek Christians, already practicing their core cultural values would not be as perplexed as we are today by the passage in John 14:12-16

*"I leave you so that the Great Comforter,  
the Holy Spirit (Sophia) may come to you ...*

*And these work that I do so shall you do,  
and greater works shall you do than I."*

## Revolutionary Discoveries of the Greeks

---

ancient Greek. Beginnings with the Renaissance, what was left of the Greek books of learning were reopened after a thousand years of collecting dust, mold, and rot. Their genetic code was examined only as an exoskeleton, without understanding their DNA buried within the culture after the Romans left only a shadow of the evidence.

These six values formed the “core” or “kernel” of the Innovation System. Like a seed kernel, the entire plant is imbedded in the kernel’s DNA. And, like a seed, it will not germinate and grow without sun, water, and fertile soil. Continuing the analogy, the kernel needs a support system of other values to flower. In the next edition of this study, we will include the “support values.”

With this newly discovered level of understanding, what has been lost or invisibly imbedded in our collective unconscious can now be manifested, replicated, and regenerated.

We believe and have substantial evidence that by engendering these six values into modern culture -- innovation teams, community, politics, sports, alliances, business, family, education - - magic will occur as synergy blossoms.

For the first time in over 2000 years we should be able to create synergy on a sustainable and replicable level.

And, if the group does something to lose that synergy, it can be resurrected because we now know the “architecture,” the underlying design of a great force in the universe -- synergy.



# Dynamic Differential Energy

---

## CHAPTER FOUR: DIGGING DEEPER INTO THE MAGIC OF SYNERGY

### *POWER OF PROGRESSION*

We see the power of progression in many ways. In today's companies, we see it when Apple introduces an *iPod*, then in rapid succession launches an *iPhone* and then an *iPad*. Remember the fanfare when, every eighteen months, Intel would announce a 286 *chip*, then obsolete it with a 386 that would run at twice the speed and half the cost per byte, then make it seem slow and sluggish with a 486. In the 1920s and 30s, people would revel in knowing that at any moment some daredevil would push an airplane to its outer limits and break the speed or altitude record.

The power of progression inspires and personifies vitality – life itself.

The Greeks were the first masters of the power of progression. Dell Ehrlich captures the unique spiritual nature of the Greek quest for wisdom that gave the culture its vibrancy:

*2000 years ago,.... why would Romans, who were the imperial masters of the Mediterranean world, seek out Greek culture, learn the Greek language, and study Greek philosophy, instead of preferring their own ways. The answer is simple. The Greeks were a very special people who penetrated the wholeness, the wonder, and the beauty of life with far more enthusiasm and joy than any other people before them.*

*They were deeply inquisitive, wanting to know what things in life really were, why they were, how they were, and that it could not be otherwise.*

*In all aspects of life they pursued perfection and excellence. Their brilliance simply overpowered and charmed all the people with whom they came into contact.*

## Revolutionary Discoveries of the Greeks

---

*The Greeks themselves knew they were very special among men, not because of race or power, but because of their desire to know and to perfect that portion of the cosmos that was given into their hands by the Craftsman and the Father of the universe. The wisest man cannot turn away from the search, but loves it passionately, and cannot be fulfilled.*

*Plato does not let his fellow Greeks forget this, stating that they must be compelled to continue the long-held desire among the Greeks for wisdom that they might obtain as much as possible through dialogue, education, discovery and all forms of the learning process, for the Greek culture has "a native supreme authority and is equal to the learning of the highest and noblest truth, if there were about one to teach them. But there will be no such teacher unless God leads the way."*

*It was their quest to improve everything and every thought that they receive from others. They even attempted to worship borrowed gods better than the people from whom they borrowed them. Confident that they could improve and bring perfection even the mental images of other people's deities, they borrowed and improved and sought to perfect that which was divine and holy, also claiming that God himself would not be offended with their great desire to know him, but, on the contrary helps men in their effort to know him and worship him in the most beautiful and honorable ways.<sup>51</sup>*

Reflecting on this commentary, it is clear that the Romans did not have this sense of Power of Progression. Like an auto maker that's lost its way and can think of nothing to do for next years' model but put a bigger engine in it and a flasher paint job. Similarly, Rome's vision was more land, bigger buildings, and stronger fortresses. Thus the Greek "DNA" of the Power of Progression was interrupted in the pathway of the evolution of civilization, lying dormant, ready to be re-injected into the genetic stream of humanity.

---

<sup>51</sup> Erhlich, Jerry Dell; *Plato's Gift to Christianity*, Academic Christian Press, 2007, p 1-2

# Dynamic Differential Energy

---

Where are we today? Is there any sense that, as a culture we are on the journey of progression? How about our children? Do they think their lives will be better than their parents? Historian Kenneth Clark makes some astute observations:

*At certain epochs man felt conscious of something about himself – body and spirit – which was outside the day-to-day struggle for existence and the night-to-night struggle with fear; he has felt the need to develop these qualities of thought and feeling so that they might approach as nearly as possible to the ideal of perfection – reason, justice, physical beauty, all of them in equilibrium.*

*Western Europe inherited such an ideal. It had been invented in Greece in the fifth century before Christ and was without doubt the most extraordinary creation in the whole of history, so complete, so convincing, so satisfying to the mind and eye, that it lasted practically unchanged for over six hundred years. .. [then] of course, its art became stereotyped and conventional.<sup>52</sup>*

In my experience revitalizing deteriorating communities, the first thing in turning the tide was to create a mission to build a future for the people, a sense of hope to cure the despondency that manifests after suicide of the soul.

The trajectory for the future must be propelled not simply with intellectual logic but also with emotional passion – an inner commitment and a powerful belief that a positive future will become a reality. In generating progressive power, each who touches the vision must add something of value – making it better or broader or more universal or more accessible.

The importance of trust is inextricably connected to the Power of Progression. With trust, people see that such progress will be the inevitable of the struggle to overcome obstacles. The Romans tried to live this belief as an illusion, and the longer the illusion was unfulfilled, the more elusive it became, until the dream drifted away, to be replaced with a progression of psychopathic leaders, like Caligula or Nero.

---

<sup>52</sup> Clark, Kenneth, Ibid, p 3.

# Revolutionary Discoveries of the Greeks

---

## ***CULTURAL IMPACT ON INNOVATION & CO-CREATION***

This analysis started as a search for the reasons why the Romans were unable to replicate or continue the Greek innovation model. There are a number of distinguishing features of the Greek model, and it is clearly evident these are either partially or wholly missing in the Roman experience. (see Volume Five for more details on what distinguished Greece from Rome)<sup>53</sup> Here are 16 distinguishing features of the Greek system:

1. *Virtue (Arête)*: For a Greek, the personal commitment to self-improvement physically, mentally, and emotionally marked a universal standard of excellence. Those who were not willing to engage at this level were considered second-rate.
2. *Community (Koinonia)*: This word is part of the spiritual soul of ancient Greece, and reflects a multi-dimensional sense of marriage, partnership, alliance, and belonging.
3. *Ethics*: invented by Aristotle, which he wrote about in great depth, which focused on integrity and caring .
4. *Relationships*: Friendship was Aristotle’s centerpiece of his work on ethics.

The first four, together, create a “community of ethical relationships,” which is sustained by the next three:

5. *Justice*: Justice & Fairness is which Solon & Plato eloquently expounded upon and was the legal system.
6. *Honorable behavior*; which was the hallmark of the Stoics, Athenians, Spartans, etc.
7. *Trust*: the quality so missing in Rome that led to its undoing.

---

<sup>53</sup> There were some notable exceptions: The Roman Era did produce a few thought leaders, Plutarch, Polybius, Ptolemy, and Galen (all who were actually Greek, and Marcus Aurelius, who was Roman but tried to reintroduce Greek thinking into the Roman mainstream)

# Dynamic Differential Energy

---

Thus, when under crisis (which was extremely frequent) the response of the community as a whole exhibited:

8. *Ethical Response to Adversity*: Greeks, under adversity, responded with “the Greater Good,” while the Romans responded with “Self Interest” (what’s in it for me). The Athenian process of “ostracism” of dishonorable people is a good example of cleansing psychopaths and other untrustworthy people from their community.

Which in turn was reinforced a culture that supported innovation:

9. *Competitive-Cooperative Balance*: While the Greeks were highly competitive in many areas, such as athletics, philosophy, and science, they too were highly collaborative, sharing ideas and wisdom. (competing ideas about origin of life – first cause – Pythagoreans harmonies versus Heraclitian polarities), nature of the universe (geo-centric versus helio-centric), nature of human behavior (upper soul: spiritual versus lower soul: animal passions), philosophy of life (Stoics, Platonists, Epicureans, Pythagoreans, etc. (Thus the society as a whole balanced the 4 Drives)
10. *Experimentation & Acceptance of Failure*: Willingness to see the whole of life’s experience as a series of learnings from experimenting with new ideas and approaches. Thus there is no such thing as “failure,” just a failure to learn, failure to improve, failure to shift and see the world in a new way.
11. *Respect for Intellectuals*: The Greek society did not regard their best thinkers as “egg heads” or “ivy-tower high-brows:” Instead they saw their deep intellectuals as a prize of their culture who held the future of the civilization in their ability to translate knowledge and wisdom into action.

Underlying these factors, was a very deep set of “spiritual

## Revolutionary Discoveries of the Greeks

---

roots" that were highly treasured and reinforced by the culture:

12. *Cherishing Diversity*: In the ancient Greek world, the concept of "Unity in the Diversity" was important. It integrated the origin of life (first cause) ideas of the Pythagorean concept of Harmonies with the Heraclitian concept of Polarities. This meant that the frictional interplay of different cultures and ideas was not a cause of conflict, but a primary means of newer, deeper, and higher insights into the cause and meaning of things. Life was not a "battle of supremacy of thought" but an evolving progression of innovative thinking.
13. *Shape-Shifting (Metanoia)*: The process of taking conflict, failure, polarities of thought, dialects, etc. and seeing these in a new, higher, broader, or deeper perspective
14. *Quest for Knowledge & Truth*: The incessant search for the "inner truth," the "underlying law," the "hidden meaning (discovery), the "reconciliation of the anomaly," and the quest for "first cause." Thus they saw that learning the "inner design" or "architecture" of all of life - philosophically, scientifically, practically, and artistically was part of the search for "logos" (from which our English word "logic" is derived) which meant the "the divine truth about the cause of all things," or the "divine essence of the deepest truth." (this meaning was grossly mistranslated into Latin as "the Word," as in "the word of God." Our English word "logic" implies that it is "rational," but totally leaves out the "inner truth" or "first cause" connotation. The "inner logic derived from deep root cause analysis" might better approximate the scientific meaning of this word.)
15. *Wisdom*: The attachment to wisdom (*sophia* in Greek) implied the integration of three critical factors: 1) deep understanding and *knowledge* (*gnosis*), 2) sensitive empathy and *compassion* for others, and 3) the ability to translate these into intelligent and heartfelt *action*. Today

# Dynamic Differential Energy

---

we should think of it as “wisdom in action.” The word “philosophy” literally means “lover of wisdom” (philo: to love, sophia: wisdom). While today the idea of “philosophy” has acquired an academic, theoretical connotation, the ancient Greek was ready to take action on their beliefs which were embodied in philosophy. Thus wisdom carries with it a “spiritual dimension” that was universal among all Greek schools of thought, which elevated Sophia to goddess status. With the exception of Marcus Aurelius, “wisdom in action” seems to have eluded the Romans.

16. *Progressive Trajectory*: One hallmark of the Greek Quest for Knowledge & Truth was that it would translate into a continuous stream of improvements and progressions that would lead their civilization on a pathway of getting better day by day, year by year. This led to the belief that the future would be bright, even in the face of adversity, regardless of circumstantial problems or setbacks.

(In Volume Five, we will make it quite evident that when the Greek and Roman cultures are compared, these 16 Critical Factors for Success (CFSs) are simply not present in the Roman culture to produce innovation.)

These sixteen core cultural “arrows” or “markers” enabled the Greeks could to keep a fighting “warrior” spirit without letting fighting, fear, and greed become their social culture or individual personality. (Add to this the “Leaders Without Conscience” factor that was so present in the Roman leadership system, and the difference becomes even more pronounced.)

In the modern world, the breakthrough that formed the United States, was roughly modeled on the Greek principles. However, these principles seem to be fading from the clarity beheld by the Founding Fathers and need to be reinvigorated. (Modern Israel (see *Start-Up Nation*) also has core elements of these Greek factors, although the Israelis still have more to work on if they were ever to dare emulate the Greek model.)

# Revolutionary Discoveries of the Greeks

---

## ***DIABOLICAL IMPACT OF FEAR ON CREATIVITY***

In the seven hundred years of Roman hegemony, the level of innovation paled compared to the Greek era, which was in ascendancy for three hundred years, then hung on in the shadow of Rome for another three or four hundred years. Yes, there were some Roman advances in engineering, which can be seen in the coffered ceiling of the Pantheon, or the capacity of aqueducts, such as the Pont du Gard, to bear up to tremendous loads, or the ingenuity of the original Coliseum's convertibility design to enable the arena to be used for gladiatorial fights or naval battles, or armament improvements, or the invention of concrete. However, with the exception of the latter, real breakthroughs in technical invention, scientific discovery, or social innovation were negligible. To illustrate, just try to name a thought leader – like Plato, Euclid, or Archimedes -- in any field from the Roman era to compare with their Greek counterpart.

The impacts of fear have been quite well studied. People respond to fear in one of three ways: Fight, Freeze, or Flight. They don't innovate, except to find innovative ways to revolt or retreat.

When one looks back on the Roman era, the lack of innovation has a thundering impact on the system of government. Unlike the Greeks that were constantly seeking new ways to improve on the way their government functioned, effectively the fall of the Republic at the end of the second century BC, Rome kept the illusion of the Republic but defaulted to a Dictatorship that was to continue for the next five hundred years. Innovation, evolution, continuous adaptation, and intelligent use of government to serve the people were ideas were not part of the Roman belief system.

It was not for lack of ideas, but Roman lack of commitment to the right things. They drank their own bathwater, plumping their self image of themselves, feeding on overpowering others, gorging themselves on self indulgence, never realizing they had only created illusions of real strength.

*Illusions are delusions!*



# Dynamic Differential Energy

---

## *Power of Expression of Ideas in Language*

Language determines much of the way we think. It can open or close the mind. As German philosopher Ludwig Wittgenstein said:

*The limits of my language are the limits of my world.*

In matters of the heart, soul, and spirit, simplicity of word may not be an asset as it strips deep meaning away and leaves us with the version “for dummies.” The Greek words were a rope to climbing out of a sea of storms, while the Roman word left us then to drown, and that’s what happened.

Consider these differences between these words that supposedly mean the same thing in different languages:

### *English*

- Repentance
- Sin
- Honor

### *Greek*

- Metanoia – shift the mind to a higher level
- Harmatia – to miss the mark
- Philotimo – Love of honor

How we act is often very tied to our belief system. If that belief system is flawed, so will our actions be distorted from the real goal. Often Latin, and then English have “flattened” meanings of some of the most influential words in our language, losing their richness, texture, and elevational power, thus limiting our belief system.

As we proceed into the future and look back on our recent past, we can take small solace in the invention of many new words for our science, but so very few for our spiritual and social relationships.

The Greeks were masters at the creation of words to reflect the nature of the world they imagined for their future. The Romans clearly were horribly deficient in this skill, not because they lacked the intelligence, but because they lacked the divine inspiration and the will to carry it to fruition.

# Revolutionary Discoveries of the Greeks

---

## *Fear and Courage*

At the core of any civilization's failure will be found two forces in opposition to each other: Fear and Courage. Aristotle said the latter was the most important quality a human can have.

These are two very differential energies, pulling us in totally different directions. Cultures themselves are often built around a focus on one or the other. A culture of fear is usually attached to other forces, such as greed, power, and control. A culture of courage is usually attached to vision, honor, and community. Rome represented the former, Greece the latter.

When Rome finally fell, the leaders of Rome had no more will to fight the evil barbarians at their gate; instead they made a Faustian bargain, and ultimately sold whatever semblance of their souls to an evil even greater than they. Kenneth Clark remarks:

*A world of fear and darkness [is] ready to inflict horrible punishment for the smallest infringement of a taboo.<sup>54</sup>*

*Thinking about the almost incredible epoch of the Roman Empire tells one something about the nature of civilization. It shows that however complex and solid it seems, it is actually quite fragile.*

*It can be destroyed. What are its enemies?*

*First of all fear – fear of war, fear of invasion, fear of plague and famine, [I might add fear of cruelty and injustice] that make it simply not worthwhile constructing things or planting trees or even planning next year's crops.<sup>55</sup>*

Ultimately our success as a civilized culture from the individual to the institutional level – ourselves, our families, our communities, our religions, our government, and our businesses -- will depend on having the courage and vision and commitment to resurrect the Greek model and take it to an even higher level – the evolution of our cultural destiny dreamt by our Founding Fathers.

---

<sup>54</sup> Clark, Ibid, p; 2

<sup>55</sup> Clark, Ibid, p 3-4

# Dynamic Differential Energy

---

## *The Energy We Receive From Trust*

In the larger sense, the fall of Rome came because the people could not trust their government, nor their fellow man, nor their culture for its lack of vision and ideals.

Just as the Roman Empire collapsed, in large measure, because no one could trust its leaders, nor its institutions, nor its vision for the future, so today, distrust is equally disturbing. Trust in institutions in the U.S. and Europe has eroded to precipitous levels. When less than a quarter of our citizens in America and Europe trust their government, the very foundations of democracy are in peril. To make matters worse, on both sides of the Atlantic, our most trusted institution is our military. Why? They are the last bastion of safety, security, and honor. Thank God our military academies train our military leaders to respect civilian authority. If this ever fails us, we will have another Hitler, Mao, or a Latin American style dictator.

Fear is the greatest destroyer of trust. Understanding how to create trust in a world of fear will be one of the great achievements of this next generation. Kenneth Clark observed in *Civilization*:

*It is the lack of confidence [distrust], more than anything else that kills civilization. Confidence [trust] in the society in which one lives, belief in its philosophy, belief in its laws, and confidence in one's own mental powers... a vigorous belief in law and discipline. Vigor, energy, vitality: All the great civilizations .. have had a weight of energy behind them.*

*People sometimes think that civilization consists of fine sensibilities and good conversation and all that.*

*These can be among the agreeable results of civilization, but they are not what make a civilization, and a society can have these amenities and yet be dead and rigid.*

*We can destroy ourselves with cynicism and disillusion, just as effectively as bombs.<sup>56</sup>*

---

<sup>56</sup> Clark, Ibid, p 4 & 347

# Revolutionary Discoveries of the Greeks

---

## *What Kind of Quest?*

Societies with direction have a “quest.”

In America in the 1800s, that quest was named “manifest destiny” to signify our dream for the United States to own the territories from Atlantic to Pacific.

The Greek quest could be called a “metaquest” meaning they were seeking something “above and beyond.”

The Roman quest was clearly a “conquest,” often also plagued with an accompanying “inquest.”

The idea of seeing the world, its history and its future, in terms of a “quest” is important, for it dynamically directs and places value on specific human energies.

In *Phaedrus*, Socrates and Plato were placing the dynamic energies on the higher spirits of civilization (explored more in Volume Three) the Divine Energies of *Love* and *Creation* represented by the gallant white steed.

Socrates and Plato warn us, however, that our own “wanton black stallion,” possessing the lust for pleasure, a compulsion for greed, and a fear of going without can over-ride all goodness, greatness, graciousness, and giftedness.

Conscience plays a major role in how we as individuals and our leaders make the daily choice between the white steed and the black stallion.

This brings us to the uncomfortable but compelling conclusion (see Volume Five):

**The Roman culture *lacked a conscience,*  
which put Rome on a pathway to perdition.**

As we now know from modern psychology, people who are *devoid of conscience* are psychopathic.

Over the last three thousand years, although circumstances and opportunities play a part, human intelligence seems to have remained fairly constant. Human society contains the potentiality

## Dynamic Differential Energy

---

to produce hope or fear, glory or destruction, life or death. Too often, this fateful decision of destiny -- crossing of the Rubicon as Caesar implied two thousand years ago -- is left too much to chance, by a cast of the dice, rather than by conscious choice and careful consideration of the underlying design that can weigh the dice heavily in our favor.

Any attempt at using the “fear of God” as the source of spiritual authority will be doomed to the same reason the French Revolution failed or the Soviet Union failed or Mao Tse Tung failed. “Reigns of Terror” cannot hold people in check. Fear and trust are natural antagonists. Fear will burn itself out.

Hopefully we shall never forget what we must continue to learn about fear and courage.

*Destiny hangs in the balance.*

[Author’s note: Upon reading my highly favorable account of the Greeks, please understand they were not perfect. Albert Einstein’s commentary on the importance of equality and human dignity for men and women of all races stated it well:

*“The ancient Greeks had slaves...who had been taken captive in war....Aristotle, one of the great Greek philosophers, declared slaves inferior beings who were justly subdued and deprived of their liberty. It is clear that he was enmeshed in a traditional prejudice from which, despite his extraordinary intellect, he could not free himself.”<sup>57</sup>*

The same could be said for Thomas Jefferson and George Washington, both who owned slaves. Washington ordered his slaves freed upon his death.

---

<sup>57</sup> Einstein, Albert, *Out of My Later Years*, Random House, 1956, p 133

# Revolutionary Discoveries of the Greeks

---

## CHAPTER FIVE: DIFFERENTIAL ENERGY REDISCOVERED

After Greece eventually succumbed to the forces of the Roman Empire, virtually all new thinking slowed, halted, and then regressed during the Dark Ages, not to be rediscovered until the Renaissance – literally the *Re-Birthing*. Scholars estimate that two thirds to three quarters of all the Greek writing rotted away, was burned by religious zealots, or was destroyed by wars, including the constructs of dynamic differential energy so clearly worked out by the Greeks.

As the Renaissance evolved into the Age of Enlightenment, a deeper investigation of Greek thinking blossomed in Europe and the fledgling United States. Democracies began to proliferate in the 1800s; a renewal in things Greek became widespread. Greek Revival architecture was the rage of the 1820s and '30s; Americans began naming their cities after Greek cities, fraternal orders in colleges took on Greek names, and scholars began digging in the vicinity of ancient ruins.

### ***HERACLITUS REVISITED***

In Germany in the 1820s Hegel resurrected Heraclitus stating:

*"... there is no proposition of Heraclitus which I have not adopted in my logic."*

Hegel took Socrates' dialectics – such as pros and cons -- and elevated it to thesis and antithesis which converged into a synthesis, which would be the springboard for the next level of challenges. Hegel's Dialectic Philosophy on the inherent nature of contradictory and polarity forces in the universe, embracing four basic concepts:

*Edison used this model in many of his experiments. Many modern innovation teams still use this approach, always ensuring that the pull and tug of ideas does not degenerate into a war of egos and self-righteous indignation.*

---

# Dynamic Differential Energy

---

1. Everything is transient and finite, existing in the medium of time
2. Everything is made out of opposing forces/opposing sides (contradictions).
3. Gradual changes lead to turning points, where one force overcomes the other (quantitative change leads to qualitative change).
4. Change moves in spirals (or helices), not circles

Many of Hegel's views are also remarkably similar to the Chinese philosopher of polarities, Lao Tzu (Tao Te Ching) writing 2300 years earlier, such as "Being and non-being are the same." (Hegel stated Being and Non-being united as Becoming).

Hegel's dialectic<sup>58</sup> contended that the nature of the world outside one's perception is interconnected, seemingly contradictory, and dynamic -- the very process that has governed the unfolding of human history.<sup>59</sup>

---

<sup>58</sup> According to Hegel, understanding the underlying complexity of dialectic unfolding requires a three-fold developmental methodology (derived from the Greeks) comprising of:

1. **Thesis** – A proposition, affirmation, or theme (Abstract)
2. Giving rise to its reaction, an **Antithesis**, (Negative) which contradicts or negates the thesis, suggests a flaw in any initial thesis—it is too abstract and lacks the negative of trial, error and experience
3. The tension between the two being resolved by means of a **Synthesis**. (Concrete)

<sup>59</sup> While Hegel had a major influence on philosophical and theological thinking, his direct impact remains limited, principally because he stopped at synthesis (joined theses) and did not go the next step to create synergy (joined energy) for implementation, overlooking the Greek process of metanoia; and thus his framework could not reconcile polarities into higher-order synergies.

Two decades after Hegel gained visibility with his writings, Karl Marx took Hegel's frameworks to support the atheistic view of dialectic materialism polarizing "labor" against "capital. In the Marxian adaptation of Hegel's model, had the ideas of "harmonizing polarities

# Revolutionary Discoveries of the Greeks

---

## ***ALBERT EINSTEIN: POLARITIES AND RELATIVITY***

Heraclitus' and Hegel's impact was to influence many of the most brilliant twentieth century's minds, but it was not until the late nineteenth and early twentieth century that the concepts of differentials in polarities began to reemerge with a new intellectual rigor.

Einstein's first fascination as a teenage boy was the unique nature of polarities as they manifested as magnetic fields and the flow of electricity between positive and negative charges. (His father and uncle were owners of a manufacturing company that made electrical equipment).

Einstein originally intended to pursue a career in electrical engineering and his first paper was an investigation of magnetic and field effects age of 15 in 1895. He explored electromagnetic polarities and changes in force fields based on the work of James Clerk Maxwell (an eclectic scientist who had read Hegel and Adam Smith's Theory of Moral Sentiments).

*"The electric field theory of Faraday and Maxwell represents the most profound transformation experienced by the foundations of physics since Newton."*

### ***Polarities & Harmonies in Electric Motors & Generators***

*One of the most important scientific breakthroughs of the late 19<sup>th</sup> century was the discovery of the relationship between magnetic energy and electric energy: how the intersection of magnetic polarities and coils of wire can induce a rotating motion (e.g. a motor) or when propulsion is applied to a rotor produce an electric output (generator).*

*Today's entire electric power generation system is based on this principle.*

*Similarly, the structure of the atom is based on polarities and harmonies.*

---

into synergies" been considered, the dysfunctional realities of the system of communism would have stood a better chance of success. However, the realities of communism were both monolithic (no embracing of diversity) and polar (win-lose); thus the horror of such flawed thought was unleashed upon the world.



# Dynamic Differential Energy

---

Advancing Faraday's breakthroughs on electro-magnetic polarities, Maxwell had a strong influence on Einstein's further thinking and led directly to the insights of the theories of relativity that were proposed 10 years later in 1905 as the theory of relativity. Einstein attributed his breakthrough to Maxwell:

*"The first stage, the special theory of relativity, owes its origin principally to Maxwell's theory of the electro-magnetic fields."<sup>60</sup>*

This breakthrough, which Einstein recognized as an "invention [which was] not the result of logical [continuous] thinking, even though the final result had to be formulated in a logical manner," essentially marked the beginning of a massive scientific shift in thinking that limited the scope of classical Newtonian physics, opening up new avenues for understanding everything from elemental atomic reactions to the nature of the universe.<sup>61</sup>

He also was a firm advocate of understanding the philosophic nature of science, again in the nature of Harmonies and Polarities<sup>62</sup>

---

<sup>60</sup> Einstein, Albert; *Out of My Later Years*; Random House, 1956

<sup>61</sup> While it is not certain if Einstein was directly influenced by either Heraclitus or Hegel (both Einstein and Hegel taught at Humboldt University of Berlin, but at different times), it is known that Einstein was deeply intrigued by philosophy, and we know he was influenced by Kant and also by Spinoza's concept of the Divine as Nature.

*"My views are near those of Spinoza: admiration for the beauty of and belief in the logical simplicity of the order which we can grasp humbly and only imperfectly. I believe that we have to content ourselves with our imperfect knowledge and understanding and treat values and moral obligations as a purely human problem – the most important of all human problems."*

<sup>62</sup> Einstein said: *The reciprocal relationship of epistemology and science is of noteworthy kind. They are dependent upon each other. Epistemology without contact with science becomes an empty scheme. Science without epistemology is – insofar as it is thinkable at all – primitive and muddled. However, no sooner has the epistemologist, who is seeking a clear system, fought his way through to such a system, than he is inclined to interpret the thought-content of*

# Revolutionary Discoveries of the Greeks

---

(It is evident from the following quote below that Einstein was well aware of the Greek debate)

*“The scientist..... accepts gratefully the epistemological<sup>63</sup> conceptual analysis; but .....must appear .... as a type of unscrupulous opportunist: he appears:*

- *as Realist insofar as he seeks to describe a world independent of the acts of perception;*
- *as Idealist insofar as he looks upon the concepts and theories as free inventions of the human spirit (not logically derivable from what is empirically given);*
- *as Positivist insofar as he considers his concepts and theories justified only to the extent to which they furnish a logical representation of relations among sensory experiences.*
- *He may even appear as Platonist or Pythagorean insofar as he considers the viewpoint of logical simplicity as an indispensable and effective tool of his research.* <sup>64</sup>

In his later years, Einstein searched unsuccessfully for the Great Unification Field Theory that would reconcile the General Theory of Relativity with Electromagnetism, with the hope that it might also embrace the dichotomies of classical Newtonian Physics and Heisenberg’s Uncertainty Principles of Quantum theory. Although he never seemed to use the term “synergies,” one might think of the “Unification Field Theory” as a “Quest for Synergy.”

---

*science in the sense of his system and to reject whatever does not fit into his system.*

<sup>63</sup> *Epistemology* is the branch of philosophy that deals with the nature and scope of knowledge, specifically:

- What is knowledge?
- How is knowledge acquired?
- How do we know what we know?

<sup>64</sup> Einstein 1949, 683–684)

# Dynamic Differential Energy

---

## ***CARL GUSTAV JUNG & HUMAN PSYCHE POLARITIES***

About the time of the First World War, Carl Gustav Jung broke his relationship with Sigmund Freud over Freud's obsession with sex as the fundamental driver of human behavior.

Jung, from his studies of ancient cultures, embracing Chinese, Greek, Hebrew, Christian (including Sophian Gnosticism) and native aboriginal, designed a new set of constructs for the operations of the human psyche based on the tension between opposites and transcendent functioning to reconcile the differentials.

*Opposites are the ineradicable and indispensable pre-conditions to all psychic life.*

He saw transcendent function flowing from the conscious and unconscious struggle to reconcile these tensions. Jung acknowledged the one of the original sources for this thinking:

*"Heraclitus discovered the most marvelous of all psychological laws:*

*the Regulative Function of Opposites.  
He called it 'enantiodromia' a running contrariwise,  
by which he meant that sooner or later everything runs  
to its opposite."*

Heraclitian and Hegelian philosophy both profoundly impacted Jung's view of the world. Jung regarded Hegel as "that great psychologist in philosopher's garb,"<sup>65</sup>

Jung then came to see the laws of psychic opposition<sup>66</sup> and transcendence as an energy force. The process of attaining transcendent breakthroughs was based on three core principles:

Principle One: The Principle of Opposites: - The greater the contrast, the greater the potential. Great energy only

---

<sup>65</sup> Jung, 1935, p.546

<sup>66</sup> Jung's work in polarities manifests today in the Meyers-Briggs Tests.

# Revolutionary Discoveries of the Greeks

---

comes from a correspondingly great tension between opposites...There is no life unless there is a tension of opposites.... Life is born only of the spark of opposites.<sup>67</sup>

Principle Two: Principle of Equivalence: -- The energy created from the opposition is "given" to both sides equally, which creates the tension.<sup>68</sup>

Principle Three: Principle of Entropy: The tendency for oppositions to come together, and so for energy to decrease, over a person's lifetime. <sup>69</sup>

---

<sup>67</sup> [Author's Note: This construct sets the stage for synergy - dynamic differential energy.]

<sup>68</sup> [Author's Note: While Heraclitus stated this, it may be difficult to "prove," in the world of psychology, but much easier to prove in the world of physics, under the rubric of equilibrium]

<sup>69</sup> [Author's Note: Jung borrowed the idea of entropy from physics, where entropy refers to the tendency of all "closed" physical systems to "run down," that is, for all energy to become evenly distributed. For example, if there is a stove in one corner of the room, the whole room will eventually be heated, and the stove will get cooler, unless it gets more fuel.

On the Principle of Entropy, Jung boxes himself into a belief construct that limits Principle One. Whereas in Principle One he acknowledged as a *psychological* principle, now he introduces into Principle Three a *physical (Newtonian)* principle. At this point Jung erroneously assumes the laws of physics govern the mind.

The synergy of differentials does not necessarily adhere to classical Newtonian physics, as Einstein came to understand with his Theory of Relativity, which superseded classical physics. In retrospect, Jung should have used Maxwell's magnetic field theory or Einstein's principles of relativity,

# Dynamic Differential Energy

---

## ***KURT LEWIN AND DYNAMICS FORCE FIELDS***

Kurt Lewin is recognized as the founder of modern social psychology and organizational behavior. He made a significant impact on the discipline of group dynamics and action research, pioneering the use of theory and experiment to test hypotheses about human behavior.

He received his doctorate from Humboldt University of Berlin (then immigrated to the United States in 1933.) While studying psychology at Humboldt University of Berlin during the first World War, Lewin was frustrated by Wundt's rigid, irrelevant and dull approach to experimental psychology. This triggered his thinking to address social psychological problems

---

because the possibilities of synergy serve to focus, transform, and amplify energy.

Jung framed the constructs of psychic entropy theory in 1912 and later published it in the 1928 paper "Über de Energetik der Seele" ("Above the Energetics of the Soul" translated into English as "On Psychological Energy"). In his description of psychic entropy, Jung states:

*"Since our experience is confined to relatively closed systems, we are never in a position to observe an absolute psychological entropy; but the more the psychological system is closed off, the more clearly is the phenomenon of entropy manifest."*

The realities of human existence are, as John Donne had so well stated in his renowned poem, "no man is an island unto himself," and thus no human exists in a "closed system," which serves to render principle of human entropy invalid unless the individual chooses the life of a hermit.

Energy only seems to be controlled by entropy in environments of either isolation or where fear and distrust prevail. When Energies Align, Synergy Occurs, and Entropy is no longer operative.]

# Revolutionary Discoveries of the Greeks

---

using Gestalt methodologies which emphasized looking at the whole picture rather than the sum of its parts.

Lewin was deeply influenced by Einstein's newly published theories (Einstein and Max Planck were teaching at that time at the University of Berlin), and began applying Einstein's ideas of field physics to psychology. When viewed from the perspective of field effects, he observed that human behavior is a function of both the person and the environment in which the behavior takes place, including the social parameters.

Lewin proposed that behavior was the result of perceived needs resulting from perceptions of the field and he saw positive valence forces which attract people, and negative valence forces which repel people, resulting in the dynamic interaction of forces propelling group dynamics. The confluence of these fields produced an approach/avoidance dynamic.

Coping in these opposing force fields required that people learn the social dynamics, because changes in valences and values were always in flux. As with any field theory, Lewin believed it was imperative to take a holistic analysis of the organizational environment in which the learning is occurring. To take into account the total situation, he developed the force-field analysis technique.

Lewin's field theory led to further research on human behavior, conducting experiments in natural settings where he manipulated complex situational variables and observed the effects. This approach has been used widely in education as "action research" and has had a large impact on modern research.

# Dynamic Differential Energy

---

## **LAWRENCE-LORSCH—DIFFERENTIATION & INTEGRATION**

In 1967 Harvard professors Paul Lawrence and Jay Lorsch began publishing the results of their pioneering studies of complex organizations, outlining an open systems theory of how organizations best meet the demands of their immediate environment. They saw organizations and its people as having to adapt to constantly changing fluctuations in their competitive environment, and therefore had to differentiate functions to meet ever-evolving needs. [Differentiated functions are like different polarities.] The critical role across functional boundaries was an “integrator”<sup>70</sup> whose job was to create synergies between the differentials, rather than let the different functions polarize into hostile camps. The better the integration (cooperation) -- “the process of achieving unity of effort among the various differentiated functions or subsystems” -- the higher the performance [or synergy].

Their groundbreaking work reintroduced the idea of synergy as the integration or alignment of differential energy.

They also proposed that no one leadership style was best for all circumstances, but leadership depended upon organizational demands, time orientation of the industry, and the organization’s structure.

*Integration is the achievement of unity of effort among the major functional specialists in a business. The integrator’s role involves .....resolving interdepartmental conflicts and facilitating decisions....., as these specialists diverge in their working styles, it becomes increasingly difficult to achieve the necessary integration. Effective integrators speak the language of each of the specialist groups, and thus they are able to work at resolving interdepartmental conflicts.<sup>71</sup>*

---

<sup>70</sup> Lawrence & Lorsch, New Management Job, the Integrator, HBR, Nov-Dec 1967 [Author’s Note: Paul Lawrence studied under Kurt Lewin. I asked Paul if he was familiar with Hegel or Heraclitus. He was not].

<sup>71</sup> Lawrence & Lorsch, Ibid

# Revolutionary Discoveries of the Greeks

---

## ***EMERGENCE OF STRATEGIC ALLIANCE SYNERGIES***

In the late 1980s and early 1990s organizations began forming collaborative relationships as strategic alliances. Robert Porter Lynch developed an Alliance Architecture with a specific objective of capturing Jung's predicted potential that "*The greater the contrast, the greater the potential. Great energy only comes from a correspondingly great tension between opposites.*" To accomplish this he adapted Lawrence and Lorsch's Differentiation-Integration models with the specific purpose of creating synergies between companies where the alliance could not be commanded and controlled by either of the parents.

After about five years of imbedding the Alliance Architecture inside the structure of the collaborations, two things became evident: first the success rate of alliances with the architecture tripled, and second, the synergies were becoming evident as new collaborative innovations were emerging from the alliances in the forms of new products, technologies, and services.

In the early 2000s, Lynch continued to evolve the synergy paradigm within alliances by looking at the differentiation of both strategic differences and individual's cognitive capabilities to generate more synergies in the form of innovations within companies.

One example of the synergy architecture's effectiveness was its deployment in Procter & Gamble's supply chain. In 2002, P&G received less than 3% of its innovation flow from its supply chain, even though about two-thirds of its corporate spend went to suppliers. In early 2003, CEO A.J. Lafley set a corporate-wide goal to increase diversity of ideas and inputs from 3% to 50% within five years without any reduction in internal R&D staff. Supply chain was destined to play a major role in that improved innovation flow.

Using the Differentiation and Integration framework, which was imbedded in the alliance best-practice architecture, P&G was



# Dynamic Differential Energy

---

able to realize its innovation objective.<sup>72</sup> The ultimate result was a massive competitive advantage for P&G against its rivals in every market segment, including new products, improved process flows, faster development times, and improved cost efficiencies.

## **Fuji-Xerox**

### Example of Dynamic Differentials for Innovation

Originally established in 1962 for Xerox to sell copy machines in Japan, the Fuji-Xerox Joint Venture has created a long-term stream of innovation to demonstrate the synergy of differentials.

When first formed, Fuji was just a sales & distribution operation. Over time, Fuji evolved to be more technologically competent.

When Xerox was attacked by other Japanese copier companies in the 1980s, it was Fuji who brought new technology, quality improvements, and advanced manufacturing techniques to help Xerox survive the onslaught.

Again, a decade ago, when Xerox was facing bankruptcy, a sale of a portion of the JV ownership back to Fuji gave Xerox just the breathing room it needed for a full recovery.

Today the alliance does over \$11 billion in annual sales, and supports a substantial R&D team.

---

<sup>72</sup>This program also involved other innovation efforts, including the development of the heralded Connect & Develop methodology. The supply chain efforts produced about 40% of the innovation initiative's final impact.

# Revolutionary Discoveries of the Greeks

---

## Synergy of Compatible Differences

Synergy does not just occur as a natural byproduct of alliance formation, nor from a tough legal agreement, nor by means of a dream.

Rather, it must be designed with architectural assurance. But more, synergy must be activated by a powerful set of actions founded upon the understanding of how differentials produce the 1+1 = 3 effect.

*“If two people in the same room think alike, one is unnecessary,”* commented the philosopher Ernest Holmes.

The eminent psychologist, Carl Gustav Jung foresaw the potential of alliances when he said:

*“The greater the contrast, the greater the potential.  
Great energy only comes from a correspondingly  
great tension between opposites.”*

Joel Barker, in his groundbreaking work on paradigms, recognized that new paradigms originate from outsiders who think differently, not from insiders who see their world from an old and tired perspective.

Each of these men understood the profound impact differences can have on the co-creation of bold new futures.

Invariably, however, ethnocentric or business culture attempts to enforce its mighty hand. Some alliance members may begin by making judgments regarding the other side's culture, branding it as strange, wrong, inefficient, bad, or unproductive. As soon as this begins, fear, uncertainty, doubt, and distrust begin to fester, and then the alliance begins to unravel. This calls for strong action.

Adept alliance managers, leveraging the vision for the alliance, will call for creating a “synergy of compatible differences” in which differences are respected as source of innovation, cherished for their ability to break paradigms, and expected to produce creative solutions.

# Dynamic Differential Energy

---

## **Synergy of Compatible Differences (continued)**

The leader's ability to create this new "super-ordinate" culture within the alliance enables the alliance to produce at higher performance levels than either parent company can achieve alone.

Because alliances cannot be commanded, the mechanisms for leadership and control are dramatically different compared with most conventional organizations. Great alliance managers tend to be "integrators," possessing outstanding skills in bridging differences through their ability to translate across cultural boundaries. The greater the differential between cultures, the greater the need for highly skilled integrators.

Often the effective alliance manager will develop principles and values for the alliance that forge unity of vision and purpose. Integrators empower those around them by recognizing that "people support what they help create." Thus, they use techniques to unify alliance members.

Excerpted from *Strategic Alliance Best Practice Workbook (which is now standard issue to the Alliance Profession)* --- by Robert Porter Lynch, 1994

# Revolutionary Discoveries of the Greeks

---

## ***POLARITIES IN THE FORM OF FOUR “DRIVES”***

As incredible as it may sound with the tens of thousands of psychologists and sociologists in the world today, the field of human behavior had never developed a scientifically based theory to explain why people act the way they do. Yes, there were psychological theories that explained individual personality differences and cultural patterns. But none of these theories gave a universal, unified rationale that explained all human behavior in all cases everywhere in the world.

Think of this as the “Big Gaping Hole” in the world of organizations and leadership. Unless we could explain the “first cause” or “root cause” of human behavior, leaders, teachers, and practitioners would always be forced to use their “intuition” to decide the best course of action in any given situation. No actions could really be explained and no behavioral responses could be predicted as the outcome of one’s actions.

Starting in the late 1990s, Paul R. Lawrence & Nitin Norhia began the first stage of developing a theory of human behavior derived from Darwin, anthropology, sociology, psychology, and neurological studies. Their work focused on identifying four differentiated drives (think of these as energy forces) imbedded and “pre-wired” into the DNA of every human.

As the model became more refined, Lawrence<sup>73</sup> proposed that while people were multifaceted and complex, all of human behavior could be boiled down to four fundamental drivers of human behavior: the needs to *Acquire*, *Bond*, *Defend*, and *Comprehend*. (see Figure 7: Four-Drive Model of Human Behavior, for more detail, see Volume FOUR )

Each of these drives are the result of evolutionary requirements for human adaptation, and are genetically wired into our DNA. All people (with the exception of psychopaths) have this multiple-set of four drives. And each of the drives is

---

<sup>73</sup> Lawrence, Paul R.; *Driven to Lead, Good, Bad, and Misguided Leadership*, Jossey-Bass, 2010

---

# Dynamic Differential Energy

---

fundamentally autonomous, meaning that satisfying one does not inherently satisfy any other.

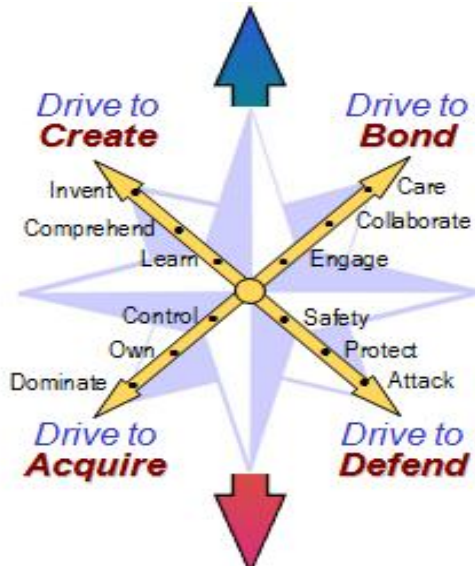


Figure 7: Four-Drive Model of Human Behavior

This “four-pole” model of differential energy drives explains why many humans behave in contradictory ways, why some people choose, either consciously or unconsciously, to act in accordance with one drive predominating over another, and why different leaders and cultures can draw out very different behavior out of the same person.

A well-adjusted person or leader must not only be aware of their own unique pattern of drives, but also recognize the dynamic energy potential inside others within their span of influence.

The four-drive framework is substantially different from the simplistic view of economists who assumed the perpetual need to acquire was what drove the predominance of human behavior, as well as the work of Abraham Maslow who saw a hierarchy of more simple “needs.” (see sidebar)

# Revolutionary Discoveries of the Greeks

---

## *COMPARING THE FOUR DRIVE MODEL TO MASLOW*

It will be natural to compare Lawrence's "Four Drive Model" to Maslow's well-known "Hierarchy of Needs."

There are some important differences.

First, Maslow sees humans as having "needs," and thus we strive to meet those needs. Lawrence perceives these as "drives" which are innate in the brain structure of modern humans. We do not have a real choice in some of our behavior because the drive is a causative force for many of our actions.

Second, Maslow's Hierarchy assumes that one's basic needs for food and shelter must be satisfied first before other needs. Lawrence makes a different observation: that the basic needs (which are the Drives to *Acquire* and *Defend*) are not always fully satisfied in all people. In fact, some people are obsessive about these drives, often becoming controlling and dominating in their obsession.

Third, the Drive to *Create (&Comprehend)* is uniquely human and cannot be left to wait until other needs are met. Nor can the Drive to *Bond* be ignored, as these two Drives are inextricably built into the human brain structure. Thus the four drives are always in constant tension to find some *balance* within the context of one's environment; or better: a *synergistic alignment*.

Fourth, unlike Maslow's model that makes the epitome of human existence a sense of "self actualization," Lawrence contends that the Drive to *Create/Comprehend* has no limit, and the Drive to *Bond* is not simply about self, but about the nature of humans as a collaborative species.

Fifth, Lawrence does make exceptions for psychopaths. Lacking the Drive to *Bond*, referring to them as "people without conscience," they do not behave normally.

Lawrence's model has another added advantage over Maslow's model which lacks the rigor of both scientific foundations and an evolutionary basis in man's fight for survival and reproduction. Lawrence grounds his model deeply in evolutionary competitive advantage and neuroscientific research.

# Dynamic Differential Energy

---

## *Reconciling Behavior and Personality*

Paul Lawrence was influenced early in his career by Kurt Lewin, who had pioneered the idea of differential energy in the form of force-fields.

In parallel, his brother, Gordon Lawrence, took the path of Carl Gustav Jung.

In his 1921 book *Psychological Types*, Jung proposed the existence of two dichotomous (polar) pairs of cognitive functions:

- The "rational" (judging) functions:  
-- *thinking* and *feeling*
- The "irrational" (perceiving) functions:  
-- *sensing* and *intuition*

Jung went on to suggest that these functions are expressed in either an *introverted* or *extraverted* form.

These preferences were extrapolated twenty years later during WWII by Meyers & Briggs.

Gordon Lawrence pioneered the practical application of Jung's polar personality differentiators with the publication of 13 books on the subject.

Here's how to think about the two approaches:

1. Start with the 4-Drive Model. It's a "*First Cause*" Behavioral model that explains the fundamental, DNA-driven, genetic encoding that one must satisfy as a human being. You cannot switch these on or off, but a good leader can reinforce one drive over another. (e.g. as instilling fear will trigger the drive to *Defend*)
2. Then look at Meyers-Briggs as a "*Personality*" Indicator that expresses the universal 4-Drives in a unique, individualized preferential pattern. These are somewhat modifiable with practice, and different environments can reinforce or suppress these as well.

# Revolutionary Discoveries of the Greeks

---

## ***APPLICATION OF THE FOUR DRIVE MODEL: TRUST***

If the lack of a good behavioral theory was a major weakness in the understanding of how organizations and leaders function, many would say the next problem to tackle was addressing the issue of “trust.”

Most management and leadership books that have anything to say about the subject explain how essential trust is for any cooperative activity – which is most anything that happens. Then, most management authorities would falter, throwing an aphorism or slogan at the trust issue: “trust but verify,” or “trust must be earned,” as if one must say something to fill the void of good solid advice on delivering a sound architecture for achieving, reclaiming, or preserving trust.

Trust is a classic human example of polarities in business. The most typical trust problems exist at the interface between differentials – buyer/seller, labor/management, sales/operations, as examples. Differentials can trigger distrust, and the greater the differential, the greater the potential breakdown.

Lawrence and Lynch [this author] put the Four-Drive Model to the reality test on the trust problem.<sup>74</sup> Examining a wide variety of cases as well as current trust applications, the test of the trust architecture has had a resounding response. Fear plays a major role in the destroying trust; triggering hormonal responses in the brain typically override the trust-building circuitry in the brain.

The Four Drive Trust architecture explains, predicts, and provides solid advice regarding a leader’s actions, as well as providing guidelines for what not to do. For example, it helps enable the right competitive-collaborative balance in an organization. Just as importantly, with a solid trust foundation, other very pressing issues could also be resolved, one being the difficulties in getting people to work together or stay together to solve problems, create alliances, or innovate interactively.

---

<sup>74</sup> Lawrence & Lynch, *Leadership & the Structure of Trust*, European Business Review, May-June, 2011



# Dynamic Differential Energy

---

## CHAPTER SIX: COMPETITION, COOPERATION & CREATIVE DESTRUCTION

### *ARE HUMANS COMPETITIVE OR COLLABORATIVE?*

It's an important question because it lies at the heart of understanding our nature. Fortunately the Four-Drive Model gives us a very clear understanding: We are *both!* Here's the explanation:

We are *competitive* because we evolved having to compete for resources to survive in hostile environments. This is true for every animal species on the planet. It is the core of our drive to *Acquire*. Without this drive we would not be able to maintain our existence, nor propagate the species. The drive to *Acquire* also embodies status and sex, pleasure and power. Our drive to *Defend* evolved simultaneously to preserve what we acquire and to protect our safety. We might refer to these as the "ego" drives; we all have them, and they are inherent in our nature.

At the same time, we are also *collaborative*. Cooperation is inherent to the nature of all mammals, no matter the type. One of the brain characteristics that distinguishes mammals from reptiles is the presence of a "limbic" system that is home the home of the bonding instinct (drive to *Bond*), something not present in reptiles. Mammals congregate in herds or pods, and care for their young, reptiles don't.

What's even more important, humans have a conscience – what Darwin referred to as our most distinguishing and important characteristic. Our higher intellectual powers from our drive to *Create*, combined with our drive to *Bond* gave rise to the development of a conscience. Darwin maintained that a conscience evolved as the key factor in our ability to progress as a species far more rapidly than any other species on the planet. In other words, it was our combined ability to collaborate (*dBond*) and innovate (*dCreate*) that is the essence of our competitive advantage on earth.

# Revolutionary Discoveries of the Greeks

---

---

*Sports provides an excellent example of the relationship between Cooperation and Collaboration in an Innovative Environment.*

---

*Basketball is a highly innovative sport. Every moment, every play is improvised to the rapidly changing conditions.*

---

A good illustration of a team with too much competitiveness and insufficient collaboration (teamwork) was the Superstar U.S. 2004 Olympic basketball squad. Playing in Athens, the U.S. Team, stacked with individual Superstars, lost to Puerto Rico by nearly twenty points in the first game for the most lopsided defeat in the history of U.S. Olympic basketball. This “Dream Team” of high-ego stars then lost to Lithuania and Argentina. The humiliation was due to individual competence being defeated by teams with passion, coordination, and commitment.

In the following Olympics in 2008, the U.S. Basketball team was coached by Mike Krzyzewski, an ardent advocate of team-first principles that instill trust.

With Krzyzewski at the helm, Team USA reclaimed the gold medal at the Beijing Olympics, guiding the U.S. squad to a perfect 8-0 record, winning by an average margin of 28 points per contest – a far cry from the 2004 “Dream Team.”

---

Another great example of how the right combination of collaboration and competition can produce extraordinary results is the Ice Dancing competition at the 2010 Olympics. The Canadian Team of Tessa Virtue & Scott Moir trained everyday with their partners, and competitors from the U.S. Meryl Davis and Charlie White, side-by-side, in the same ice rink. Each team lifted the other to greater heights – Winning the Gold and Silver medals – the first Canadians and Americans to do so, as they ended the Russians 30 year reign. And the Canadian pair was the youngest to ever win the title. The right combination of competition and collaboration can produce superior performance

# Dynamic Differential Energy

---

Sports are a deep reflection of our inner nature, that's why we love our teams so ardently, and follow them with such great passion. The most successful sports teams, no matter the sport, maximize both their *competitive* and *collaborative* drives. Just watch a team sport game - whether it be hockey, basketball, baseball, soccer, football, or even car racing (remember the pit crew). The winner is the best *team* that combines a great competitive drive and impeccable collaborative coordination. When these two forces are linked and energized, we call it *synergy*.

The team with the greatest synergy is able to think best on its feet, creating in the moment, responding to breakdowns and unexpected moves by the competition in a rapid and forthright way. This is referred to as being "in the zone;" and it's pure delight to watch from afar as well as to experience on the field. It's also the time when all the brain's hormones have just the right balance to produce optimum creativity, physical performance/endurance, and team coordination. This is what every great coach aspires to do.

## ***Collaborate Internally, Compete Externally***

When threats are perceived as *external* but collaboration is high *internally*, the brain modulates its chemistry to enable the drives to *Acquire & Defend* to be on alert, (but not in overdrive) and the drives to *Bond & Create* to predominate.

When threats are perceived as both *internal and external*, the drives to *Acquire & Defend* go into overdrive, triggering behaviors such as panic, fight, flight, freeze, or protect, while the drives to *Bond* and *Create* are subordinated.

No group can be successful when the team members work against each other instead of together. If you have winners and losers inside the organization, you can't focus on beating the competition outside the organization.<sup>75</sup> (also see Air Wars over Texas, box below)

---

<sup>75</sup> Bethune, Gordon; *From Worst to First*, Wiley 1998, p 267

# Revolutionary Discoveries of the Greeks

---

## *AIR WAR OVER TEXAS*

### *The Competitive-Collaborative Balance*

---

In the annals of the aviation industry, Texas was the site of some of the feistiest leaders and fiercest competitors during the period of the 1980s through the 1990s.

Weighing in as the reigning heavy weight was Dallas-based American Airlines CEO Robert Crandall. A tough-as-nails leader, he was in constant conflict with his unions. Caught with a large airline just as deregulation hit, he had to innovate to survive. He is credited with introducing Frequent Flyer programs, computerized reservations, and the hub and spoke system. Combative and competitive, Crandall is quoted as saying: "I've got one problem. It's about this independent speaking. If you come to work for American Airlines, you will not have any independent thoughts. So you can just scratch that out. All your thoughts will be my thoughts." "The game we are playing here is closest to the old game of 'Christians and lions.'"

A U.S. District Judge, issuing a restraining order against an American Airlines pilot union said 'If you would look up bad labor relations in the dictionary, it would have an American Airlines logo beside it.'

Crandall invested millions in innovation, but never got the full measure of return because he was despised by a workforce that was always getting things shoved down their throat. After nearly three years of bickering with the pilots union, Fortune Magazine wrote in 1997:

*No matter how things turn out, this standoff will likely have long-term repercussions at the carrier, the largest domestic airline in the U.S..., the impasse has really been about something much more intangible: trust. When it's lacking in your company, it can cost you deeply--as American's bean counters are currently learning all too well.*

---

# Dynamic Differential Energy

---

## *AIR WAR OVER TEXAS*

*(Continued) The Competitive-Collaborative Balance*

---

*The airline, no doubt estimating conservatively, guesses that the threat of a strike has so far cost it at least \$100 million in lost bookings as passengers, concerned about various impending walkout dates, choose to fly on other airlines. It's a bit surprising that American Airlines CEO Robert Crandall has allowed employee trust to deteriorate so badly, and with such dire consequences.*

*Even his pilots speak of him with outright contempt... There's been a growing feeling among American employees that the competitiveness Crandall employed so effectively against other airlines is now being turned toward them,"*

Innovation was always seen as a threat by the workforce, met with resistance and disdain. Distrust prevailed. Fearing their ideas would be stolen, workers seldom shared their ideas with others. Only 9% of employees participated, and less than 8% of all the ideas were adopted. American Airlines hasn't thrived, having to use bankruptcy to survive.

---

Across town, Southwest Airlines legal counsel Herb Kelleher was equally competitive, fighting over 30 separate injunctions and lawsuits filed by Texas-based airlines attempting to break Southwest before it even put its first plane in the air and to prevent it from flying anywhere in the state. By 1969 the big airlines apparently won: Southwest ran out of money, and the board of directors told Kelleher to shut down. He convinced them to persevere, and the Board appointed him CEO.

---

# Revolutionary Discoveries of the Greeks

---

## *AIR WAR OVER TEXAS*

*(Continued) The Competitive-Collaborative Balance*

---

With only four planes, less than 70 employees, and finances in dire condition, by the time the legal constraints were cleared in 1971, they were faced with either laying off employees or selling a plane. They sold the plane and set a precedent: in over 30 years Southwest has never had an involuntary furlough, retaining an unbroken chain of profits. Southwest empowers its employees to contribute a constant stream of daily innovation.

Kelleher “loved” his employees, building a powerful trust-based culture that treats workers and customers alike with dignity and respect. He epitomizes the right competitive-collaborative balance, beating rival Crandall again and again.

---

Employees share in the fruits of their labor, owning a large portion of Southwest’s stock; while the majority of the stock publicly traded. Southwest is the only major airlines in the United States to turn a profit every year for the last thirty years.

Dynamic Differential Energy is alive and well at Southwest,

Synergy and the Competitive-Collaborative Energy Alignment Beats Pure Competitive Energy time and again.

---

# Dynamic Differential Energy

---

## ***INNOVATION & FORCES OF CREATIVE DESTRUCTION***

A critical issue in modern capitalism is *Creative Destruction*. It was Heraclitus (~500 BC) that originally proposed the never-ending process of destruction of the old and creation of the new.

*Strife is the father of all.*

*There is nothing permanent except change.*

*The more things change, the more they stay the same.*

*Cold things warm up, the hot cools off;*

*Wet becomes dry, dry becomes wet.*

Schumpeter, writing in the mid-20<sup>th</sup> century, demonstrated how the natural forces of capitalism caused a continuing cycle of the old to be replaced by the new: the horse and buggy replaced by the car, the train replaced by the truck, the iceman replaced by the refrigerator, the fireplace replaced by the furnace, the adding machine replaced by the computer, and on and on.

During the last fifty years, the cycle of creative destruction has not remained stable. With the technology revolution propelled by computers in the hands of even the youngest children, creative destruction has accelerated at a dizzying pace. The shelf-life of high tech products is compared to ice cream – less than 30 days before value starts deteriorating. New products are knocked off by a copy-cat as fast as the inventors can produce them.

This rapid pace of change has a number of effects on society; two will be addressed here:

1. The need for highly effective systems of Collaborative Innovation
  - All innovation today is collaborative, requiring the integration of many people, co-creative development of ideas, and coordinated action for proliferation of the ideas.
  - However, the *collaborative* component of innovation is highly

# Revolutionary Discoveries of the Greeks

dependent upon the level of trust between the parties, and many modern leadership practices unknowingly or inadvertently destroy trust.

2. The pace of change causes high levels of Anxiety and Distrust (see Figure 8: Trust & the Pace of Change

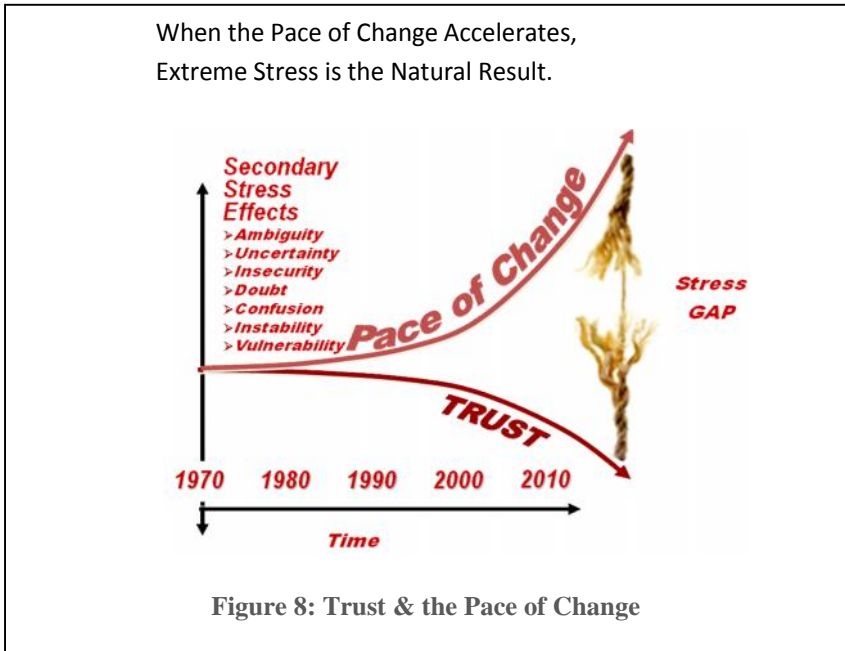


Figure 8: Trust & the Pace of Change

- Rapid change is disconcerting and unsettling for many people. Thus change does not come without a downside.
- Trust in business and government has declined throughout Europe and America to precipitously low levels, fueled by uncertainty and the attachment to archaic leadership methods primarily based upon fear and command-control.



# Dynamic Differential Energy

---

Any approach to trust must address this apparent paradoxical tension between conflicting forces: [collaborative adaptation to changing environments.]

- Increase Innovation/Adaptation  
and
- Build Trust and Collaboration,  
while
- Reduce Unnecessary Anxiety  
and
- Produce Profitable Results

The Four Drive Trust architecture enables these issues to be solved simultaneously, while meeting the four-point criteria. How? By aligning the Four Drives; focusing on the drive to *Create/Comprehend* and the drive to *Bond*, while reasonably satisfying the drives to *Acquire* and *Defend*.

## ***Cognitive Diversity & Differential Thinking***

All innovation comes from “differentials in thinking” – from those who challenge conventional assumptions, ask uncomfortable questions, and see possibilities in the middle of difficulties.

Innovation energy is much like electrical energy – the greater the differential, the greater the potential power, as Jung had proposed.

*Differences are the  
Source of  
Creative Energy*

---

Anyone who wants to master collaborative innovation and trust must have a strong understanding and skilful grasp on differential energy, which is like electricity: used right and it becomes the force to drive powerful motors and sophisticated electronics, or the opposite, to electrocute and cause fires.

Psychologists call an abundance of differentials in thinking by the somewhat complexifying term: “cognitive diversity” and it’s a fundamental ingredient for innovation success.

# Revolutionary Discoveries of the Greeks

---

*Innovation is the result of synthesizing [or synergizing] or bridging [or integrating or boundary spanning] ideas from different domains.* <sup>76</sup>

Harnessing the multi-disciplinary power of differential thinking is a critical strategic methodology to generate breakthrough innovation. To be creative requires divergent thinking -- generating many unique ideas -- and then innovation demands convergent thinking -- combining those ideas into the best result. The intersection of highly spirited people whose own personal identities are often tied directly to their ideas -- their "babies" so to speak -- is highly charged and emotional. In a distrustful environment, the highly charged atmosphere can create a lot of destructive thunder and lightning; whereas in a high trust environment, the likelihood is that "co-creative" sparks will trigger a succession of new ideas each building on the other.

Collaboration triggers the sparks between people that brings out their natural (often suppressed) creativity and enables their differentials in thinking to generate a massive stream of idea, then converge, integrate, and align those ideas into real innovations.

People who innovate collaboratively (as opposed to independently) have a greater chance of learning from others and building the networks that actually enable innovation to become implemented. With the many challenges ahead for humankind -- the propensity to solve problems through war, global warming, hunger, and new energy development -- the need for a more effective collaborative innovation model could never be stronger.

---

<sup>76</sup> Hargadon, Andrew: *How Breakthroughs Happen*, Harvard Business School Press, 2006, p viii [bracketed words from RPL]

## *Differentials & DNA*

One of the foundational breakthroughs in bio-medicine was the joint insight by Watson and Crick regarding the double-helix structure of DNA in 1953.

Crick had migrated from the field of physics, and Watson was just a young graduate student. They both came from a place of “not already knowing,” an openness to new ideas, rather than thinking of themselves as “experts” in the bio-medical profession.

They never conducted any experiments, instead looking at the data of others, but interpreting it from a fresh perspective; they meticulously integrated work of others in other fields – such as crystallography – and saw the unique patterns in the data that enabled them to envision the double helix.

Because they saw things differently, from another perspective, they could put their minds together to crack the DNA code.

# Revolutionary Discoveries of the Greeks

## ***Differentials in Thinking Source of Innovation Flow***

More and more, innovation is, by necessity, addressed by multi-disciplinary teams, because, as the old adage predicts: “if two people in the same room think alike, one is unnecessary.”

***All Innovation comes from Differentials in Thinking  
– seeing one’s world in new and different ways—***

However, while new paradigm innovations originate from people who do not think alike, all too often people with different perspectives cannot synergize, or worse, they disregard, argue with, or even destroy the value from those with whom they don’t share a common perspective.

Our Architecture of Trust is designed to create vital synergies, not let other forces destroy them.

## ***Edges of Eco-Spheres: Customer and Supplier Relationships as Innovation Source***

Companies who want to accelerate innovation realize that the more points of contact they have with differentials in their network of relationships, the greater the chance of accelerating innovation flows. For example, our work with Procter & Gamble helped create the “*connect and develop*” model that successfully uplifted the older “*research and develop*” approach.

Thus, by tapping into the co-creative energies of differentials in thinking, and aligning those energies positively, integrated customer & supplier relationships are particularly well positioned to become a *unique, faster, and more agile structure* for unleashing the innovative potential of the *synergies of differentials*.

Thus the diversity of the supply base is a powerful resource for generation of innovation flows. By capitalizing on the “*synergy of compatible differences*,” suppliers hold unique potential as engines of innovation, enabling the transformation of new ideas into new products, services, and solutions. Companies like Toyota and Procter & Gamble have recognized this factor and now generate massive innovation flows – and profits -- from suppliers.

- 2008-- Excerpted from Client Presentation by R.P. Lynch

# Dynamic Differential Energy

---

## *Diversity in an Acquire & Defend World*

But why then has innovation been so hard to get off the ground? Why so many failed attempts?

Diversity of thinking, while the stimulus to all innovation, can be a double-edged sword or a field of landmines. Many managers are threatened by diversity, instead desiring conformance to a standard set of rules, procedures, and modes of thinking. When organizations are segregated into specialties, such as biology, or marketing, or administration or any other form of functional segregation, it is often the case that these specialties become fiefdoms of power and isolation, perhaps isolating themselves because “those others don’t think like us.” Conflict and competition characterize these groups. They are stuck. And the more stuck they are, the more defensive they become, which breeds more distrust of outsiders.

How should a leader turn diversity into advantage?

Command and control has been the by-word of most leadership thinking over the last two thousand years. It comes from the military model (no longer fully used by the best militaries any more.) Command and control is essentially a hierarchical, top down approach to organizations. It works reasonably well in slow moving, highly predictable environments where everyone is expected to conform to whatever the boss commands. Obviously it worked for centuries wherever military leaders or kings ruled, and enabled the establishment of highly effective manufacturing industries in business.

This approach to leadership depends upon the drives to *Acquire* (command & control) and *Defend* (risk management & no deviance from the norm or the past) to be the predominant elements of a business culture. All energies to *Create* were focused on one department - Research & Development ; and energies to *Bond* were aimed at uniting within silos and functional units - thus Marketing would fight Operations, Procurement would wrestle with Finance, and so forth, just like fiefdoms in a feudalistic society.

# Revolutionary Discoveries of the Greeks

---

Mastering the transformational power of differential energy is the inner secret of both trust and innovation. Once a leader gets “in tune” with differential energy, it becomes synergy.

But if differential energy clashes, the result is conflict. Let’s illustrate:

Great music is a set of differentials used masterfully to create symphony.

The woodwinds may weave a tender melody as the strings are singing a harmony, while the percussions are pounding a mighty rhythm, and the horns are wailing counterpoint tune.

A great symphony is not placid, nor is it conflictive – it’s synchronized differential energy creating a synergy.

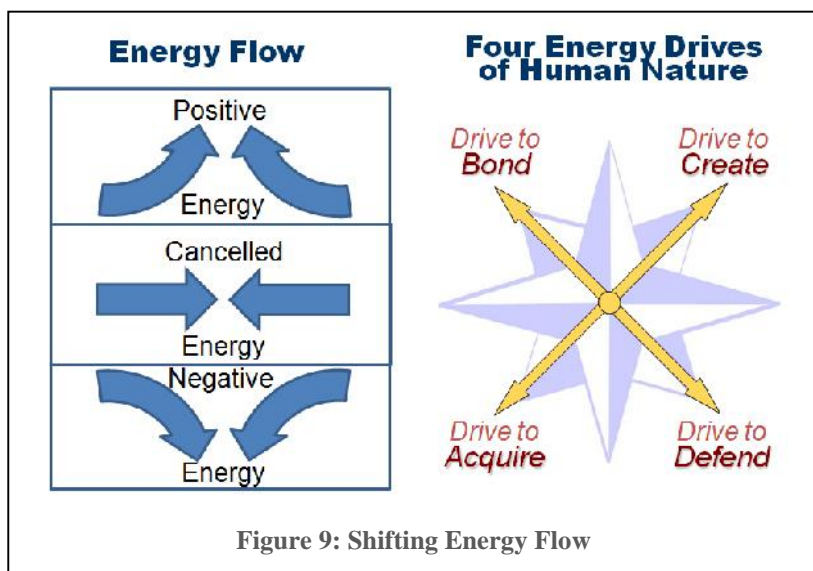
Just like in martial arts – if one resists the differential energy, the likelihood is that a war will occur and both parties will be depleted and bloodied in the end; differential diversity carries within itself the seeds of conflictive destruction.

Team members with have different values, priorities, belief systems, and cultural heritages will often identify first with their culture of origin, making the team seem fractured and distrustful of each other. Teams with similar mindsets lack the diversity to be highly creative and may fall victim to the process of “group think,” where conformity becomes a distinct liability.

## ***Differential Energy & Metanoic Shift***

Shifting differential energy is essential when two personalities begin to clash. Unless one of the people is evil, the battle of egos can be highly destructive. There are three fundamental options for how differential energy can flow as illustrated in Figure 9.

# Dynamic Differential Energy



Energy in an argument usually starts off as simply a difference in opinion or point of view – one person’s energy is cancelling the other’s. There is no elucidation, no revelation, and no gain of trust. And no one feels they have “won” the argument. More often this energy flow is unstable – ego energy (drives to *Acquire & Defend*) kicks in to try gain ascendancy and protect one’s position against attack.

It is exactly at this critical stage that the adroit and perceptive synergist will proactively shift the energy by using the six Greek Virtues, particularly *Metanoia* (shape shifting), along with *Historia* (deep inquiry), engaging the “soul” drives (*Bond & Create*) to move the energy upward into new insight and personal revelation.

The battler will do just the opposite, engaging in a lose-lose destructive power struggle as egos engage in a dinosauric fight to oblivion.

Attaining the right set of dynamic tensions is very desirable for any leader. In the next section, we will explore the nature of some of those tensions, and their importance to trust and collaborative innovation, and how to create synergy.

# Revolutionary Discoveries of the Greeks

---

## ***IS SYNERGY A NATURAL ACT?***

Is synergy a “natural act?” In other words, does it occur biologically or neuro-chemically in our world? Or is synergy something we have to concoct that goes against the grain of our nature? If it’s the former, synergy will be easy to replicate. If the latter, we are in for a rough ride, trying to force our nature to do something it was no designed to do.

It’s not surprising that very little systematic analysis of synergy has been undertaken since Aristotle first defined it over two thousand years ago, given the course of intellectual history on the subject.. There have been several noteworthy champions who have attempted to crack the synergy code. They have all looked inside the secrets of nature to find the imbedded design.

### ***Buckminster Fuller***

Buckminster Fuller, after several personal crises at the age of 32, embarked on "an experiment to find what a single individual [could] contribute to changing the world and benefiting all humanity." He searched to find the unique embodiment of the structural principles found in nature. He introduced “synergetics,” an encompassing term which he used broadly as a metaphoric language for communicating experiences using geometric concepts and, more specifically, to reference the empirical study of systems in transformation, with an emphasis on total system behavior unpredicted by the behavior of any isolated components, including humanity’s role as both participant and observer.

Synergetics is a very expansive discipline embracing a wide scope of scientific and philosophical studies including tetrahedral and close-packed-sphere geometries, thermodynamics, chemistry, psychology, biochemistry, economics, philosophy and theology. It follows the cosmic logic of the structural mathematics strategies of nature, in the same vein as Pythagoras. Despite Fuller’s prominence, this field is still considered iconoclastic and thus ignored by most traditional curricula and academic departments.



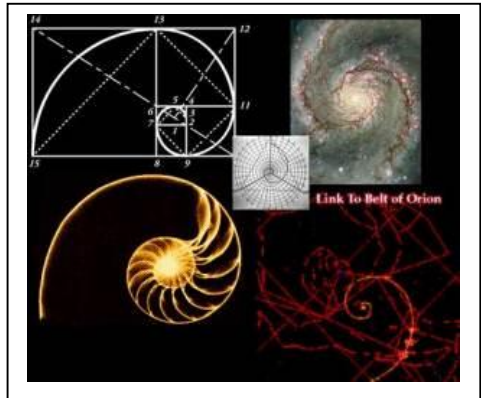
# Dynamic Differential Energy

**Gyorgi Doczi**

Following the trail trail-blazed by the Greeks, Hungarian born émigré Gyorgi Dozi explored the Heraclitian energies of polarities and the Pythagorean concept of the *Power of Limits*<sup>77</sup> in nature. Limits create boundaries, and boundaries harness energy. He also embraced the Chinese constructs of Yin-Yang – female-male, moon-sun, and negative-positive. He was searching for “the basic pattern-forming processes that operate within strict limits, creating limitless varieties of shapes and harmonies:”

*It is an interdisciplinary venture into the no-man’s land between the borders of science, art, philosophy, and religion, an area that has been largely disregarded in recent years because its contents are intangible. This area bears investigation, since the powers that shape our lives and our values have their source [in nature]....*

*These proportions are shared limitations that create harmonious relationships out of*



<sup>77</sup> Doczi, Gyorgy; *The Power of Limits, Proportional Harmonies in Nature, Art, & Architecture*, Shambhala, 1981

## Revolutionary Discoveries of the Greeks

---

*differences. Thus they teach us that limitations are not just restrictive, but they are also creative.*<sup>78</sup>

Trained and active as an architect, Doczi studied the inherent interplay of harmonies and polarities occurring in both nature and what we as humans found pleasing to the eye or designed for functionality. He proposed a new word to describe the synergy of differential energies: *dinergy* (from the Greek *dia* meaning “across, through, or opposite,” and “energy.”) Thus: *dinergy* is the synergy of harmonizing differential creative energy by joining diversities, allowing differences to complement each other.

*Dinergy is the energy-creating process that transforms discrepancies into harmonies by allowing differences to complement each other. Dinergy accomplishes this through the power of certain **proportions, analogous to musical and root harmonies, well-known since antiquity, chief among them being the Golden Section.***<sup>79</sup> (see figure 2)

When organizations say: “*we’re making music,*” or “*we’re in tune,*” or “*we’re on the same wavelength,*” or “*there’s a magnetic energy here,*” people are referring to this phenomenon. In defining the functionality of proportional harmonies in nature, Doczi observed that the power

*Arises from its unique capacity to unite different parts of a whole so that each preserves its own identity, and yet blends into the greater pattern of a single whole... This recognition filled the ancient Pythagoreans with awe: they sensed in it the secret power of a cosmic order. It gave rise to...realize the harmonies of such proportions in patterns of daily life, thereby elevating life to an art.*<sup>80</sup>

*Thus, in organizations, each function must not only know its proportional value, but the value of others. Seen in this light, one can now begin to see why Aristotle linked friendship into his*

---

<sup>78</sup> Doczi, Ibid, preface

<sup>79</sup> Doczi, Ibid, p 7

<sup>80</sup>Doczi, Ibid, p 13

# Dynamic Differential Energy

---

*framework of ethics – to attain a personal sense of synergistic harmonies that should be a central organizing principle when people work together. Doczi also observed that all natural patterns sought order in complexity:*

Unity with diversity of the patterns of organic nature is a combination of order and freedom. This combination is as paradoxical as it is dinergic: order and unity involves constraint, while diversity implies freedom to differ.

*“Life is order, but order with tolerances.”<sup>81</sup>*

While Doczi examined the fundamental properties of nature to discern synergy, evolutionary bio-scientist Peter Corning began examining the functional behavior of living organisms from evolutionary adaption perspective.

## ***Peter Corning***

Beginning with his 1983 publication of *The Synergism Hypothesis, A Theory of Progressive Evolution*, and with his later books including *Holistic Darwinism, Synergy, Cybernetics, and the Bioeconomics of Evolution*, polymath Corning makes a compelling case that:

*Synergy is nature’s method of responding to stress and complexity by seeking out the most “economic” (efficient) means of existence to ensure survival and reproduction.*

*Cooperation is a functional concept found at every level of living systems” having “played a central role in catalyzing living systems” from the most basic cellular level to the most complex species. Cooperation ...is fairly common in nature, but synergistic effects have played an important causal role in evolution, especially in relation to the evolution of complexity. The most cooperative species are the most synergistic, by*

---

<sup>81</sup> Doczi, Ibid, p 84

# Revolutionary Discoveries of the Greeks

---

*providing mutual advantages for their members, so that the net benefits to all participants outweigh the costs.*<sup>82</sup>

Corning's work is extensively researched and articulately presented. This case for synergy being a natural phenomenon in all forms of life makes a number of key points, which we will attempt to summarize here:

- The role of Synergy is to create a combined cooperative effect that has been a major cause of evolutionary continuity and change. . Not only is cooperation fairly common in nature, but synergistic effects have played an important causal role in evolution, especially in relation to the evolution of complexity. Functional Synergy explains the evolution of cooperation in nature, not the other way around.
- Nature has an inherent drive to improve functional performance, from the cellular level and above, and found at every level of living systems. Living wholes are contingent products of evolution and of natural selection.
- Differential reproductive success is the result of a complex interplay of competitive and cooperative interactions
- The Neo-Darwinist paradigm of "survival of the fittest" is in error. Darwin's real focus was on competition *via* cooperation.
- The focus on Genetics has obscured other realities of living systems, particularly the *functional dynamics* of living systems at various levels of organization.
- Synergy manifests in a number of forms and goes under the alias of many descriptions, including: emergent effects, cooperativity, symbiosis, division of labor, threshold effects, mutualism, phase transitions,

---

<sup>82</sup> Corning, Peter A.; *Holistic Darwinism, Synergy, Cybernetics, and the Bioeconomics of Evolution*, University of Chicago Press, 2005, p 22, 24

# Dynamic Differential Energy

---

coevolution, dynamical attractors, holistic effects, complementarity, interactions, and simply, cooperation.

- Cooperation provides mutual advantages for members, so that the net benefits to all participants outweigh the costs. In other words, cooperation is not equivalent to altruism and does not by definition require sacrifices, or genes for altruism.
- The dominant theme of human evolution is the expansion of modes of social cooperation, including cooperative modes of competition. Thus, in the rise of civilization, the human species “invented itself. The real key to human evolution was not any single prime mover (such as language or tools), but the entire suite of cooperative, behavioral, cultural, and morphological inventions – a synergy of synergies.

Corning’s well researched insights constitute a clear confirmation that that cooperation is a natural act.

Complexity is the natural evolution of capitalistic systems that are constantly obsoleting the old with the newest, fastest, more efficient model or method. Complexity, in and of itself, will most likely become more burdensome, which is often a bureaucracy’s response, such as more complex tax laws or more complex reporting systems, or more complex rules and regulation. Innovation’s role is to enable synergy to engulf complexity, making complexity seem simpler.

*Thus Synergy is Natural,  
latent within us, yearning to manifest.  
It doesn’t have to be created in the normal sense,  
because it already there, suppressed at worst.  
In this sense, synergy is like a flower still in the bud,  
waiting to be released to blossom.*

The role of trust is *not to create* synergy, but to *manifest* synergy. Just as Orville Wright commented to his brother on the evening after their first flight in 1903, the brothers recognized they had not “invented” the first airplane, they had simply “discovered the

## Revolutionary Discoveries of the Greeks

---

secrets” of flight. Synergy is prewired into our brains, and is accessed by opening up the trust flow of the drives to Create and Bond.

*Synergy should become a central organizing principle.*

*The purpose of “architecture” is to unite diversity and polarity into usable form.*

As a leader, think of the constant set of diversities that must be united in some way every day: management-operations, staff-line, headquarters-field, sales-research, labor-management, buyer-seller, and so forth. Getting these into alignment requires either a monolithic “do it my way or the highway,” which is destined to destroy trust and innovation, or a more enlightened approach that uses the power of limits to create boundaries to channel energy into new ideas and solutions. Remember, a swamp is a river without boundaries.

The explosive proliferation of the iPod made listening to music far simpler for the user with elegant user interfaces, while integrating complex hardware and software.

Similarly, the profusive use of tax software like *TurboTax* enables a more synergistic solution to the Byzantine nature of our tax structure.

So too with collaborative innovation as the source of synergy. ,

*The more complex the product and processes, the more managers have to rely on their employees to get all the little things right.--Robinson & Schroeder, p 37*

We are constantly exposed to the value of synergistic systems, but seldom understand the internal design that underpins its creation.

# Dynamic Differential Energy

---

## CHAPTER SEVEN: THE NEXT HORIZON

### *BUSINESS ATTEMPTS TO ACHIEVE SYNERGIES*

#### *High Failure Rates in Mergers & Acquisitions*

In the last two decades, the ideal of achieving synergy has gone from a magical quest to a cynic's nightmare in the field of Mergers and Acquisitions.

Billions upon billions of dollars have been invested by companies in acquisitions in search of synergies that would create great wealth for their shareholders, only to find them evasive, elusive, or even outright destructive.

The Mergers & Acquisitions Departments went on buying sprees. For example, in the late 1990s, AT&T went on a massive \$140 billion acquisition kick, gobbling up cable companies, paying huge premiums over market value. Five years later AT&T was faced with horrendous losses; ending up having to write off the strategy as a failure as the company imploded.

Over the last twenty five years, studies in America and Europe consistently find M&A failure rates run in the 60-80% range. There has been little if any improvement over time. Mark Sirower, in his book: *Synergy Trap*, first defines, then cautions about synergy:

*[M&A] Synergy is defined as increases in competitiveness and resulting cash flows beyond what the two companies are expected to accomplish independently.*

*Most purported synergies are like the colorful petals of the Venus flytrap – dangerous deceivers. Most major acquisitions are predictably dead on arrival.<sup>83</sup>*

---

<sup>83</sup>Sirower, Mark L.; *The Synergy Trap*, How Companies Lose the Acquisition Game; Free Press, 1997, p 5-6

## Revolutionary Discoveries of the Greeks

---

Sirower then details the “competitive challenge of synergy” which uses “the value chain concept advanced by Michael Porter of the Harvard Business School:

*“In a competitive environment, the only way to earn economic returns is by preventing rivals (current or potential) from winning along the value chain. At least one of the following conditions is necessary:*

*Acquirers must be able to further limit competitors’ ability to contest their or the targets’ current input markets, processes, or output markets, and/or*

*Acquirers must be able to open new markets and/or encroach on their competitors markets where these competitors cannot respond.”<sup>84</sup>*

Just from reading this description it should be evident why so many acquisitions fail based on the Four-Drive architecture: the nature of the M&A process is oriented to the drives to *Acquire* and *Defend*, triggering massive fear and distrust, sowing the seeds of its own destruction. Differential Energy is destined to conflict.

Then, on the day of announcement, everyone is taken by shock; and the best people start circulating their resumes outside the newly vanquished company, knowing that cost-cutting will likely be the first action. Little attention is paid to reducing fear, building trust, or what innovation must be protected to ensure the future value of the company is sustained.

Often the integration process is a sordid “ram and cram” affair that spurs even more distrust. Sirower continues:

*“Numerous articles... have discussed the potential troubles of power and culture clashes between organizations. ... The implicit assumption has been that if only the cultures were managed well, performance gains would occur. ... Cultural tensions can undercut mergers and imperil strategies. We need to consider the “why” of the economics of culture to put this cornerstone in the*

---

<sup>84</sup>Sirower, Ibid, p 25



## Dynamic Differential Energy

---

*context of synergy.....the issue for acquirers is not whether the cultures are similar or different, but whether the changes necessary to support the strategy will clash with either culture.*

*Two questions about culture are particularly evident relevant to mergers and acquisitions:*

- *When will problems of conflict and cooperation arise?*
- *How will they be solved?*

*The larger problems stem from the reshuffling of power and unwritten expectations of payoffs of cooperating versus competing in the course of doing business with the new company. It is the uncertainty and ambiguity surrounding acquisition events that will cause executives and employees in general to defend positions they may have taken years to build. “<sup>85</sup>*

Ambiguity and uncertainty, along with actions associated with the drives to *Acquire* and *Defend* dramatically escalate distrust. What’s more, if the target company already has a high level of distrust prior to the acquisition, the emotional fuse is ready to blow, and the acquisition process just pushes everyone over the edge, as the two levels of distrust amplify each other.

Those that fail at the acquisition process continue to claim that synergy is just a myth, an illusion, or simply bunk.

Organizational psychologists Philip Mirvis and Mitchell Lee Marks maintain that of all the failures, the majority collapse because of cultural clashes.<sup>86</sup> Since writing their book twenty years ago, Marks, who is now a professor at San Francisco State University, maintains that notes that the story is still the same:

*18 months after a combination, executives bemoan that their best talent has bailed out, productivity has gone to hell in a handbag, and culture clash remains thick.*

---

<sup>85</sup> Sirower, *Ibid*, p 39-40

<sup>86</sup> Mirvis, Philip H. and Marks, Mitchell Lee; *Managing the Merger, Making it Work*, Prentice Hall, 1992

# Revolutionary Discoveries of the Greeks

---

*As the two sides come together, politics typically predominates. Oftentimes, it's power politics: the buyer decides how to put the two organizations together.*

*Meanwhile, individuals jockey for power and position, and management teams fend off overtures for control from the other side by hiding information or withholding information. In the typical situation, transition teams are convened to recommend integration options, but personal empire building and group dynamics block efforts to seek out and capture true synergy.*

*Meanwhile, culture clashes rear up as people focus on differences, and fixate on which side wins what battles, rather than joining together to build a united team.*

*A recent study examined three levels of cultural learning during an acquisition – none, shallow, and deep – and found an interesting relationship between them and the subsequent integration of plants in an acquired firm.*

*In the case of no learning, not surprisingly, no relationship to eventual integration success or failure was found.*

*By contrast, deep culture learning interventions, involving cross-company dialogue, culture clarification workshops, and the like, had a strong positive effect on integration success. Measured results included greater cross-cultural understanding, smoother resolution of cultural differences, more communication and cooperation between combining parties, and greater commitment to the combined organization.<sup>87</sup>*

What made matters worse in virtually all the acquisition failures was the lack of understanding that synergy will not and cannot manifest without trust; and that trust cannot manifest in an atmosphere of fear, exacerbated by uncertainty and insecurity.

Synergy does exist, and it does live, but only if one looks for it, and creates it by design. It doesn't fall out of the sky like some

---

<sup>87</sup> Marks, Mitchell Lee; from San Francisco State University website, 2010

# Dynamic Differential Energy

---

divine blessing. Trust plays a central role in the game of business acquisitions, but goes largely unnoticed.

Reviewing a half dozen books on mergers and integration in my library, only one even mentions trust, and it merits three paragraphs; here's an excerpt that is so typical of most treatment of trust in management and leadership literature:

*In the post merger context, trust has great value. High levels of trust reduce friction among employees, bond people together, increase productivity, and stimulate growth. Conversely, low levels of trust aggravate friction, alienate people from one another, depress productivity, and hamper growth.....*

*To build trust after a merger, managers must show they are worthy of it. They can do this by making and fulfilling unwavering commitments in changing circumstances.<sup>88</sup>*

We believe that organizational synergy is so elusive because *few have understood its intimate connection to trust.*

As the old adage goes, if all you have is a hammer, everything looks like a nail.

So too, if your comprehension of trust is fuzzy and poorly understood, your understanding of synergy will be the same.

## ***How Strategic Alliances Achieve Synergy***

Strategic Alliances are not mergers or acquisitions, instead bringing to companies together to collaborate to achieve a common goal, while each retains its autonomy and independence. In the Four Drive architecture, alliances do *not* focus on the *Acquire & Defend* drives, instead emphasizing the *Bond & Create* drives.

Twenty five years ago, as the strategic alliances began to proliferate, their success rates started out not better than acquisitions, mainly because the people and process used to form them were the same as those for mergers and acquisitions.

---

<sup>88</sup> Lajoux, Alexandra Reed; *The Art of M&A Integration, A Guide to Merging Resources, Processes, & Responsibilities*; McGraw Hill, 1998, p 370

## Revolutionary Discoveries of the Greeks

---

However, a very different path<sup>89</sup> was taken by alliance professionals, who were more interested in collaborative innovation (primarily drives to *Bond & Create*) than their M&A counterparts who were more interested in power and control (primarily drives to *Acquire & Defend*).

By using the precepts of Dynamic Differential Energy (Differentiation-Integration, Four Drives of Human Behavior, and extensive Trust Building), alliance professionals regularly achieve 70-80% success rates, fully three times the rate of the M&A profession.

And by sharing the Best Practices that underpin those successes, not only to companies collaborate, but approximately fifty percent of all the collaborations are actually between competitors – a clear indication that the competitive-collaborative balance is an efficacious strategy in business.

The synergy is created by recognizing that Dynamic Differential Energy becomes constructive when:

- organizational strategies are in alignment,
- standards of trust are strictly adhered to,
- people are willing to share ideas,
- conflict is treated as a source of innovation,
- people expect the whole to be greater than the sum of the part
- flexible adaptation to changing needs and competitive environments is expected
- people with high drives to *Bond & Create* are chosen to lead/manage the relationship

---

<sup>89</sup> See books by Lynch, Robert Porter; *Practical Guide to Joint Ventures and Corporate Alliances*, 1988, *Business Alliances, the Hidden Competitive Weapon*, 1993, *Strategic Alliance Best Practices Handbook*, 1994-2002

# Dynamic Differential Energy

---

## ***CLASSICAL & SYNERGISTIC TRUST***

In Chapter Two, we spoke of Classical Trust based on Fairness, Accountability, Respect, Honorable Purpose, Excellence, Security, and Transparency (acronym: “FARTHEST”). Undoubtedly there is a high level of validity to these eight principles or they would not have sustained civilized evolution for so long. Think of Classical Trust as “Harmonious Trust.”

*When two people think alike, while they may harmonize and feel good, innovation may grind to a halt as “group think” stifles the creative edge of dynamic differentials.*

---

However, there can be a drawback to harmonious relationships that are too “nice.”

Why? Classical trust essentially supports *harmonious* relationships, which will not produce and sustain the level of innovation required in the 21<sup>st</sup> century.

“Feel Good” relationships may make great personal *friendships*, but poor business *partnerships* and innovation *creationships*. Dynamic Differential Energy is required to respond effectively to the ever-pounding competitive forces of *Creative Destruction*.

We call this *Synergistic Trust*, (see Figure 10: Classical & Synergistic Trust) meaning it *acknowledges differential energy* and *aligns the harmonies and polarities* of idea generation to enable new, greater, and more effective innovation to manifest.

Synergistic trust means people can challenge each other to push them to higher levels. A system exhibiting synergistic trust will always be asking questions about root cause, new value potential, how, can we do it better, cheaper, or faster?

The Nissan Case Study illustrates (see Figure 11: Failure of Harmonious Trust) why a *second form of trust* needs to be overlaid or woven into Classical Trust.

# Revolutionary Discoveries of the Greeks

## Two Kinds of Trust

**Fortify Personal Character**

**Creative Destruction & Renewal**



Classical  
"Harmonious"  
Trust  
(Friendships)

Innovative  
"Synergistic"  
Trust  
(Creationships)



With FARTHEST trust flourishes, communications are good, leaders are able to delegate, objectives are met, there is little strife, people are content and cooperative. But the world passes them by.

### ❖ F.A.R.T.H.E.S.T.

1. Fairness & Reciprocity All
2. Accountability & Integrity
3. Respect & Honor
4. Truthfulness & Courage
5. Honorable Purpose
6. Excellence & Standards
7. Safety & Security
8. Transparency & Openness

### ❖ D.I.S.T.A.N.C.E.

1. Differential Energy is Cherished
2. Integration & Interconnection
3. Servant /Synergistic Leadership
4. Timing : Speed & Synchronicity
5. Alignment of Purpose & Vision
6. Networked & Neural & Allied
7. Collaborative CoCreative Culture
8. Exploration & Expansion

Figure 10: Classical & Synergistic Trust

### Power of Alignment

The first thing any organizational leader must do to trigger the synergistic impact of co-creativity. According to Robinson & Stern, authors of *Corporate Creativity*: (p 13)

*Alignment is often overlooked; it is intangible and elusive, and as far as corporate creativity is concerned, its effects are readily visible only when a company is either extraordinarily well aligned or misaligned.*

*Companies can function with relatively poor alignment, but they cannot be consistently creative unless they are strongly aligned.*

Whenever we try to balance forces, not align forces, we are probably introducing a compromise, which means no one is happy. Anything that is compromised is "at risk." Balancing means we can decide, so we split the baby – art of muddling through the muddy middle.

# Dynamic Differential Energy

---

## *Nissan Case Study in Synergistic Trust*

In 1999, when Carlos Ghosn took over struggling Nissan Motor Company in Japan, it was on the verge of declaring bankruptcy – but “too big to fail.”

Over the course of the previous decade, innovation had faltered dramatically, and customers were finding Nissan to look and feel old.

70% of the car was made by outside suppliers, with whom Nissan had long, trusting, harmonious relationships. The Japanese have a word for it: “Wa” meaning “harmony.”

These cozy arrangements had gone soft – everybody was happy and honest, but not very creative.

When Ghosn shook up Nissan and demanded innovation, he wanted to gain a trusting relationship with his suppliers, but he wanted them to have a creative “edge.” He encouraged people to challenge the conventional thinking, to shorten time frames, to find better ways to translate work into real value. He demanded better cars, more efficiently produced, an more collaborative innovation from suppliers and his internal team.

Within a year, Nissan was back on track and profitable.

**Figure 11: Failure of Harmonious Trust**

# Revolutionary Discoveries of the Greeks

---

## *CONCLUSION*

The importance of understanding the Greek system is that it produced the highest levels of intellectual thought and the highest levels of innovation in every field. The Greek culture, when imbedded into organizations today, produces similar results.

The Four Drive Architecture enables us to embrace Dynamic Differential Energy in powerful new ways to engage the co-creative spirit, manifesting and sustaining itself.

Unless we understand what happened during the Roman-Dark Age - Middle Age period that stifled and snuffed out innovation, we run the risk of it happening again. There are many countries in the world over the last hundred years that tried to recreate the Roman or Dark Ages. Many corporations do so now. Reversion backwards comes when people are unaware of the real forces that sustain collaborative innovation.

In late 1800s, when business was evolving its first management theories, Andrew Carnegie went to town linking Herbert Spenser's Survival of the Fittest philosophy to Charles Darwin's Natural Selection theory (Origin of the Species) (bypassing Darwin's cooperative adaptation theory - Descent of Man) and then linking it to the first leadership theorist of the modern age, with Machiavelli (basing everything on The Prince) and, like the treatment of Darwin, not including the much wiser material in Machiavelli's Discourses,

Had the last hundred years of management professors, researchers, and practitioners used the Greek models to launch their understanding of excellence and human behavior rather than using Machiavelli I and Darwin I as their starting point, the world today would have been a very different place.



# Dynamic Differential Energy

---

## *Differential Synergy & Unity in Diversity Flaws*

There is a tragic flaw (Achilles Heel to use the Greek analogy) in the whole concept of “Unity in the Diversity.” (This does not imply there is something “wrong” with the concept.) In the main, the idea of integrating and unifying diverse elements is a powerful construct. When set against the context of monolithic, fundamentalist thinking, the idea of “unity in the diversity” eminently makes success.

However the ideal of unity in the diversity can also be hijacked and captured:

- by those seeking Stability (homeostasis – Nissan Case: Figure 11). Traveling this course, unity in the diversity can become passive and static, not active and dynamic, thus devolving or failing to evolve. Situations like this can linger in limbo for years, even centuries.
- by Monolithic thinking (see Soviet Innovation Failure Case: Figure 12) in which case unity in the diversity is a guise for ruthless conformity. Ultimately this ends like the Soviet Union or the Roman Empire, and

If a culture (such as the ancient Roman or more recent Russian/Soviet) supports monolithic thinking, innovation will falter. This is because monolithic cultures make their drives to *Acquire* and *Defend* predominant, and their drives to *Bond* and *Create* subordinate or subservient. A preponderance of the *Acquire* and *Defend* drives generates fear, which stifles (strangles) naturally adaptive collaborative innovation emerging from the drives to *Bond* and *Create*.

When this happens, a culture stops evolving, loses competitive advantage, and may even devolve, as happened to the Romans with the onset of the Dark Ages. In Russia today, twenty years after the collapse of the old regime, the nation has yet to find its path out of the historic morass. Putin is much like Octavian in Rome. He can maintain order with the rule of fear, or shift to a better strategy. Only time will tell Russia’s fate.

# Revolutionary Discoveries of the Greeks

---

## Soviet Innovation Failure

“The most ambitious effort in history to promote creativity occurred in the Soviet Union. It failed.

Fear ruled the Soviet program. Stalin’s purges had the same effect as Roman “proscription.” Fail and the result was either Siberia or death.

The Russian quota system was impossible to fulfill and spawned ‘phantom crops, phony records, false book-keeping, a pyramid of lies, thievery, and bribes.’

“The force that drove the Soviet economy – the one ingredient that kept it working despite all that was wrong – was *fear*.

“In a command economy with constant shortages, no manager looked forward to receiving an idea from a subordinate that would result in significant savings... [fearing] he might be accused of not doing his job properly in the first place and being accused of not thinking of that before.”

“Soviet managers were supposed to encourage ideas from their subordinates, it could actually be dangerous for them to receive a very good idea – in fact, they could even be charged with economic sabotage, a crime as serious as treason.”

The regime made failure unacceptable. This fear of failure caused massive levels of unofficial hoarding of critical raw materials inventories. It was not unusual for managers to stock twenty years worth of inventory to ensure they had adequate supplies to perform to their quotas.

### Figure 12: Soviet Innovation Failure Case

Source: Robinson, Alan; & Stern, Sam; *Corporate Creativity*-Barrett-Koehler, 1997, chapter 5

# Dynamic Differential Energy

---

## *Core Elements of Synergistic Thinking*

How should we “cure” this problem? We propose shifting the perspective from “unity in the diversity” to “synergy in the differentials,” which implies:

1. Dynamic (in both the classical and modern sense): Aristotle coined the word to imply a potential between what is and what can be, much like a high-voltage battery sitting on a shelf, but not connected to anything. Today we think of dynamic meaning things are in motion, active, something is happening.
2. Alignment of Energies: Energy is potential put into action. The problem with energies is that without being aligned they can dissipate, conflict, or work independently, thus has no synergy. Alignment implies an “aim” or “direction.” When alignment occurs, things “jump” to a higher order, just as in an atom, when a electric charge is put on it, or when a piece of iron is surrounded by an electric force and becomes a magnet. In the world of human behavior, “first cause” energy is an essential ingredient. We believe that “first cause energy” is represented in the Four Drives: *Acquire, Bond, Create, and Defend*. (Another way of saying this is “alignment of the 4 Drives is a critical place to start.)
3. Cooperatively Interactive: The interdependence and interaction of parts of a system is an essential part of the synergy thinking. Using the human body as an example of a “synergistic system,” every organ and function is interactively responding to internal needs, with feedback loops, while responding to changing external conditions. Cooperation among the component parts is essential.
4. Competitive Advantage: From an evolutionary survival/thrival perspective, synergy should create better economic efficiency (use of resources), capacity to adapt to changing conditions, mutual benefit, or attractiveness of other collaborators. Building on the Holistic Darwinian theme, this means “cooperate to compete.”

# Revolutionary Discoveries of the Greeks

---

5. Harmonies & Polarities: Transforming potential into unified action is finding the way to blend the admixture of resonant similarities (harmonies) and compatible differences (polarities) into a symphony of synergies. Too much of one or the other, and the secret sauce tastes bad. One of the important recipes is to get the blend of hormonal neurotransmitters (Testosterone, Oxytocin, Dopamine, Adrenaline, and Endorphins) in the right proportions by creating a culture that supports harmonies and polarities.
6. Finding Concord in Discord: People who study “chaos theory” maintain there is no such thing as chaos – there is order in everything; it is just our lack of insight that doesn’t see this order. Finding order in what appears to be discordant phenomenon was one of Einstein’s key principles for solving problems.
7. Passion: Synergy is never birthed from a disengaged heart. Passion means commitment, both intellectual and emotional. You must “believe” that synergy is both possible and beneficial, or it won’t manifest.
8. Ever-Evolving: The Greeks saw the world as an ever-evolving progression or unfolding, and their task was to find the underlying laws that governed the world, both humanity and science. The term “metanoia” meant to “shift the heart of the mind to a higher, broader, or more transformative level.” Thus the synergy process could be seen as a “metanoic shift.” In the sense of continuous evolution, every continuous improvement would potentially lead to the fundamental insight that triggered a breakthrough in thinking. (This is how the Japanese developed lean processes that were instrumental in beating the US in the auto industry.)

While “Unity in Diversity” (see Figure 13) may have been excellent thinking in the ancient era, given the fundamental shifts the nature of society and technology today, “Synergy in Differentials” may be a more appropriate mid-course correction.

# Dynamic Differential Energy

---

But more importantly, in the brain, when the drives to Bond and Create link up, they have an inner “yearning” that is continually seeking its “north star” or “true north” to guide its destiny. What are they yearning for? Synergy: that “dance of life” that makes everything so alive, so filled with awe and wonder, and the optimism synergy brings that gives concrete evidence that tomorrow will be a better day.



Figure 13: Dynamic Differential View of Synergy

# Revolutionary Discoveries of the Greeks

---

## SYNERGY IN DIFFERENTIALS (A DEFINITION)

**Synergy is the joining, unifying and aligning of ever-changing differential energies, bringing together harmonies and polarities into a more effective new form, level, configuration, or function.**

- The Greeks would have said that is was a “metanoic effect,” meaning it shifted the heart of the mind (*noia* or *nous*) to a higher or wider or transformative (*meta*) level.
- Darwin would have said this is “evolution on steroids.”

# Dynamic Differential Energy

---

This is the SECOND Volume in a Six Volume Set of

## Cracking the Synergy Source Code

This series of books is a result of my personal quest to find the “truth, and to act from an integrated belief system that’s:

“coherent and consistent;”

“spiritually strong and scientifically sound.”

Most people have such a conflicted belief system that they waste their lives “chasing fireflies in the night,” darting and charging in every direction, with no star to guide them to a worthy destiny. The other volumes in this set contain the deep wisdom – the “source codes” – that create order in a chaotic world and help you find that star to guide you through life.

- |              |  |
|--------------|--|
| Volume ONE   | Be the Champion of Your Life<br><i>Transform Your Destiny!</i>             |
| Volume TWO   | Dynamic Differential Energy<br><i>Revolutionary Greek Discoveries</i>      |
| Volume THREE | Dancing with the Holy Spirit<br><i>The Spiritual Quest for Synergy</i>     |
| Volume FOUR  | Building a World You Can Trust<br><i>Beyond Safety &amp; Security</i>      |
| Volume FIVE  | History’s Hidden Lessons<br><i>Learning from the Good, Bad, &amp; Ugly</i> |
| Volume SIX   | Destiny’s Dream<br><i>Lifting Ourselves to a World that Works</i>          |

Volumes ONE through FIVE are designed to stand alone; you don’t need to read the prior volume to understand the next, with the exception of Volume SIX, which integrates the themes of the prior books and moves on to strike new thoughts for a new world. I have purposely designed a small amount of overlap between the volumes to ensure connectivity and continuity of thought.

--Robert Porter Lynch