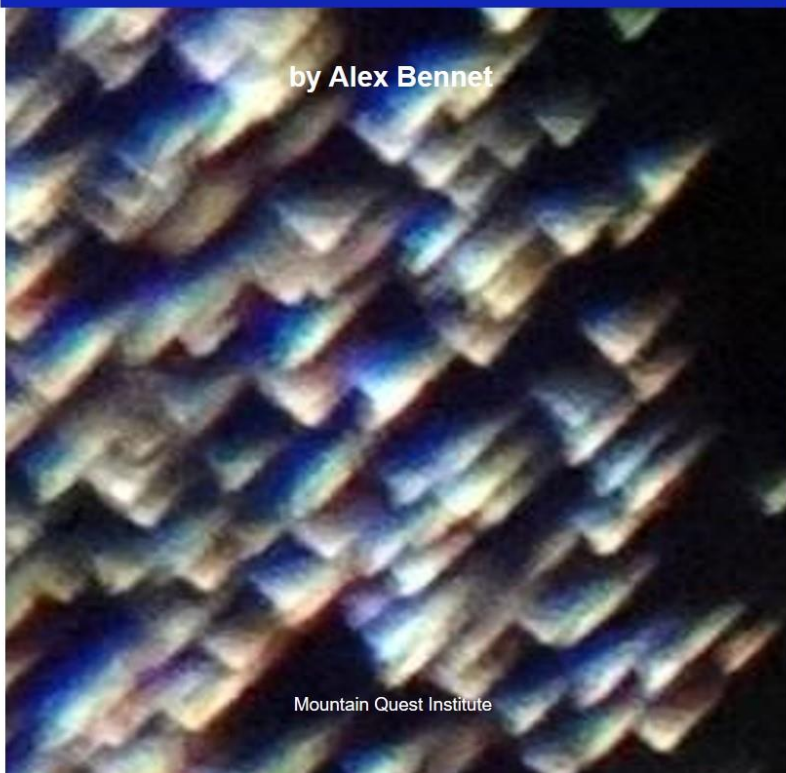


Possibilities that are **YOU!**

Volume 9: Connections as Patterns

by Alex Bennet

Mountain Quest Institute



This is Vol 9 in a series of 22 short books, what we call Conscious Look Books, that are conversational in nature, taking full advantage of the reader's lived experience to share what can sometimes be difficult concepts. We live in a world that is tearing itself apart, where people are out of control and wanting to control others, rebelling from years of real and perceived abuse and suppression of thought. Yet, this chaos offers us as a humanity the opportunity to make a giant leap forward. By opening ourselves to ourselves, we are able to fully explore who we are and who we can become. With that exploration comes a glimmer of hope as we begin to reclaim the power of each and every mind developed by the lived human experience!

These 22 concepts are part of the learning journey of which we are all a part, the Intelligent Social Change Journey (ISCJ). This is a developmental journey of the body, mind and heart, moving from the heaviness of cause-and-effect linear extrapolations, to the fluidity of co-evolving with our environment, to the lightness of breathing our thought and feelings into reality. Grounded in development of our mental faculties, these are phase changes, each building on and expanding previous learning in our movement toward intelligent activity.

These little books share 22 large concepts from the Profundity and Bifurcation of Change (which is written from an academic viewpoint). Each book is independent and includes seven ideas offered for the student of life to help us become the co-creators that we are. These books, available in soft cover from Amazon, support idea exploration, class discussion, other discussion groups or can be used as special occasion gifts.

Possibilities

that are **YOU!**

Volume 9: Connections as Patterns

by
Alex Bennet



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*Ideas flowing in many rhythmic patterns
Connecting what was with what's to come
Gathering, storing new truths along the way
While holding on to where we came from.*

*The pulsing cadence of the biorhythm
Ever moving, ever growing thus
Each pattern spawning a new reality
Creating the life story of us.*

-Cindy Lee Scott

Preface

This book is for YOU. Regardless of economic success or educational prowess, beyond cultural influences and habitual routines, YOU have been and continue to be a student of life. And since our time in this learning sphere is precious, the challenges and opportunities are both rapid and continuous, always offering new insights. YOU are a verb, not a noun. Forget what you were taught in grammar school!

Now, we live in a world of demanding challenges, where people and systems are rebounding from control, rebelling from eras of real and perceived suppression of thought. With the acceleration of mental development over the past century has come increased awareness of human capacity, with economic success in small bites for many and large bites for the few, and for some coming with an arrogance that says, “Look at me. I’m right, you’re wrong, and I’m not listening.”

Because of our Economy’s focus on the material, economic success begets economic success and the separation of wealth grows larger, flaming the difficulties of surviving in a CUCA world, that is, a world of accelerating change, rising uncertainty, increasing complexity, and the anxiety that comes with these phenomena.

Yet all of this **offers us, as a humanity the opportunity to make a giant leap forward.** By opening ourselves to ourselves, we are able to fully explore who we are. With that exploration comes glimmers of hope as we contemplate the power of each and every mind developed by the lived human experience!

As YOU move through your life of thoughts, feelings and actions—even when you have to repeat things over and over again as part of the experience—YOU are advancing toward the next level of consciousness.

Here's the bottom line. Everything that has been learned and continues to be learned is out there ... and as a student of life, YOU have access to it all. So often it is expressed in ways that don't make sense because of the language and media being used. It just isn't presented conversationally, and you don't have a chance to ask questions from your unique point of view.

So, these little books—which we refer to as Conscious Look Books—are specifically focused on sharing key concepts from *The Profundity and Bifurcation of Change* series and **looking at what those concepts mean to YOU.**

These books are conversational in nature, and further conversations are welcome. We invite your thoughts and questions, not guaranteeing answers because there is still so much to learn, but happy to

join in the conversation. Visit Mountain Quest Inn and Retreat Center www.mountainquestinn.com located in the Allegheny Mountains of West Virginia or email alex@mountainquestinstitute.com

As my partner David reminds us: *Run with the future!*

Our gratitude to all those who take this journey with us, and a special thanks to the colleagues, partners, friends, family and visitors who touch our hearts and Mountain Quest in so many ways.

With Love and Light, Alex and David

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Introduction

Why on Earth is it so important to be able to recognize patterns? THAT is a really important question! There are many ways to answer it. To see the direction we are heading, it's a good idea to first understand where we have come from, where we are, and how we got from there to here. This has proven incredibly difficult in an increasingly complex environment where invisible forces combine to form emergent characteristics that, at best, are difficult to directly connect to those forces. Still, when we are able to identify the repetition of patterns, we are better able to connect potential indirect cause-and-effect relationships in the future. In short, *in the NOW we learn from the patterns of the past in order to better predict the future.*

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INSIGHT: In the NOW we learn from the patterns of the past in order to better predict the future.

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Learning to recognize patterns—and then using those patterns in the NOW to plan for the future—is part of our human learning journey, what we describe as the Intelligent Social Change Journey. In this personal journey of growth and expansion, we first learn cause-and-effect relationships based on logic. For example, if I study for a test, I get a good

grade (hopefully). If I break the law, there are consequences. Then, as we experience more and more of life, we begin to recognize patterns in those behaviors. We now expand into conceptual thinking, which is a higher level of mental thinking. This is also a way to perceive higher-level truths. For example, let's take that concept that says when you study you get a better grade. This repeated behavior works again and again until one night, after studying, you go out with the "guys" drinking, have a sleepless night, and the next morning in class you can hardly remember your name! Now, your concept is expanded to include: when you study and get enough sleep you get a better grade. And so forth. You now have a deeper understanding, achieving a higher truth. As we achieve higher and higher truths, **we begin to see the interconnections of all things and all people**, that is, the relationships among things, the connections among them and how they work together. *Recognizing these patterns enables us to make better decisions in the NOW about the future.* Are you beginning to see how important it is to be able to recognize patterns?

Underlying the physical Universe there is energy and patterns of energy. That keeps coming up in these little books, so I guess it's pretty important to say. The term "pattern" comes from the French word *patron*, which refers to a specific theme that reoccurs in events, objects or movement. Patterns can be based on repetition (the same thing appearing

again and again), periodicity (recurrence at regular intervals), similarity (likeness, qualities or features in common), or symmetry (balanced proportions, exact correspondence in position) and translation (a change in form or state, transference to a different place).

If a specific pattern or set of patterns is not random, then it contains information. However, whether a specific non-random pattern is *recognized as information* depends on the individual looking at the pattern. For example, if the pattern is a Chinese symbol and the observer does not understand Chinese and is not capable of interpreting the pattern of the symbol, then the observer acquires no information from that symbol. However, to a Chinese observer the same symbol may contain huge significance and meaning.

Building on this idea, any given pattern may contain different information for different observers. Many people have different interpretations, that is, they get different information from the same pattern. These differences happen for a number of reasons. First, we tend to see what we are looking for, what we are interested in, or what strikes an emotional chord in us. Since no two people are alike (different DNA, beliefs, passions, etc.), the things we are looking for, interested in, or emotionally charged about can be quite different. Second, the interpretation and meaning of incoming patterns are

very much a function of preexisting patterns in the brain. That sure is a lot of patterns! Each individual has had different experiences in life (culture, family, activities, work, etc.), *all* of which are reflected in the patterns in that person's brain.

Humans are ALWAYS looking for relationships among things—events, happenings, people, thoughts. We are part of the grand search for patterns, for creative association.¹ *The human mind has evolved to discover patterns.* In fact, “the human mind yearns for the beauty of order and pattern.”² With each person's pattern detection and formulation system fueled by all that it is to be human, an entangled matrix of thoughts, feelings and experiences emerge within and without throughout life. *Around us weave the energies of probability, randomness and chaos married to characteristics of change, uncertainty and unpredictability.* Just as we take the events of our lives and create a story of us, whether real or imaginary, we discover and invent the patterns which we seek, driven by the need for structure, connections and meaning.

Sound exciting? Well, let's keep going for a bit, and perhaps as examples of our hunt for patterns I'll throw something REALLY mind-blowing into the mix!



Idea 1: Nature repeats patterns at various levels, building multidimensional patterns of iterated cells.

We haven't always known this! It wasn't until 1975—and it pains me to think that many of you avid readers were just being born about then—that Benoit Mandelbrot, a mathematician working for IBM, observed the presence of repeating patterns within the complexity of fractal images. This concept of repeating patterns, or iteration, is much like Russian nesting dolls. We have several of those in our front dining room that the kids like to play with at breakfast time. Benoit explored “seemingly separate entities, from the shapes of coastlines to plants, blood vessels, human pursuits, music, architecture, even stock markets and clustering of galaxies.”³

Through mathematical analysis, Benoit demonstrated that, no matter how chaotic it appears, there is an underlying order to everything in our Universe! He called the underlying patterns *fractals* and concluded that the appearance of disorder is merely a *function of limits of perception*.⁴ This was the beginning of fractal geometry, which revealed the design principle of Nature. This also demonstrates a human paradox, that man is

simultaneously subservient to nature at the material level while possessing a unique liberty, freedom of choice and action. “Man is part of nature—he exists in nature—and yet is able to transcend nature.”⁵

It’s interesting that Benoit used mathematics to figure all that out. You know, the older I get, the more I wish I’d learned more about mathematics. Numbers lend themselves well to the creation of patterns. *We use numbers to create grand designs for exploring our Universe*, and the binary system was the beginning of our computing age! Grand Design. Oh! I remember something the Broadway drama critic Brendan Gill said about that in relation to time: “When it comes to dealing with time—a mystery whose nature remains largely inaccessible to us—we try to accommodate to the mystery by forcing patterns of numbers upon it. We divide it into units of measurement, such as seconds, minutes, hours, days, weeks, months, years, and decades, that give it the appearance of partaking of some Grand Design, useful to us for the planting of crops, the keeping of records, and the prediction of things to come. But we have no proof that any such Grand Design exists outside our sense”⁶ So, we use patterns of numbers, at least for planning purposes, to help us navigate time.

Another idea that is kind of exciting to think about is the hypothesis of formative creation, which proposes that *memory is inherent in nature*. This

suggests that all natural things inherit a collective memory from previous populations of similar natural things. Further, through repetition, these collective memories become habits. Thus, habits are inherent in all living things. As that extends to humanity, “All humans too draw upon a collective memory, to which all in turn contribute.”⁷ Now, that sounds like we have a good excuse when we can’t get rid of a bad habit! Blame your great grandparent! This process in which the past becomes present, involving formative causal influences transmitted through both space and time, is called *morphic resonance*.

A similar theory is the field of instinctual intelligence, which refers to basic instincts that are programmed within the human that have innate intelligence aimed at survival in an unpredictable environment. Actually, that sounds a bit like our fight or flight instinctual response. But this instinctual intelligence requires learning, the continual modification of our nervous system as it adapts to continuous change, and then the passing on of that learning to future generations, who in turn change and pass it on to future generations.

Theodore Usatynski, anthropologist and psychologist, says that, “The most primal impulses are brought into alignment with the most precious of human qualities like compassion, generosity, patience, and intelligence. Modern scientists are finally acknowledging what the ancient mystics have

always known: our basic instinctual programming can not only learn and adapt—it can actually evolve.”⁸

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INSIGHT: Our basic human programming can not only learn and adapt, but actually evolve!

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A romantic treatment of this concept is that of the character of *torchbearers*. “Social inheritance enables man to stand on the shoulders of all who have preceded him, and who have contributed ought to the sum of culture and knowledge.”⁹ The marked increase in world travel and unparalleled improvement in methods of connection and communication have made this social inheritance highly visible, as well as having a great impact on the furtherance of civilization and the advancement of culture. For those who have traveled the PhD learning trail, it is similarly described as a journey of “becoming” built on the thought of those who have come before.

Because at every level of complexity individual organisms (whether we call them systems or holons) are indeterminate, morphic fields are probabilistic in nature when interacting with material forms. This is the same understanding we have reached regarding Quantum fields, which is descriptive of the environment in which we exist. They are

probabilistic. Rupert Sheldrake, the researcher and originator of the morphic field idea, describes it this way: “Random fluctuations in the electrical potential across the membranes of nerve cells affect their tendency to ‘fire,’ and this has important consequences in the functioning of the nervous system. For these reasons alone, it seems natural to assume that morphic fields are probabilistic in nature.”¹⁰

What’s even more interesting is that Rupert’s morphic field appears to share the properties of Pierre Teilhard de Chardin’s *Noosphere* as well as the Quantum field. I brought in the Noosphere because some of you may be familiar with that since that idea has been around for a longer period of time. Anyway, it looks like Noosphere, morphic field, and Quantum field are different frames of reference for the same energy field, and that’s the same field some people call the consciousness field or the God field! Sounds like we’re all in agreement about that field, just calling it different names.

One more thought before we move to the next idea, and it has to do with “older” people (I guess that includes me). An interesting neuroscience finding is that *patterns stay in the mind longer than facts*. So, the aging brain can accomplish mental feats that are quite different than younger brains. Although older people forget names, acts and words (sound familiar?), they have the capability of

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remembering high-level patterns and meaningful insights that we often consider as wisdom. Yeah!

[Your Thoughts]



Idea 2: As a form of energy, information is organized patterns.

Remember when we talked about the larger energy field earlier? I'll say it again, since this is one of the talking points my partner insists on sharing.

Everything—at least in our physical reality—is energy and patterns of energy, and information is a form of energy. Looking from an organizational framework, how do we find meaning in the plethora of information that is assailing our sense every minute of every day?

If you're not into the IT kind of stuff, you might skip this section and move on to Idea 3. The bottom line is that the search for, and identification of, patterns is at the very core of our information and knowledge management systems. While the stuff below is somewhat antiquated by the time it is written and published, we briefly take a look at the trends.

In our world of technology, data mining, including the use of artificial intelligence such as automated reasoning programs, emerged to support identification of patterns. For example, the use of supermarket loyalty cards in exchange for discounts enables the tracking of detailed purchasing patterns. Prominent methods in data mining include link

analysis, software agents, machine learning, neural networks and, more recently, cognitive systems from the creation of artificial intelligence to development of systems that can supplement and expand the capability of the human mind. And, it's the age of Big Data!

Link analysis does just that; it uses mathematics and technology to connect people and organizations to events. See how mathematics seems to be involved in everything? I wonder if I'm too old to learn a bit more in that direction? Anyway, identification of these connections enables human experts to investigate each link and record detail, and to discover new nodes that connect to existing ones or new links between existing nodes.¹¹ A subprocess of link analysis is geometric clustering, looking at the relationships among clustered events. For example, geometric clustering is the process used in social network analysis, which maps relationships among people, teams or across organizations. If you're not familiar with this, you may want to explore it. There's a software program out that does this.

Social Network Analysis is particularly effective in assessing the flow of information through communication and collaboration, and geometric clustering enables identification of people who are central (overly central?) and peripheral (underutilized?) to an organization. The extent to

which a group is connected, or the extent to which it is split into subgroups, can be an indicator of a problem, difficulty or strength in moving information from one area of the network to another.

Software agents come out of artificial intelligence research. These are self-contained computer programs that act autonomously to accomplish specific programmed tasks. For example, drug stores use software agents to mitigate the potential danger among prescription drugs, and banks use software agents to monitor the pattern of credit card activities. Machine learning is also a product of artificial intelligence research. Development of learning algorithms—which connect differentiating features of the information being searched—are essential for exploring the patterns of Big Data to identify key features and higher order patterns.

Even though at one time I was the Deputy Chief Information Officer for Enterprise Integration of the U.S. Department of the Navy, I’m certainly not on the front end of any of this! Things change so rapidly; sometimes I feel like I don’t know anything related to IT or AI. [Tell me again what those abbreviations stand for? Ha! Ha! Maybe I know SOMETHING.]

Speaking of something, we ought to say something about neural networks, which are excellent for recognition of patterns. These are

another kind of computer program which attempt to simulate the way the human brain works. This attempt was a formidable task. It is not simply the large number of connections (synapses) in the human brain that makes this difficult, and it is not what the human brain does, but understanding how it does it—that step portrayed in a bunch of cartoons that say “then a miracle occurs”—that challenges the designer’s intellect.¹²

At the turn of the 21st century, Brown University set out to build a brain-like computer, what was called the Ersatz Brain Project. While only focusing on a microcosm of the brain, when the project was over the team had recognized that *by requiring software to use brain-like constraints, new ways to tackle old problems emerged*.¹³ Further, they realized that an important application of such a machine would be the realization of a large network where individual nodes having complex internal structures would provide flexibility and associative capabilities beyond semantic networks. The understanding was beginning to be voiced that as we design machines to mimic our minds, we need to make sure that those machines are equipped with sufficient diversity. They need a similar diversity to that which distinguished humans from most other animals and from machines built in the past, “stemming from what we each have made of ourselves: a colossal collection of different ways to deal with different situations and predicaments.”¹⁴

Cognitive systems move beyond Artificial Intelligence approaches to exploration of this technology to aid learning and decision-making. In 2005 cognitive science and technology became a core research focus for Sandia National Laboratories. For Sandia, cognitive systems include technologies that utilize computations models of human cognitive processes or knowledge of specific experts or other individuals.¹⁵ These systems accurately infer user intent, remember experiences and provide simulated experts to help users analyze situations and make decisions. *Through modeling a virtual “you” and simulating thinking patterns, individual strengths can be reinforced and weaknesses mitigated.* Imagine this as the basis for a learning system, a human-technology partnering that is already happening today. This is clearly not the AI of the past. Intent is modeled to a specific individual; knowledge is associative, with emphasis on pattern recognition not just rule-based representations and logic; and this is a dynamic complex system that may easily adapt to changing circumstances!¹⁶

There is so much more underway. Even as we attempt to capture a few ideas along the path, something new is emerging and those ideas we have captured become antiquated. That’s right, they already are! Nonetheless, they do represent a pattern of discovery that continues today. What I have tried to convey in a very limited way is that, *just as with*

the human mind/brain, possibilities abound, and the only limits are those imposed by ourselves!

[Your Thoughts]



Idea 3: Pattern thinking is using your inside world to look for patterns in the outside world.

Are you still with me? That was a lot of IT kind of stuff. We're going to switch gears here and talk a bit more general about pattern thinking.

An approach to studying the changing times and the content and context of a situation is to identify patterns of change and the underlying principles or environmental drivers that are generating that change, unpredictability and apparent complexity. Much of this kind of knowledge resides in your unconscious, particularly if you have previously and deliberately looked for these characteristics. Thus, you may not be consciously aware of them but your unconscious can, and often will, be aware of them as you observe and study a situation. While perhaps outside of your awareness, you are creating knowledge in the form of understanding.

As we are exposed to more diverse and varying conditions, the brain creates new patterns and strengths of connections and thereby changes its physiological structure.¹⁷ It is also true that the structure of the brain—containing a huge number of networks of neurons—significantly influences how incoming signals representing new thoughts (patterns

composed of networks of neurons) are formed. Through the process of associative patterning, these new patterns entering the brain associate or connect with patterns already in the brain.

Pattern thinking is not primarily thinking *through* patterns, although over time this will occur. Rather, *it is using your inside world to look for patterns in the outside world*, and bringing them into your conscious awareness. The intent of pattern thinking is to let the pattern emerge as a mode of understanding a situation, purposefully thinking about external patterns in order to better anticipate and respond to change, that is, to expand your understanding, solve problems, create new ideas and improve your capacity to forecast the outcomes of decisions.

Thinking *about* patterns is different than thinking *with* patterns. If you start with a specific pattern in mind, no doubt you will find it. This is the same phenomenon that occurs when you purchase a new car and you begin seeing similar cars every time you are on the freeway, although you'd never noticed them before! However, pattern emergence can be stimulated by other patterns. For example, the systems thinking approach developed by Peter Senge is based on matching a recurring set of relationships (archetypes) to a situation at hand.¹⁸ While this force-fitting can certainly help facilitate an understanding of causal relationships in simple and

complicated situations, it does not work well in complex situations. Complexity infers difficulty in understanding something due to the large number of unpredictable and nonlinear relationships. Yet, once you have used the models of complexity over and over again, you begin to think systems and discover system patterns beyond the archetypes. Both systems thinking and complexity thinking are forms of pattern thinking, enabling a person to build the ability to recognize, comprehend and learn how to influence complex systems.

I really enjoy thinking about systems and complexity. When I get caught up in it, somehow my everyday life at Mountain Quest seems simple! I wish all of you the opportunity to taste country living. There's nothing better than rocking on the front porch and watching a group of Arabian horses toss their heads as they race down the field.

From the neuroscience perspective, pattern thinking involves mental exercise that stimulates the brain. The best mental exercise is new learning in multiple areas of the brain, acquiring new knowledge and doing things you've never done before.¹⁹ Making new connections, seeing new relationships, and bringing patterns into our conscious stream of thought does just that. For example, there are patterns over time such as trends, cycles, spikes, curves, sinks, sources, and so forth.

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***INSIGHT:* Making new connections, seeing new relationships, and bringing patterns into our conscious stream of thought stimulates the brain.**

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Forecasters use scenario planning: setting up patterns, creating self-consistent patterns over time, and looking at what happens. Scenario development can be used to create applicable knowledge by starting with the recent past and developing several possible scenarios for the future. Here you may have to identify trends by averaging over time, considering the most desirable, acceptable and least desirable possible outcomes. Knowledge can be developed from creating, studying and playing with the possible results of these scenarios. Other ways to think about forecasting are in terms of laying out a trail (a pattern) with milestones (symbols), and, of course, through dynamic modeling.

While this all may sound like it's the stuff of organizations, it's also the stuff of YOU as an individual! YOU are ALWAYS planning! And that planning is based on the patterns you have learned from the past coupled with your desires for a future state. For example, you really enjoy amusement parks, and a friend asks if you want to join them on a trip to Disneyland. Now, what goes through your mind? You realize that they have several kids 8 and 10 years of age, that your friend gets sick going on

rides (you've known him for years), and that your friend's wife is pregnant. Okay, looking at those patterns, and your understanding of those patterns, you move through scenarios in your head of how all that will play out. It's clear that you will be expected to be the "go to" guy for going on rides with the kids—and your friend will actually admit to that—and, since you actually like kids as well as the rides, and you're glad to help make this vacation special, you are enthusiastic about the prospect. So, all of these things—understanding patterns from the past, including our own personal preferences and feelings as well as those with whom we interact—help determine our decisions in the NOW to plan for the future. Does that make sense?

When addressing a difficult situation, while there is generally not a visible cause-and-effect relationship, the amount and depth of study offer potential for discovering a solution. People who are continuous learners, regardless of their focus of learning or areas of passion, will often see patterns that suggest action directions. While in the middle of a situation, even the most rigorous focus and attention to detail may not present solutions, this focus and learning is supplying the unconscious with additional information, which is being integrated with all your life experiences to identify patterns of response. In other words, while you may not have immediate answers, you are accelerating your unconscious learning and increasing the potential for

intuitive insights. The unconscious can detect patterns that the conscious stream cannot.

This whole discussion brings home the fact that YOUR mind/brain develops a robustness and deep understanding from its capacity to use past learning and memories to complete incoming information. Instead of storing all the details, it stores only meaningful information in invariant form, sort of like using shorthand. This provides YOU the ability to create and store higher level patterns while simultaneously mixing those with internal memories, adapting those memories to the situation at hand, and providing YOU with a feeling or thought of how to act. Through these processes—and many more that are not yet understood—the brain supports survival and sustainability in a complex and unpredictable world. For example, our very survival may be dependent on recognizing patterns²⁰ such as weather cycles that drive our planting, harvesting, storing of food or evaluation in times of really bad hurricanes and tsunamis!

* * * * *

EXERCISE: *Thinking Patterns*

In the latter part of the 20th century, my partner and I included the phrase *every decision is a guess about the future* in all of our briefings on decision-making. However, in working with the implementation of Knowledge Management, it became clear that the practices considered as *best* in

one part of the organization failed in another part of the organization. This was early in the KM implementation process, when the understanding was just emerging that knowledge is context sensitive and situation dependent. *Yet, there were similarities; types of things that were similar in situations.*

As more implementation examples of the various practices became available, recognizable patterns began to emerge. At this point, we began to purposefully look for patterns. If we found similar patterns occurring, we could more accurately predict the outcome of our implementation process. It was no longer a random guess about the future. “If a pattern can be recognized, then the accuracy of predicting a future event is relatively high ... if events are found to be random, then all predictions are essentially guesses with an accuracy based on chance.” This tool is focused on tapping into the innate human ability to recognize patterns.

STEP (1): Find a place where you will not be disturbed and briefly close your eyes and take several deep breaths. Open your eyes. Then sit comfortably, ready to take notes.

STEP (2): Consider the group of things or series of incidents in which you are searching for connections. If this is a group of things, briefly write down each item’s characteristics such as how it looks and what it is made of, how it is

created/developed, its purpose, how it is used, etc. If this is a series of incidents, briefly write down for each incident the subject (who or what) and the verb (action occurring) and any descriptive adjectives that come to mind describing the incident, the people involved, the place and timing, the outcome, and the why (if known).

STEP (3): Look across the group and consider the *differences* among the things or incidents. Note these as characteristics.

STEP (4): Look across the group and consider the *similarities* among the things or incidents. Note these as characteristics.

STEP (5): Considering both differences and similarities, identify categories into which these differences and/or similarities could fall. Keep searching until you can bring two or more characteristics of *different things or incidents* together into a category. Repeat until you have discovered all the categories that connect the things or incidents.

STEP (6): Now look at how the categories fit together. *ASK*: How do these things relate? Are these different things the same *types* of things? Are there patterns emerging?

STEP (7): Repeat Steps 3-6 until you are satisfied you have discovered all there is to discover.

HINT: This process works better in a facilitated collaborative group looking from multiple frames of reference!

* * * * *

Note that there is a difference between pattern identification and trend extrapolation. Patterns deal with repeatable associations and connections; trends deal with movement in the same direction over time. Throughout history of futures research, trend extrapolation has been the most popular forecasting tool, and it is still a habit of many organizational planners today. Trend extrapolation is recent-past oriented and carries with it the assumption that people are objective. It does not delve into the more distant past, nor consider the future potential non-rational behaviors of human beings.

For example, behavior pattern analysis includes human actors such as the leaders of companies who carry a picture or perception of the character and purpose of the company. Their personal worldview is going to be imposed on the technical, economic or financial aspects of any situation. Thus, the “resulting decisions may be wise or less wise, but they include the ambitions of the people involved, the friendships and the personality clashes, the power struggles and the ups and downs of real life.”²¹ Using this broad, adaptive framework allows detection of directions of change, thus providing the opportunity to anticipate their implications. “The

more complex, the more fluid, the situation—the greater the power, the greater the insight, of this kind of approach.”²²

In the Introduction, I promised you some really exciting—or at least fascinating—examples in our search for patterns. So, we’ll include those in the next idea!

[Your Thoughts]



Idea 4: Patterns provide information from which we can gain insights, understanding and meaning.

Surprises pop in and out as we weave our way through life. The *Myst* phenomenon began eight years ago following a number of startling events that accelerated our growth, as all such events do.²³ This phenomenon occurs on the 450-acre farm that is Mountain Quest, although there are a dozen other natural settings around the world where it is also occurring. When we first started writing about the phenomenon, we said this regarding the pictures:

Myst-Art represents the results of night photography at Mountain Quest Institute. Specks of dust, waves of water mist, bursts of light and other electromagnetic energies—all part of the Earth's natural ecosystem—combine to produce Myst-Art.

This, of course, was not enough. As the phenomenon continued, we expanded this to add:

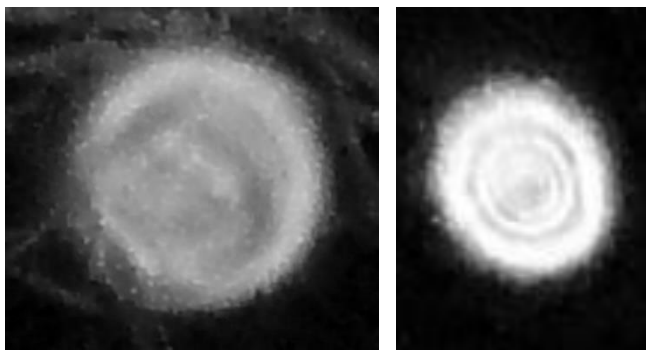
Myst-Art represents a deeper look into the natural energies surrounding each and every one of us, energies that are often invisible and rarely capture our attention. New technologies enable us to photograph these energies and produce pictures that are truly beautiful, engaging and unique. Exploring the patterns of Myst-Art encourages our search for

understanding and meaning, challenging us to revisit our beliefs and our place in the larger Universe.

What we see depends on what the camera captures, what we perceive, and what reality is trying to tell us.

And this is the challenge we issue to you as we explore the patterns emerging from this phenomenon. First, here is what we know about the origins of the physical aspects of it. Let's look at pictures in these various stages. We won't label these pictures; and these will be in black and white.

(1) The *Myst* phenomenon begins with the appearance of orbs, which are small dots of electromagnetic energy.



(2) What we loosely refer to as “dimensional holes” open, expressed by large blotches of light, and thousands of these orbs emerge out of the light.



(3) As discovered through research and repetition, these orbs attract water molecules that are in the air.



(4) And, in the instant, the *Myst* presents in various textures and shapes such that it can be captured by a camera. Then it is gone.



Well, that was a pretty simple sequence. However, what does it tell us? Just sort of sequentially what we think happens. Let's dig a bit deeper. While this pattern exploration will only represent small pieces of what has been an eight-year research project at the Mountain Quest Institute (exploring some 47,000 photographs), it will hopefully serve as an interesting example of how to explore patterns in nature, or perhaps your own life patterns from the past.

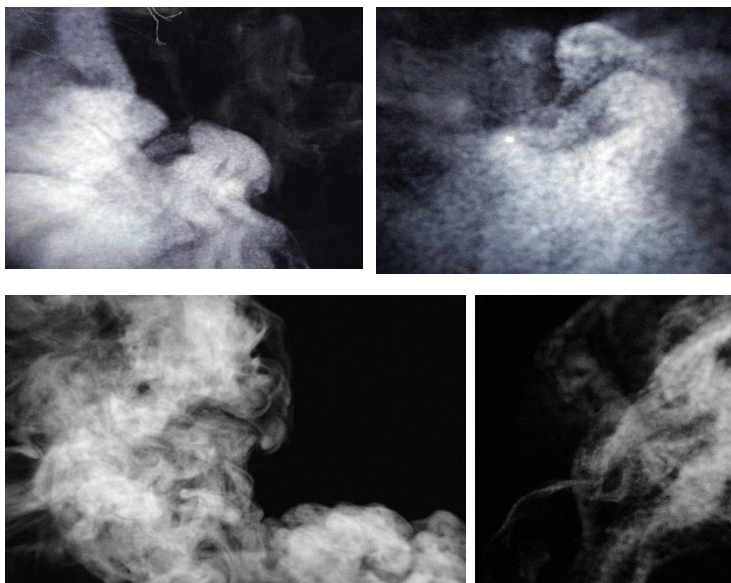
Much like other patterns in nature, the *Myst* is somewhat chaotic, never exactly repeating a pattern, though consistent in many other ways. Since, ultimately, we are looking for meaning in patterns, in addition to looking for those things which repeat themselves (characteristics, appearance, response, etc.), we search for common principles behind similar patterns that occur.

For example, MQI's Quarter Horse Paint mare named Vision Quest is brown and white. While her mother (Calamity Jane) had different markings or patterns, nonetheless they are both Quarter Horse Paint mares that are brown and white. These are high-level similarities, and digging deeper into personality characteristics would also provide similarities as well as differences. You know this stuff. Just think about the similar patterns across your family, whether parents, kids or siblings, or all three!

The question then becomes whether the set of similar characteristics applies to all/most Quarter Horse Paint mares that are brown and white? Pattern formation in developmental biology is the mechanism by which equivalent cells assume complex forms and functions. In science, pattern formation is the visible and ordered outcomes of self-organization built on a set of common principles. Are there underlying common principles behind the *Myst* phenomenon? How deep can we delve to help identify differences, discover similarities and uncover meaning? Meaning, of course, is the most desirable goal.

Patterns can provide information, and by studying them carefully we can gain insights and understanding of what they mean. One interesting aspect of exploring patterns is that we are naturally attracted to that which is familiar to us. For this

reason, we are always seeing faces in clouds, and it is the same with the *Myst*. Keeping an open curiosity, see what you can find in these photographs:



See any faces? Hmmm.

A bit more formally, one approach to pattern recognition is the **assignment of labels to a given input**, developing a classification or clustering system. For the *Myst* phenomenon, we chose descriptive words based on visual representations of the phenomenon in terms of *texture*. These included: Circles (Standard, Crystalized); Clouds (Formed, Swoops, Splashed); Pocked; Fluff; Dots; Soft Light;

and Bright Light. While one presentation can include multiple textures, forms or figures appear to be more exclusive in terms of texture. Let's look at some of these textures.



Figure1. *Representative textures of the Myst phenomenon. (L-R) Dots (Rounded and Bounded); Fluff (with Light Striations) [note the arrows]; and Circles. NOTE: Can you find the arrowheads in the middle photograph?*

Observation over time of these attributes gently leads us to think of specific characteristics in terms of energy output, which in turn leads us to explore potential sources of those energy outputs, or at least ones of which we are aware. For example, specific textures appear when there is a higher level of water vapor in the air, or during a clear night versus a cloudy night, or when there is a full moon. Thus, we begin to develop an understanding of the relationships among the *Myst* phenomenon and various aspects of energy in the night setting of the farm.

Shapes themselves, as form, are patterns, or meta-patterns, that bound space. Form exists in space and space exists in form; thus, at the material level, all patterns of reality occupy space. Space and form are mutually dependent and inseparable.²⁴ That sounds strange, but think about it this way. If you just have space without anything in it, then it's hard to define space. If you put an object in that space, then all of a sudden you can see that space is different than the object, and the object is defined by the space around it. Kind of interesting, although it's hard to imagine space without anything in it. Maybe that's the point!

Meta-patterns are patterns of patterns; grand-scale, inclusive patterns that help us understand ourselves and the functioning of the Universe. As Tyler Volk, an environmental biologist, says, "A meta-pattern is a pattern so wide-flung that it appears throughout the spectrum of reality: in clouds, rivers, and planets; in cells, organisms, and ecosystems; in art, architecture, and politics ... representing all of human creativity."²⁵ We're going to depend on Tyler's work heavily for the next few paragraphs. As he describes himself, and we agree, his work has "deep relevance for human life and their mysterious ways."

The **sphere** is a meta-pattern, so perhaps it could be expected that orbs take the shape of a sphere, and, of course, the word "orb" represents a

sphere. The omnipresent sphere is abundant in the Universe, *the shape from which all living things emerge* and the beginning point of complex organisms such as people. Examples range from human ovaries to eggs; pulsars to black holes; and moons to planets and suns. Even atoms were originally thought of in terms of space-filling balls! As our expert Tyler says, “When alone in space, like a miniature star, a hydrogen atom’s cloud of charge density created by its single electron extends and fades into spherical infinity ... The sphere thus appears to reign as dominant shape in the astronomically immense, the atomic infinitesimal, and the ancient or nascent living. No other shape is so universally abundant, so insistent as the omnipresent sphere.”²⁶

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INSIGHT: The sphere, a universally abundant shape, is the shape from which all living things emerge, and is the beginning point of complex individuals such as you and me.

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There are many reasons why the sphere emerges as the prominent shape throughout nature. Energy is always conserved; you cannot create it or destroy it, you can only change its form and/or move it around. Parsimony is the principle of least action or energy, and conservation. *Nature is fond of doing things in the most economical and efficient way.* A

compacted surface area has significant biological advantages, providing the smallest surface and strongest structure for the greatest volume. That certainly makes sense. Because it is a low maintenance shape, many cells are spherical. For example, the majority of cells in the human immune system such as T-cells, B-cells, and the natural killer cells are spherical.

In space, a liquid ball develops a “skin” that is self-created from surface tension. A leaky faucet demonstrates this same behavior as the water forms into a drop, naturally forming a skin as the fluids drive to achieve “states of lowest energy, which translates into the lowest total area of free surface.”²⁷

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INSIGHT: Energy is always conserved; you cannot create it or destroy it, you can only change its form and/or move it around.

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There're more reasons we see the sphere throughout nature. When moving, *spheres are omnidirectional*, and, because roundness minimizes drag, when propelled they can spin in any direction with minimal air resistance. Further, throughout history the sphere has represented power. For example, the sphere (an orb of power) appears in the portraits of European royalty and is often depicted in the hand of Jesus. Thus, physical attributes of

spheres such as omnidirectionality, surface area and strength are part of the sphere's archetypal attributes equating power, equanimity, idealization, and perfection.²⁸ These connections are observed in *Timaeus*, when Plato describes the origins of the Universe.

“Creator compounded the world ... as far as possible a perfect whole and of perfect parts ... leaving no remnants out of which another such world might be created ... that figure ... which comprehends within itself all other figures ... the form of a globe, round as from a lathe, having its extremes in every direction equidistant from the center, *the most perfect and the most like itself of all figures* ... the surface smooth all around ... because the living being had no need of eyes when there was nothing remaining outside to be seen.”²⁹ I just bet you didn't expect to read Plato in this little book!

That's enough about spheres, although since orbs are spherical it certainly *is* appropriate to this exploration of patterns! Counterparts to the sphere, and also considered meta-patterns, are **sheets and tubes**. Sheets are flat planes, similar to a pancake, and tubes are rounded lines, similar to a spaghetti noodle. In the biological world an example of sheets are the green leaves on plants used to absorb light, with a surface area that is 20-40 times greater than volume. Sheets can also capture motion. Examples

are the ear drum, which captures sound waves, and the sail of a sailboat, which captures wind currents.

Sheets are different than spheres in their surface-to-volume ratios as well as in their directionality. For example, tossing a Frisbee is very different than throwing a baseball. What are the differences? Given the general viewpoint of pictures, which are two-dimensional, it is difficult to identify sheets in the *Myst* phenomenon, although it is assumed that they are present.

Like sheets, tubes have a greater surface area than spheres with equivalent volumes. In nature they too are used as transfer surfaces. For example, a pine needle captures photons and exchanges gases much more efficiently than if its biomass were shaped as a ball. Also, like sheets, tubes change momentum with their environment. However, they are not interchangeable in places that need surface because of their unique shapes. Examples include a kite (sheet) attached to a string (tube), and a canoe (sheet) guided by an oar (tube attached to a sheet). As Tyler explains from his deep observations of nature, “Where the press of maximizing area overwhelmingly drives the design, sheets will dominate.”³⁰

A third major attribute of tubes is the ability to transfer forces along lines. *Biological structural tubes are about reach*. “The most efficient use of materials in support systems that reach out occurs in

cylindrical bodies.”³¹ Think in terms of the human circulation system. As connectors, tubes are directional, forming relationships between objects in space. There are many examples of tubes in the *Myst*. One excellent example is a photograph titled “Entanglement.” These tube-like structures appear to be in relationship at their base with the larger *Myst* energy and to host faces at their extremes.



Figure 2. *This Myst photograph, titled “Entanglement” engages the meta-pattern of tubes.*

Defining form within space, the surfaces of spheres, tubes and sheets can all be considered as borders which function as barriers to disruption.

Distinct bounding surfaces can be found in all scales of life. These surfaces provide a system of walls and bridges that both separate and connect! The closest example would be the patterns in clouds. While clouds lack a defining skin (such as the boundaries of the human body), they sometimes terminate against the dark sky thus showing edges, and sometimes are fuzzy and indistinct, even wispy in nature, which is similar to the *Myst*. While these borders are casual, clouds are still recognized as things that are distinct, worthy of notice, and therefore named.

The complex, often shifting nature of the borders of clouds described above (moving in scale from large to small) is an example of *fractal geometry*. Similar to clouds, the shifting nature of the borders of the *Myst* may provide an example of fractal geometry. Some of the *Myst* photographs demonstrate two properties: (1) When part of the image is magnified it is essentially indistinguishable from the unmagnified version (self-similarity) and, (2) some parts are irregular fragments. In nature the patterns that are the most highly symmetrical are often the most random. While they are not always visible, there are always differences at some level. If these are not clear examples, the forming of the *Myst* provides some examples of underlying fractal patterns. (See the picture on the front of this little book.)

As a final example of pattern exploration, another approach is to investigate **the probability of a specific characteristic occurring**. Probability is one way of helping to validate whether an event is based on an independent source. For purposes of this exploration, *probability is considered the quality or condition of being probable or the likelihood that a given event will occur*. This is often expressed as the ratio of the number of *actual* occurrences to the number of *possible* occurrences. Randomness is having no specific pattern, purpose or objective, relating to an event in which all outcomes are equally likely to occur. Non-randomness, then, means that the pattern, action or event can be anticipated from past and present patterns, actions or events, if (and only if) one has understood patterns over time (sequences) well enough to predict the next pattern action or event.

While it's sure easy to get them mixed up, there is a difference between non-randomness, predictability and uncertainty. Predictability and uncertainty are opposites. Predictability means that one can successfully anticipate the next event, action or occurrence. Uncertainty means that one cannot successfully anticipate (predict) the next event, action or occurrence.

If the patterns in the *Myst* are random, then most likely it would be the result of the weather or other environmental conditions. If the patterns in the

Myst are non-random, then there is some force—perceived or felt, internal or external, understood and/or beyond understanding—that is forming and shaping the *Myst*. So, an important step in understanding the *Myst* and exploring the patterns in the *Myst* is understanding the probability that the phenomenon is non-random.

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INSIGHT: An important step in exploring the patterns in the *Myst* is understanding the probability that the phenomenon is non-random.

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While there are many possible focal points, one element to consider is **color**. While there may be more shades of colors involved in some of the photographs, for simplicity here we assume three primary color tones: white, black and pink. By definition, if a color is random then the probability of selecting any one of these colors is equal. This is the same as throwing dice. If there is a different number on each side of a die (1-6) and if the die is balanced, the result should be random. The concept is similar with a perfectly balanced coin. In a random coin toss, the odds of tails versus heads should be the same, that is, both heads and tails have the same chance (50/50) of being on top. (Of course, we're NOT referring to the concept of probability in a Quantum field, which is quite different.)

The picture we are exploring is the one that is shown on the back cover. With our three tones of colors, excluding external stimuli, it should be equally probable for any one color to appear in each pixel, that is, the probability of getting a black pixel is $1/3$ or 33%, the probability of getting a pink pixel is $1/3$ or 33%, and the probability of getting a white pixel is $1/3$ or 33%. So, in an unweighted environment with no external influences the probability of each pixel being a specific color is $1/3$ or 33%. In short, if each pixel of the camera's image were random, then the pictures would be nothing more than a messy, complex mixture of black, white and pink dots.

If we look at a specific order of a string of the same color, the probability changes. For example, the probability of getting three black pixels in a row is $1/3 \times 1/3 \times 1/3$ which is $1/27$ or 3.7%. The probability is becoming very low. Suppose in this phenomenon there are a hundred of the same-color dots in a row? The probability is then $1/3^{100}$ which is equal to 1.94×10^{-48} (that's .194 with 47 zeros in front of it). This is a very, very low number, yet it is the probability of getting 100 black dots or 100 pink dots or 100 white dots in a row. Referring back to the picture frame and assuming an area of 100 pixels square (based on the width and height of the camera frame), there are 10,007 dots in the square. When we do the calculations, the probability of getting a random picture in that area with a specific pattern is

10⁻⁴⁷. This math is hurting my head! If any of you are mathematicians out there, let me know if I got it right!

To help understand this probability factor, let's consider it in comparison with the number of estimated particles in the Universe, which is 10⁷⁰. If a given picture without environmental influence is truly random, *the probability of getting it is smaller than the number of particles in the Universe!* Putting aside the interpretations of the shapes themselves, in the photograph that is on the back cover, the probability of this block of pink randomly appearing in the *Myst* picture without environmental influence is approximately 10⁻⁹⁴. Well, we've pretty much figured out the *Myst* phenomenon is not random!

Meaning? In this idea we have briefly explored three elements of pattern thinking: (1) labeling and categorizing characteristics of the phenomenon; (2) the relationship of meta-patterns in terms of shape; and (3) the role of probability. A single example of each was provided in terms of exploring the *Myst* through pattern thinking. All this, of course, is based on directly experiencing the phenomenon of the *Myst*. Remembering that the mental faculties are in service to the intuitional, we would continue the search for patterns through every framework that makes sense. Then, we would look for higher order patterns across the patterns we have identified and described.

Only then, with all that has been learned well in hand, would we turn inward and ask *how do we feel* about the phenomenon, reviewing each aspect of our learning and repeating that question for each discovery as well as addressing it as an overarching question. To do this without bias, you need to take a close look at your mental models, and reflect on your openness to new ideas, simultaneously bringing to mind limits to your understanding and your openness to learning. Now, you are finally in a position to explore meaning in terms of personal ramifications—what this phenomenon may mean to you in terms of beliefs, thoughts and actions—and what potential this learning holds for humanity at large. In terms of the *Myst* phenomenon, if you are looking for us to advise you in this regard, you will be disappointed. It is a personal experience for each of us to discover, and indeed it is a fascinating one!

While this exercise has taken a number of pages, it also has provided a number of examples of the application of pattern thinking. We now briefly look at patterns as story.

[Your Thoughts]



Idea 5: Some stories are easily remembered because they mimic the pattern of your heartbeat.

The stories we tell and hear are instruments of change. Knowledge is experiences and stories, and “intelligence is the apt use of experience and the creation and telling of stories.”³² Roger Schank, who has quite a story of his own to tell—he’s an engineer, psychologist, computer scientist and educator—says that our knowledge of the world is more or less equivalent to our experiences. We understand experiences in terms of those experiences already in our memory that we understand, so that new ideas are dependent on old ideas. This is, of course, is the process of associative patterning. Context helps us relate incoming information to the experiences already in our memory, and stories provide that context.

But as philosopher Michael Oakeshott reminds us, experience, “of all the words in the philosophic vocabulary, is the most difficult to manage.”³³ We can place ourselves in situations to learn, but since learning is an emergent quality *we cannot predetermine **what** we will learn* or, indeed, the significance of what we will learn to our future thinking and acting.

There are many ways that information can come to the attention of the mind and thereby interact and influence your thoughts and perceptions of the world. Individuals may, and can, make sense of their experiences in many ways, utilizing both inward reflection and social engagement. For example, social engagement might include discussions with friends, collaboration with colleagues, or engagement in communities of practice.³⁴ In today's connected world, virtual exchanges and idea resonances occur on a day-to-day basis, moving through the former barriers of geographic location, culture, age, education, professions, and values and belief sets.

With the rise of bureaucracy in the 1900's, trusting ideas and opinions was primarily built on relationships, that is, the valuing of ideas based on attunement with trusted and respected others who were personally known to the decision-maker. This makes sense. Trust was built up over time as we had a series of continuous cause-and-effect relationships with others, complete with feedback loops. Since travel was difficult and communications were limited, both personal and professional interactions were focused on specific groups of people whom we came to know well, thus enabling choice of whether or whether not to open ourselves to these individuals.

Building on this idea of resonance, let us briefly consider the concept of reverberation. An

knowledge emerges, shifts and changes in concert with our environment and the demands placed upon us. Thus, for continued learning to occur, there is the need for a sense of humility in the acceptance and consideration of new ideas, whether or not they fit into our previous learning, beliefs or understanding. When a "position" is taken in terms of past knowledge (regardless of the form this knowledge takes, i.e., beliefs, values, etc.) forces are created that prevent intelligent activity, thus limiting effectiveness of action.

There is a synergy that can emerge through the echoes of reverberation. This occurs when two or more individuals or groups between or among whom no forces exist reflect and consider the thoughts and feelings of the other, with an emergent quality representing the best of multiple streams of thought and feelings. This process is described as a *harmonic reverberation*. Now, I had to go back and reread that myself, and make sure I was saying what I intended to say. At any rate, the idea of creating harmonic reverberation can be likened to the idea of creating harmony while singing in a choir. It sounds like everything is blending together.

Good stories have a rhythm to them, which makes them more memorable. Stories have the ability to increase our memory and our descriptive capabilities, communicate common values and rule systems, and convey a high level of complex

meaning. A plot based on our pulse beat which unfolds in a regular pattern of “4”s might follow these patterns:

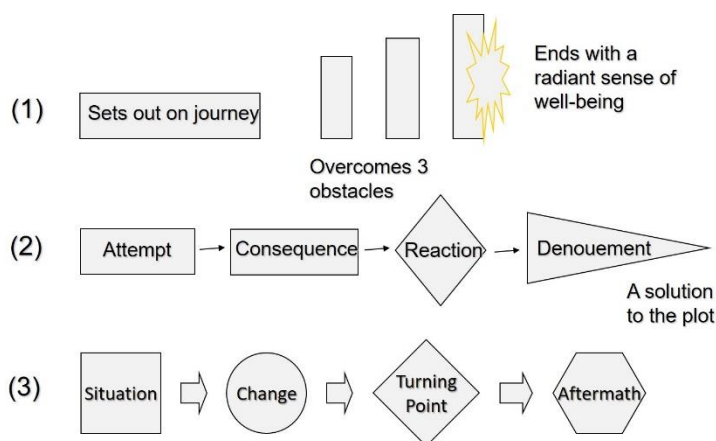


Figure 4. *Plots based on our pulse beat unfold in a regular pattern of “4”s.*

Let’s look at a couple of stories based on (3) above. **Hansel and Gretel** is a fairy tale of Germanic origin recorded by the Brothers Grimm. *Situation*: Hansel and Gretel, children of a poor woodcutter, are twice abandoned in the woods. The first time they drop pebbles and make it home. The second time they leave a trail of breadcrumbs. *Change*: The animals eat the trail of breadcrumbs. Lost, the children are enticed into a house. The witch locks Hansel in a cage, and makes Gretel her servant. *Turning Point*: Hansel deceives the witch with a thin

bone. Days pass by. The witch tells Gretel to climb into an oven to check it, but Gretel tricks the witch into climbing into the oven. *Aftermath*: Hansel is freed. A beautiful white dove helps them find home. Their stepmother has died and they are reunited to their father. They live happily ever after.

You can run through the same pattern sequence with **Beauty and the Beast**, a French fairy tale first published by Madame Gabrielle-Suzanne Barbot di Villeneuve, and **Babe the Blue Ox**, a classic American folktale retold by S.E. Schlosser.

Human memories themselves are story based. Memory recall is improved through temporal sequences of associative patterns such as stories and songs. Written, oral and visual storytelling are sequential narratives in a serial fashion. This idea of “serial” is interesting. Think about it. When you are telling a story, you are only remembering where you are—the whole story is not in your mind, but emerges in the telling. The same thing happens when you are singing a song, with lines coming as they are needed. These are examples of temporal sequences in memory. Neither are stories ever remembered exactly the same. Remember, we are verbs, not nouns, changing every instant of life. Stories are invariably the result of “authorial aspect,” changing every time they are remembered and retold.

While all experiences are not stories, stories are remembered because they are patterns and come

with many indices, multiple ways that the story is connected to memory. Our multi-talented Roger, who we introduced at the beginning of this idea, says that “The more indices, the greater the number of comparisons with prior experiences and hence the greater the learning.”³⁵ In order for memory to be effective, it must have not only the memories themselves (events, feelings, etc.), but memory traces (or labels) that attach to previously stored memories. These indices can be decisions, conclusions, places, attitudes, feelings, questions, and so forth.

A simple story can convey deep emotion and compassion, which will plant it in the memory. We will leave you with one example. In 1997, when there was a mid-air explosion of Silk Air MI 185 in Palembang, a Singapore Armed Forces helicopter was second to arrive at the site. Reflecting Singapore's commitment to humanitarian efforts, one participant in the rescue effort shared the following:

*What we saw was unexpected and is difficult to describe. Pieces of twisted metal and mangled passenger seats half submerged in the murky waters of the Musi river. Luggage and body parts floating with the current. A lifejacket and teddy bear entangled in tall grasses at the river's edge. Our teams dove into the grisly work of search and salvage, hoping beyond hope that the river-soaked teddy bear had a live owner. It didn't.*³⁶

[Your Thoughts]



Idea 6: The story of self is a pattern we create.

One of the main jobs of consciousness is to tie our life together into a coherent story, a concept of self.³⁷ Moving through various life experiences, the individual singles out and accentuates what is significant and connects these events to historic events to create a narrative unity, what could be described as a *fictionalized history*.

From the viewpoint of clinical psychology, “[J]ust as the novelist is selective with respect to character development, plot, etc., so the person who seeks the connective threads in the history of his life ... has singled out and accentuated the moments which he experiences as significant; others he has allowed to sink into forgetfulness. The result of this process is narrative unity as something akin to fictionalized history ... [The] narrative unity which results from this process is not discovered; it is the result of selective attention, emphasis, dim remembrance, and possibly even forgetting. The person makes choices about the importance of persons and events, decides on their meanings, though there may only be a minimal awareness of the resulting order as a partially created one. These choices and decisions – like those of a novelist – are not arbitrary; they are guided by the desire for the “good story.” The finished product is the

“fictionalized” history of a life, neither a lie nor “the truth,” but instead a work of imagination, evaluation and memory.”³⁸

The autobiographical self—the idea of who we are, the image we build up of ourselves and where we fit socially—is *built up over years of experience and constantly being remodeled*, a product of continuous learning. While much of this model is undoubtedly created by the unconscious, *it is the conscious mind that perceives the idea of self* and through active experimentation with objects and the external world is typically very aware of the perceived boundaries between the individual and the external world.

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***INSIGHT:* The autobiographical self is built up over years of experience and constantly being remodeled.**

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The story of you lives in the mind—the what, why and how of your life, a summary of the conclusions you have made about yourself and about life, *which often include the harshest judgments you have about yourself*. We ARE our own worst judges! Neale Donald Walsch, who writes international best sellers on spirituality and personal development, clarifies that this is not the “looking within” place where we search for answers to life. As he reminds

us, “Burrowing deep within that mess rarely produced clarity. In fact, I will say that it never does, because your story is not real. It exists only within your mind. It may seem very real to you, but it is not reality.”³⁹

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INSIGHT: The story of you—which exists only in your mind—is not real.

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It seems that evolution created the mind/brain to ensure survival through its meaning-making capacity, not just its memory. For example, we tend to remember things that have meaning, and the close ties between emotion, meaning, and remembering bring out aspects of the mind/brain/body that emphasize meaning.⁴⁰ The narrative language and connective tissue of stories communicates the nature and shape and behavior of complex adaptive phenomena. This is because stories capture the “essence of living things, which are quintessentially complex phenomena, with multiple variables, unpredictable phase changes, and all of the characteristics that the mathematics of complexity has only recently begun to describe.”⁴¹

Roger goes so far as to measure intelligence in terms of the number of stories an individual has to tell, and in terms of the size of an individual's indexing and retrieval schema that provide a

mechanism for determining *what* is relevant to current experiences, and the ability to *search and find* that which is relevant. This is consistent with the power of the mind as an associative patterner.

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***INSIGHT:* Because simple stories have the capacity to convey or highlight intricate patterns, they can be used to open minds and create new futures.**

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As we integrate the experiences, reflections, comprehensions, social engagements and actions of our story, we move to the position of observing the observer, floating above the drama of life and soaking in the richness of a lifetime of experiential learning. Is age the determinate of this aggregate and, accordingly, a dimension of intelligence? We think not. Short periods of time can be experientially rich, and the diversity of mind reflects the diversity of humanity. We can be sure, however, that every living creature is at some level experiencing, creating a story of their lives and, hopefully, learning and expanding.

In a newspaper article entitled “The Story of You” that appeared in the April 26, 2000, edition of *The Washington Post*, reporter Weeks cites Bernstein as saying “The future of literature lies on the screen” and Greco as saying “Books will become objects of

nostalgia."⁴² In our current reality we see the truth of this and even greater shifts coming down the way.

While print media is seeing a resurgence, nonetheless, today more and more authors write for electronic reading screens, and as the medium has changed from the oral tradition to paper to screen, the concept of story has changed.

This chapter began with a simple description of story as that which has a beginning, middle and end. With the increased use of hypertext on the Internet, even this simple definition is called into question. Modern day Internet storytellers are experimenting with short moving images and music, and only the occasional sentence here or there. For example, one Internet story website asks visitors to post their own stories or family photos, and invites readers/viewers to express their own innermost feelings, building those feelings right into the story being presented so others will respond to those and become part of the story, "changing and shaping and expanding and making more rich the story."⁴³ In short, we are creating patterns and the story of our lives together ... *the reader is becoming the storyteller, and the storyteller is becoming the reader.*

[Your Thoughts]



Idea 7: We can identify rhythms in the pattern of life.

Rhythm is all around and within us as we journey through life. This is beautifully demonstrated in the movie *August Rush*, as a young protégée flows with the swishing of breezes back and forth across a grain field; picks up the beats of car horns, street cleaners, foot traffic on the streets of New York; and turns this rhythmic cacophony of sound into an exquisite sonata.

We are immersed in the rhythmical fabric of our reality: the striking of the ocean waves against the shore, the incessant mumble of cicadas as they execute their nightly circadian rituals of sound, the chorus of birds welcoming the dawn, the soft and continuous beating of our hearts, and the rise and fall of our breath. We are rhythmical creatures, called into being through creation and evolution.

Rhythms are frequencies, the timing of events, a regular pattern. There is a correlation between external rhythms of the environment and the internal rhythms of life on Earth. For example, the 24-hour day and our cycle of sleeping and waking. Cycles refer to the ordering of those events. Thus, the 24-hour marks a rhythm of time, and the cycle of sleeping and waking occurs during that rhythm.

In his study of the work of Lao Tzu, Wing-tsit Chang, who translated the *Tao Te Ching* into English, believes that we are creating a dialogue with the Universe when we translate our personal experiences in the language of nature. For example, when launching a new project, we might see a resemblance to the initial need to overcome gravity. This reflection of physical laws in our lives “forms a direct and interdependent relationship with an elegant, impartial, and evolving Universe. When we align our lives to the rhythms of this Universe, we begin to understand its purpose and we begin to reflect its significance in our own lives.”⁴⁴ We now are in a position of greater discernment and discrimination, with the ability to recognize truth, facilitating intelligent activity and achieving “the fulfillment that comes from leaving what we touch with our minds a little more evolved than we found it.”⁴⁵

From the cosmos we have the energy of the sun, the spinning and orbiting earth, winds and weather, cycles of cold and the pull and phases of the moon. *Along with all of the species that have evolved on earth, we carry the signature of all of this energy.* Quite literally, “Each of us on Earth, each of the 10 million species that has evolved on and now swarms over its surface, carries the time signature of the planetary motion of our world indelibly stamped within it.” There is a physical vibrational basis of these signatures which are “the mechanisms that

generate our rhythmical environment, an environment that has made us rhythmical creatures."⁴⁶

We've been exploring rhythm without even defining it! *What is rhythm?* It comes from the Greek word *rhythmos*, which is derived from *rhein*, to flow. In a general sense, rhythm is the ordered alternation of contrasting elements. In music, it is the placement of sounds in time. The notion of rhythm also occurs in other arts, for example, poetry, painting, sculpture and architecture, as well as in nature (biological rhythms). The musical unit of time is called a beat; and the Italian word *tempo* is used to describe the fundamental beat of a music offering. However, the tempo of a musical work is not mathematical or metronomic, that is, it is not perfectly regular for any length of time. Along with sound fluctuations, modifications (tightening and slackening) of the rhythm provide character and emotional emphasis, much like the human voice when communicating thoughts and feelings. These modifications are called *tempo rubato*, which means "robbed time." Note that *even the human heart beat has a tempo rubato*. If it was mathematically regular, it would wear out by our mid-30's!

Rhythm could not exist outside of time. Rhythm is established by a pattern that *exists over time*, a series of repeated activities, events or occurrences happening regularly and evenly over

time, patterns. Activity is directly linked with energy coming from the environment, and these are often cyclic and rhythmical.

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***INSIGHT:* Rhythm is established by a pattern that exists over time, a series of repeated activities, events or occurrences happening regularly and evenly over time.**

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A key characteristic of rhythm is frequency, which is the number of complete, even cycles over a period of time (per second, minute, day, year, etc.). It is frequency that offers us patterns from the past that can be flipped to project patterns of the future. To shape that future, Jean Houston, an American author who is part of the human potential movement, urges each of us to get in touch with our rhythm, our essential self. As is her gift, she expresses this quite elegantly and from the heart:

In this Universe of ours, from the tiniest particles to the Galaxies of galaxies, everything is rhythm, pulse, beat, music. The music of the spheres is no mere metaphor, and its cadences are the stuff that supports life and all its becomings. Get in touch with the rhythm, which is your essence, your essential self, and the rest unfolds in the music that is meant to be. We are each of us melodies in the

*Divine symphony, and we can join the orchestration of the whole with the music of our minds.*⁴⁷

Final Thought




As can be seen, patterns and rhythms are interwoven into our experiences of life. While often occurring outside of our awareness or so common that we take them for granted, these patterns and their rhythms provide clues to our physical, mental, emotional and spiritual expansion. We invite you to join us in *expanding the music of our minds and co-creating the rhythms of your new reality.*





[Your Thoughts]

What does this mean to me?

So, patterns are pretty interesting. There's some stuff in here that you probably never thought of before. I know I learned a lot writing it!

And the bottom line was made pretty clear in that introduction. Still, for reflection, let's highlight a few points here ... and maybe you can add others that you think are important.

-  In the NOW we learn from the patterns of the past in order to better predict the future.
-  Our basic instinctual programming can learn, adapt AND evolve! So, some of your “habits” may come from a past relative, AND what you learn in your life CAN be passed on to your offspring! Or, from another viewpoint, there is a collective memory from which we draw from and to which we contribute.
-  There are human cognitive systems today that can model a virtual “you” and simulate thinking patterns such that individual strengths can be reinforced and weaknesses mitigated.

-  Making new connections, seeing new relationships, and bringing patterns into our conscious stream of thought stimulates the brain.
-  Patterns can provide information from which we can gain insights, understanding and meaning.
-  Just as we take the events of our lives and create a story of us, whether real or imaginary, we discover and invent the patterns which we seek, driven by the need for structure, connections and meaning. Our lives are literally a story created by us.
-  The patterns and rhythms interwoven into our experiences of life offer clues to our physical, mental, emotional and spiritual expansion.

Gosh, I think I get it! Do YOU get it?

This mind/brain of ours sure is wonderful.

Happy Pattern Exploring!

Happy Pattern Creating!

This volume of **Conscious Look Books** builds conversationally on the ideas presented in *The Profundity and Bifurcation of Change Part III: Learning in the Present*, largely presented in Chapter 17, “Connections as Patterns.” Co-authors of the original text include David Bennet, Arthur Shelley, Theresa Bullard and John Lewis. Full references are available in the original text, which is published by MQIPress, Frost, WV (2017), and available as an eBook on www.amazon.com

Endnotes

¹ See Gell-Mann, M. (1994). *The Quark and the Jaguar: Adventures in the Simple and the Complex*. NY: W.H. Freeman and Company.

² Quoted from Whitfield, P. and Ayensu, E.S. (1982). *Rhythms of Life*. London: Marshall, p. 9.

³ Quoted from Courteney, H. (2010). *Countdown to Coherence: A Spiritual Journey Toward a Scientific theory of Everything*. London: Watkins Publishing, p. 219.

⁴ See Mandelbrot, B. (1983). *The Fractal Geometry of Nature*. New York: W.H. Freeman.

⁵ Quoted from *The Urantia Book* (1955). Chicago: URANTIA Foundation, p. 1221.

⁶ Quoted from Gill, B. (1984). “The Manipulation of time” in *The Phenomenon of CHANGE*. New York: Rizzoli for Cooper-Hewitt Museum, the Smithsonian Institution’s National Museum of Design, p. xx.

⁷ Quoted from Sheldrake, R. (1989). *The Presence of the Past: Morphic Resonance and the Habits of Nature*. New York: Vintage Books, p. xvii.

⁸ Quoted from Usatynski, T.J. (2008). *Instinctual Intelligence: The Primal Wisdom of the Nervous System and the Evolution of Human Nature*. Flying Cedar Press. Flyingcedar@msn.com , Preface.

⁹ Quoted from *The Urantia Book* (1954), p. 909.

¹⁰ Sheldrake (1989), 120.

¹¹ See Devlin, K.J. and Lorden, G. (2007). *The Numbers Behind Numbers: Solving Crime with Mathematics*. New York: Penguin Group.

¹² See Hillis, W.D. (1987). *The Connection Machine*. Cambridge, MA: MIT Press.

¹³ See Anderson, J.A. and Allopenna, P. (2008). “A Brain-Like Computer for Cognitive Applications: The Ersatz Brain Project.” Retrieved August 2016 from www.cog.rown.edu/Research/ErsatzBrainGroup/index.html

¹⁴ Quoted from Minsky, M. (2006). *The Emotion Machine: Commonsense Thinking, Artificial Intelligence, and the Future of the Human Mind*. New York: Simon and Shuster, p. 6.

¹⁵ See Sandia National Laboratories (2007). “Cognitive Science and Technology Program becomes Sandia Initiative.” News release August 8.

¹⁶ See Forsythe, C. (2003). “Human-Machine Interface Possibilities: What if the Machine is a Human-Like Cognitive Entity?” Retrieved 02/08 from www.sandia.go/cog.systems/Index.html

¹⁷ See Kandel, E.R. (2006). *In Search of Memory: The Emergence of a New Science of Mind*. New York: W.W. Norton & Company.

¹⁸ See Senge, P. (1990). *The Fifth Discipline: The Art and Practice of a Learning Organization* (2nd ed.). New York: Doubleday Currency.

¹⁹ See Amen, D.G. (2005). *Making a Good Brain Great*. New York: Harmony Books.

²⁰ Lipton, B. and Bhaerman, S. (2009). *Spontaneous Evolution: Our Positive Future* (And a Way to Get There from Here). Carlsbad, CA: Hay House, p. 217.

²¹ Quoted from Simmonds, W.H.C. (1977) in Linstone, H.S. and Simmonds, W.H.C., *Futures Research: New Directions*. Reading, MA: Addison-Wesley Publishing Company, Inc., p. 26.

²² Ibid.

²³ See Bennet, A. and Bennet D. (2012). *Journey into the Myst*. Frost, WV: MQIPress.

²⁴ Wilber, K. (1993). *The Spectrum of Consciousness*. Wheaton, IL: Quest Books.

²⁵ Quoted from Volk, T. (1995). *Metapatterns Across Space, Time and Mind*. New York: Columbia University Press, p. 6.

²⁶ Ibid.

²⁷ Ibid., p. 12.

²⁸ Ibid.

²⁹ Hutchins, R.M. (Ed.) (1952). *Great Books of the Western World*, Vol. 7—"The Dialogues of Plato" in *Encyclopaedia Britannica*, Chicago.

³⁰ Quoted from Volk (1995), p. 34.

³¹ Quoted from Wainwright, S.A. (1988). *Axis and Circumference: the Cylindrical Shape of Plants and Animals*. Cambridge: Harvard University Press, p. 17.

³² Quoted from Schank, R.E. (1990). *Tell Me a Story: Narrative and Intelligence*. Evanston, IL: Northwestern University Press, p. 16.

³³ Quoted from Oakeshott, M. (1933). *Experience and Its Modes*. Cambridge, UK: Cambridge University Press, p. 9.

³⁴ See Merriam, S., Caffarella, A.S. and Baumgartner, L.M. (2007). *Learning in Adulthood: A Comprehensive Guide*. San Francisco, CA: Jossey-Bass and Sons, Inc.

³⁵ Quoted from Schank, 1998, p. 11.

³⁶ Bennet, A., Bennet, D. and Lee, S.L. (2009). "Exploring the Military Contribution to KBD through Leadership and Values" in *Journal of Knowledge Management*, Vol. 14 No. 2, p. 326.

³⁷ LeDoux, J. (1996). *The Emotional Brain: The Mysterious Underpinnings of Emotional Life*. New York: Touchstone.

³⁸ Quoted from Long, T.A. (1986). "Narrative Unity and Clinical Judgment" in *Theoretical Medicine* 7, pp. 75-92.

³⁹ Quoted from Walsh, N.D. (2009). *When Everything Changes Change Everything: In a time of Turmoil, a Pathway to Peace*. Ashland, OR: EmNin Books, p. 36.

⁴⁰ Sousa, D.A. (2006). *How the Brain Learns*. Thousand Oaks, CA: Corwin Press.

⁴¹ Denning, S. (2001). *The Springboard: How Storytelling Ignites Action in Knowledge-Era Organizations*. Boston: Butterworth Heinemann, p. 113.

⁴² Weeks, L. (2000). “The Story of You” in *The Washington Post*. Wednesday, April 26, p. C1.

⁴³ Ibid., p. C8-9.

⁴⁴ Quoted from Wing, R.L. (Trans) (1986). *The Tao of Power: Lao Tzu’s Classic Guide to Leadership, Influence, and Excellence*. New York: Doubleday, p. 23

⁴⁵ Ibid.

⁴⁶ Whitfield and Ayensu (1982), p. 15.

⁴⁷ Houston, J. (2000). *Jump Time: Shaping Your Future in a World of Radical Change*. New York: Penguin Putnam, Inc.

The Volumes in ***Possibilities that are YOU!***

All Things in Balance

The Art of Thought Adjusting

Associative Patterning and Attracting

Beyond Action

The Bifurcation

Connections as Patterns

Conscious Compassion

The Creative Leap

The Emerging Self

The Emoting Guidance System

Engaging Forces

The ERC's of Intuition

Grounding

The Humanness of Humility

Intention and Attention

Knowing

Living Virtues for Today

ME as Co-Creator

Seeking Wisdom

Staying on the Path

Transcendent Beauty

Truth in Context

To see the direction we are heading, it's a good idea to first understand where we have come from, where we are, and how we got from there to here. When we are able to identify the repetition of patterns, we are better able to connect potential indirect cause-and-effect relationships in the future. *In short, in the NOW we learn from the patterns of the past in order to better predict the future.*



In this photograph entitled "The Gift of Light", given no external influence and an approximate 100 X 100 pixel square, the probability of the pink shape appearing in the photograph is 10^{-94} .