Ken Wilber in his book, *A Brief Theory of Everything*, has a model that he also calls the quadrant model. In it he labels four the stages of consciousness. The first stage is the instinctual-spiritual; the second stage is the magical-religious; the third is the rational-interpersonal-selfish; egocentric and the fourth is the trans-rational, transpersonal trans ego stage. Wilber puts each of these stages in a square, forming a quadrant.   He labels the first square the MIND. The second square he labels, CULTURE. The third square, which is always the most physical and solid, he labels, BODY. The fourth square he labels the SOCIETY. The four correspond to the quadrants of the quadrant model. This theory helped to spark the theory of the quadrant model.

Quadrant 1: Sensation perceptions, response and awareness (MIND); Quadrant 2: Belief, faith, behavior, belonging (CULTURE); Quadrant 3: Thinking, Emotion, Doing, Dreaming (BODY); Quadrant 4: Contemplation passion flowing knowing (SOCIAL/society)

* Quadrant 1: Spiritual- instinctive consciousness. Sensation perception, response and awareness (MIND). The first square is mental. Sensation, perception, response, and awareness compose the first quadrant. These are all mental. The First Squares of Quadrants also have the quality of being mental. For instance, sensing, believing, thinking, and contemplating are the most mental. These are the first squares of the quadrants. The first quadrant is Wilbur's instinctual-spiritual stage of consciousness. Sensation is the mental of the mental. Sensations are purely mental, and are purely constructions of the mind. The first square can be viewed as somewhat gullible--sensations and perceptions are not to be completely trusted, for they do not always correspond with the true nature of reality. The connotation of sensing is that it provides only limited information; when sensing something it is not understood completely ("I cannot quite put my finger on it!").   The grasp is not solid. Similarly, in perceiving something it is only perceived to be so, which allows for some degree of uncertainty. It is not completely grasped conceptually. It is only perceived . And it is the same with being aware of something; a degree of uncertainty remains.

The first square is conservative and caring. The connotation of the words sensitive, perceptive, responsible, and aware is of being able to feel what others are

feeling, and able to react accordingly. Sensitive people are often viewed as fragile easily influenced, and very caring. The perceptive individual is much like the sensitive one. Response is the third square, and connotes doing. Responsible people react according to what is most appropriate for them to do. The responsible person can be counted on. Responsible, sensitive and perceptive people are all conservative. Aware has the root word wary in it, which means cautious. People who are aware keep their nose on what's happening around them. They can have diabetes awareness, cancer awareness, global warming awareness.   Awareness leads to concern with the environment. Awareness is also concerned with survival. The first quadrant is concerned with survival. Being sensitive and perceptive is important in survival.

Also there is a spiritual (implying beyond the normal) connotation to being sensitive, perceptive, and aware. The first quadrant has a spiritual quality to it. Spiritual people often claim to sense, perceive, or be aware of things that others miss. They may describe sensing auras, or perceiving other dimensions of reality that many claim not to perceive. This is evidence of a spiritual element to the first square. The first square always expresses characteristics that may appear weird, in the sense of being not normal.

*Quadrant 2: Group oriented/ Magical-religious consciousness. Belief, Faith, Behavior, Belonging (Culture).   The second square is characteristically concerned with homeostasis, a concern with the structure and maintenance of order. Quadrant 2 in the quadrant model pattern contains belief, faith, behavior, and belonging, which corresponds to Wilbur's second stage of consciousness, namely magical-religious consciousness. The second squares of quadrants also have this quality of being concerned with relationships and homeostasis. These are perception, faith, emotion, and passion. The nature of the second square and second quadrant is about order, structure, maintenance, and protection.   Belief and faith glue communities together.   Group behavior, including rituals and habits provide community glue.

Belonging is often determined by the physical and ethnicity. Genetically determined physical traits influence intelligence. Belonging to a group will often determine the possessions (or belongings) owned. Acceptance in a country club is based on financial status, which is influenced by the physical genes.   More attractive and intelligent people tend to make more money. Some would argue that traits like attraction and intelligence are cultural constructions. Belonging to the

Jewish religion is determined by genetics.; the children of a Jewish mother automatically belong to the religion. Genetic evidence shows that Jews throughout the world are genetically related. Beliefs, faith, and behavior help to maintain the Jewish people as in inside group. Without the right genetics, regardless of beliefs, behavior, and faith, belonging is not possible.

Belonging is the fourth square of the second quadrant. Therefore, it's qualities point to the quality of the third quadrant. Belonging points to the thinking, emotion, doing, and dreaming quadrant which is related with the physical. Belonging is tied to the physical. Also one's genetics not only affect what group he belongs to, but how he thinks. For instance, if you are asian this may affect how you view the world because you view yourself through that prism of being asian. But also, it can be argued that genes affect qualities like brain structure and chemistry, and these physical qualities affect thinking, emotion, doing and dreaming. So belonging points to the third quadrant.

The second square is conservative and respectful of authority. The second square is group-oriented; if some group members believe and have faith in something, the remaining are more likely to do the same. Belief is the first square of the second quadrant; as the first square, it is mental. The first square is the mind square. Belief is the mind square of the culture quadrant. While belief has a connotation of being more mental, it is often associated with being based on emotion. The culture square is more feeling oriented, but belief is more mental than faith, because faith is the second square of the second quadrant. So it is the culture square of the quadrant. Faith is the most feeling oriented of all of the squares. Beliefs are supported more often by empirical evidence. The dictionary definition of belief emphasizes trust in something guided strongly by empirical evidence. The empirical data from awareness of sensations and perceptions points to belief -- "seeing is believing". Perceptions and awareness enforce belief. The fourth square of the Quadrant 1, which is awareness, yields what comes after it, which is belief. But belief is more mental, while faith is more feeling oriented. Belief is the first square of the second quadrant so it should be more mental. The dictionary suggests that faith is something that is trusted, not due to empirical evidence, but to emotion and desire.

Faith is the second square of the Quadrant 2, which is concerned with structure, order, and homeostasis. Faith is more "gut" based, while belief is more mental. Faith facilitates belonging. Faith has a relational connotation; people are

faithful to their wives, or their bosses, or their employees. The second square is always highly concerned with relationships and feelings while the first square is more mental.

Perception is the second square of the Quadrant 1; the second square is culture. Perceptions are the way that one interprets sense data; perceptions are very highly shaped by context and culture. For instance, there is a tribe that has boys put their hands in fire ant nests, and have the ants bite their hands as a coming of age ritual. This is important for the boy because it signifies becoming a man. He would probably perceive the sensations of the ants biting him differently than would a boy not belonging to the tribe. The pain is lessened for the boy doing the ritual, because of the group-enforced honor involved. For any other boy not belonging to the group there would be fear or embarrassment, and no reward, except perhaps some sympathy.   Perception, therefore, is very cultural.

The second square is also very concerned with morality, which is the foundation of order. Moral codes create order and structure in cultures by defining what is right and wrong, good and bad, proper and improper. Behavior is the third square of the second quadrant.   Good behavior is in accord with the morality system of the culture.   Bad behavior deviates from the group's moral system. The second square is very "white or black", good or bad, insider or outsider oriented.

The second square is, therefore, dualistic; right/wrong, black/white, good/ bad, proper/improper. It is very concerned with plans and scripts, and sticking to them without deviating. It is concerned with a surface reality, with less substance or depth.

Emotion is the second square of Quadrant 3.   Emotions can be used to manipulate relationships. The second square is always associated with relationships. Emotion is cultural. The second square is culture. An orthodox Jew may be sad if a fellow Jew marries outside the tribe. A reformist liberal Jew in America, however, may be more inclined to be happy, and even celebrate that marriage. The emotion of sadness can be used as a signal to others to express disapproval.   Smiling can be a signal of approval. Emotions can powerfully regulate the cultural environment.

Quadrant 3: Rational/interpersonal-egoistic consciousness. Thinking, Emotion, Doing, Dreaming. The third quadrant/ square is physical and spontaneous and often destructive, therefore very different from the first and

second squares, which are very planned and conservative. The third square is associated with action. The third squares of the quadrants are response, behavior, doing, and flowing.   Responses are often determined by stimuli and existing survival mechanisms within the responder. Behaviors are more determined by orders of authority. Doing is pure action. Doing is the third square of the third quadrant, so it is the most related to action of all of the squares.   The third quadrant is about breaking the rules, whereas the first and second are about following rules and regulations. It can be seen as bad or sinful for breaking free from rules and regulations. An example may be an orthodox Jew getting a tattoo. The Torah has prohibitions against getting tattoos according to orthodox rabbis. Getting a tattoo would be breaking the commandments of God.

The third quadrant is less controlling. Thinking, which is the first square of the third quadrant, is constantly occurring, generating thoughts difficult to control. If told not to think of pink elephants, thinking of pink elephants will occur. It is also somewhat difficult to control emotions. Thought is the first square of the third quadrant. Emotion is the second square of the third quadrant. Being in the third quadrant, they are more difficult to control.

The third square and third quadrant is also the most physical and solid. Thinking is the first square of the third quadrant; thinking is the first square and not completely physical, although because it is within the third quadrant it has a physical quality. Scientists question if thinking is purely physical. There are proposals that thinking occurs outside of the brain. Since thinking is the first square it follows that it is not entirely physical. Some scientists advocate that thinking is very physical, proposing that thinking occurs via the physical processes of the firing of action potentials in the brain. These firings are electrical and chemical. Being electrical there is an ethereal quality to them, but they are physical phenomena. As a part of the third quadrant, thinking should have a sort of physical quality to it.

Thinking and learning elicit the formation of new connections between neurons in the brain; thinking is neuronal.   Neurons are fundamental functional units within the brain, which is a physical occurrence.   The third quadrant is physical. Learning follows thinking; connections are physical phenomena occurring between neurons, causing the brain to change physically. The third square and third quadrant are associated with the physical. The third square always has a connotation of being the most solid.   Synapses produced in the brain are

empty spaces between neurons in which chemicals are transmitted, signaling and producing action potentials. Thoughts can change the nature of synapses. When an action potential fires, neurotransmitters, which are chemicals, are released into the synapses. These neurotransmitters signal a new neuron to fire. Physical processes are in charge of neuronal firings. Neuronal firings correlate with thoughts.

Emoting is also very physical.   Emotions are influenced by thoughts. Thinking happy thoughts influences emotions by triggering the neurotransmitter dopamine to be released in the brain. This neurotransmitter generates happy emotions.   Scientists claim the neurotransmitters in the brain promote happiness, and propose that all emotions are tied to the release of specific neurotransmitters in the brain. Neurotransmitters are physical chemicals.

In addition emotions, which are the second square of the third quadrant, are hormonal, which is a very physical phenomena. When happy,

humans release hormones in the body. Prescription drugs also can influence the release of hormones and neurotransmitters in the body in order to generate desired emotions.   Ingesting food, which is an interplay of chemicals, serves as a kind of drug.   The chemicals in food affect the release of hormones in the body and neurotransmitters in the brain, causing the release of emotions. A physical threat to the ego/body may trigger the emotion of fear, with a release of a hormone called adrenaline. This hormone creates a fight or flight response.   Emotion is the second square of the third quadrant. Because it is in the third quadrant, it is the most physical of the second squares.   Emotion has a quality more physical than perception, faith, and passion, which are the second squares of other quadrants.

The fact that the third square and third quadrants are the most physical, and that the first square of the third quadrant is thinking, is represented in the idea proposed by physicists that thoughts manifest reality, and influence the physical world. An example of this is an experiment done with water in which the scientist had a person think thoughts that made him happy.   This occurred in the presence of water molecules. When the water molecules were studied, the water molecules expressed patterns that were harmonious. The water molecules were altered by the thoughts.   Then the man was told to think thoughts that made him angry. The water molecules then expressed patterns that were chaotic.   The thoughts affected physical environment. The third quadrant is related to the physical.

Some scientists go so far as to say that thoughts create the physical environment. This is a notion in quantum mechanics. (See also the chapter above

on sensation and perception.) There is an experiment in which electrons are fired into a slit, revealing that the electron deflection is affected by whether or not the experiment is viewed. This is an example of why sensations and perceptions cannot be trusted completely; thinking affects the electrons. The presence of the observer affects the electron. Some physicists go so far as to say that without an observer there is no electron. This quantum mechanical idea suggests that the individual-ego-body creates reality. This quantum mechanical principal causes physicists to question if reality exists apart from the observer. The third quadrant is essential to the physical, which is evidenced by the idea that it produces physical reality.

       * Quadrant 4 contemplation passion flowing knowing (Society). Dreaming is the fourth square of the third quadrant. Dreams tend to be very difficult to control. As a part of the third quadrant dreams tend to be wild. The third quadrant is wild. During dreaming thinking, emoting, and doing occur. The quality of thought is different when dreaming because the part of the frontal lobe responsible for questioning is turned off, causing the dreamer not to question. Dreaming of a giant monster does not lead to questioning whether or not it is real.

       The dream affects all preceding quadrants, including beliefs, faith, perceptions, etc. There is a saying,"Our reach should exceed our grasp, or what's a heaven for". Dreaming allows the dreamers to reach for something beyond their reach. For instance, some people dream to go to the moon. People often dream about the impossible. Dreams are often very selfish. Thoughts, emotions, doing, and dreaming are very shaped by the ego. The third quadrant is the ego quadrant. The ego wants to be inflated and perpetuated. Dreams can be about making a lot of money. This also inflates and perpetuates the ego. Women dream about having a successful husband and a nice family. Many people dream about killing their enemies, or getting revenge on a straying lover. Dreams are often very selfish. The third quadrant is selfish.

       Reportedly most dreams are about things that are perceived as negative, often of being in danger or facing situations to be avoided in real life. Dreaming is in the third quadrant, and the third quadrant is negative. The third square is always bad or destructive.

It is the doing and action square, which is not as conservative as the first two squares. But dreaming is also the fourth square of the third quadrant. The fourth

square and quadrants have a transcendent quality to them. While dreams are very much tied into physical reality, they also have a transcendent quality to them that suggest a sort of breaking out of the physical world.

Scientists think that thoughts, emotions, doing, and dreaming really influence the physical nature of reality. Doing clearly changes the physical nature of reality; people build pyramids, throw food into the garbage or on the street, people go to war, all of which alters physical nature. But there is evidence that dreams can also affect the physical. This makes sense, because dreams are in the third quadrant, and the third quadrant is the most physical, and therefore it is logical that physical reality is affected by thoughts, emotions, what you do, and your dreams.

The idea that dreams can affect physical reality is presented in the Bible, and is seen in cultures throughout the world. In the Bible dreams are considered to be messages from God foretelling and influencing the future. The dream can influence the future by inspiring the dreamer to fulfill it, sometimes consciously, sometimes unconsciously. Either way, the fact that the dreamer had the dream has an effect in the playing out of what the dreamer does to fulfill it or not fulfill it in waking life.

There are many reports of dreams predicting future events, including dreams that changed lives. One example is of a muslim man who was considering whether or not to become a Christian. During sleep he had a dream in which he saw a cross. Interpreting this as telling him to become Christian, he proceeded to do so.

One theory is that dreaming provides practice for waking life. After dreaming people find that they are better at doing the activities performed in their dreaming. Freud believed that dreams are the workings of the subconscious mind. He believed that content in dreams matched content in mythologies. He thought that mythologies of the world grew out of dreams, and are allegorical, essentially of sexual matters. He used the Oedipal myth as the foundation for his idea that the Oedipal complex is the structure of the subconscious of the human psyche. He noticed that cultures throughout the world had myths involving the killing of the father and having sex with the mother. He believed that this theme permeates dreams, and that the content of dreams was metaphorical of this complex, and this complex permeated mythology.

Carl Jung was a student protégé of Freud, but moved away from Freudian ideas with his theory that there are deeper meanings to dreams. He advocated that people could gain better understandings of themselves from dreams, and that their content is a metaphor of archetypal psychological conflicts. He thought that dreams could lead people to deeper understanding of life, the subconscious, and reality itself.

Jung proposed that the subconscious mind, which operates in dream states, actually manifests physical reality. Other scientists claim that dreams borrow from reality. It is proposed that people dream about things that they experience in reality, although dreams create varieties of these experiences. But Jung went so far as to say that the subconscious mind during dreaming produces reality. This is consistent with characteristics of the third quadrant, which is the physical quadrant, and a part of it being physical is that it manifests physical reality. Therefore, Jung's idea that dream consciousness manifests physical reality is consistent with the quadrant model of reality.

Jung reported that people have many experiences with UFOs. He actually believed that UFOs might be real. He suggested that there may be extraterrestrial vehicles flying in the sky that people sometimes observe. But he also believed that they might be projections of the subconscious mind being transposed into reality. He thought that psychological conflicts might not be seen only in dreams, but may manifest in the physical world as

projections of subconscious struggles. Just as dreams are manifestations of subconscious struggles, Jung thought reality might be a manifestation of those struggles, therefore aliens may be observed by people and manifested in reality as a result of a conflict within the human collective subconscious that is producing reality.

This idea seems utterly bizarre. But physicists studying quantum mechanics point out that the observer does manifest reality, going so far as to claim that without an observer there is no reality. The implication is that Jung's notion may not be so far fetched after all, which supports the claim that the third quadrant is the most physical. Dreams seem to transcend the physical--they are the fourth square of the third quadrant--but Jung is saying that dreams are essential in the production of the physical world. The subconscious mind produces dreams according to Jung, and the subconscious mind also produces reality.

Evolutionary psychologists claim that reality produces the subconscious mind, proposing that if it is true that there are archetypes in dreams, and dreams of people throughout the world shape mythologies, and these mythologies have a common structure, then this subconscious mind revealed in dreams is a product of evolutionary forces. They would perhaps say that all humans have a common ancestry, and all humans had similar environmental conditions with which they had to struggle in order to survive. Therefore all subconscious minds of humans are similar, having evolved in a similar manner. But again, quantum physicists m disagree with this biological interpretation, proposing that humans create the physical world in observing it. The question is, "Which came first, reality, or the subconscious mind? Or are they simultaneous?"

There are other scientists who say that dreams are just random and have no meaning, suggesting that humans are just meaning-making creatures in search of meaning where there is none in order to find comfort in the grips of an unfathomable and unmanageable reality.

Dreaming is the fourth square of the third quadrant. When dreaming, the physical body is paralyzed, providing a sense of being disconnected from the physical body. Dreaming allows for the existence of the ego and the body in a projected world. But that body in the dream is imaginary, a figment of the imagination. The dreamer is also producing an environment in imagination , which may include perceiving trees, rocks, as well as a mother. But none of them are real. It is all an illusion.

Some contemporary physicists are now claiming that illusion may not be only the nature of dream reality; this may be the nature of reality itself. It may be that everything is like an illusory dream. Dreaming encompasses everything before it, including sensation, perception, belief, behavior, thinking and doing, all of which affect dreaming. And dreaming affects all of them. But life is kind of like a dream; people have bodies, or seem to have bodies. If as Physicists claim that the observer manifests physical reality, that manifesting includes the observer's body. The body may not be real; it can be perceived and sensed. The body produces hormones that seem to produce emotions. Behaving and thinking occurs, activating the body and the brain. Quantum physicists are exposing a very bizarre reality in which the participant produces reality when observing it, while reality produces the participant.

Most of reality is empty space containing very little, if any, solid matter. In a manner of speaking, like in a dream, the body, the environment, thoughts,

perceptions, beliefs, doings, all might be a grand illusion. All are *Re-presentations of the Quadrant Model of Reality—the Real and intangible Form of Existence presented in discernible form.*

Dreaming produces a kind of transcendence of the ego.When dreaming there is a transcendence of waking normal physical reality and its laws. The fourth square always has a transcendent quality. Awareness, belonging, and knowing are the fourth squares of the other quadrants.

Quadrant 4- Contemplation, passion, flowing and knowing, represent a sort of transcendence of the body and normal physical reality. The fourth square is always transcendent. Dreaming points to contemplation. When contemplating , the same brain waves are present as when you dream. The fourth square always indicates what comes after it. Dreaming, the fourth square of the third quadrant, points to contemplation, the first square of the fourth quadrant.

When flowing, things are done automatically; without effort. Flowing is the byproduct of being completely amerced in something. The same brain waves that are present in dreaming are noticed in flow states. Also there is a different subjective experience of time and space during dreaming, which is also present during contemplating and flowing states. The fourth square points to the fifth. Flowing is the byproduct of passion. Passion is zeal toward something and love and complete and total immersion.

Knowledge is the fourth square of the fourth quadrant so it is the most transcendent of all of the squares. Knowledge in the bible is synonymous with sex. When somebody knows somebody in the bible it means that he has had sex with that person. Knowing is a deep intimate connection with something. Sex is a deep intimate connection with another person. In the act of sex there is a sort of death. For instance, when a woman orgasms she sort of passes out, and when a man orgasms there is a feeling of bliss and his thinking sort of ceases, kind of like a near death experience. There can be a sort of transcendence of the body/ego in the act of sex. A characteristic of the fourth quadrant is the transcendence of the ego/body. Knowing is the fourth square of the fourth quadrant.

Knowledge is sort of synonymous with sex and sex is related to death. There is a common philosophical idea that to know something one must sort of die. Shamans in many cultures get into trances where they describe a sort of death and describe attaining knowledge. The fourth quadrant is death of the ego. In order to know, the ego must die. The attainment of truth corresponds to the transcendence of the ego, because the ego is responsible for rational identity thinking which is ripe with delusion.

Alien encounters coincide with flow states. An alien encounter represents a sort of transcendence it the rational ego plane. During alien encounters there are sexual surgeries and mutilations of bodies, symbolizing a sort of death. People describe that knowledge is gained from aliens. It is reminiscent of the shamanic death and resurrection in which he attains knowledge. Alien astronaut hypothesizers theorize that the gods of ancient mythologies who supplied knowledge to human beings were aliens. So an alien encounter kind of represents a union with God, or the transcendent. The 17th square is being. Extraterrestrial "beings" are associated with knowledge. The 16th square always points to the seventeenth. The sixteenth square, which is knowledge, is connected to the seventeenth square, which is being.

War is sort of a sublimation of sex in which the spears and guns and weapons are penises and there is a lot of death in war and the experience of war it has been said gives people extraordinary transcendent experiences. People describe flow experiences during war. The fourth quadrant, the knowledge quadrant, is associated with death. Sports is synonymous with sex, in hat the balls can represent penises and the goals or hoops vaginas. You score in sports, and it is said when you have sex with a woman you scored. Flow experiences are associated with sports. Flow experiences, in which there is a different subjective experience of time and space, are linked to sex, sports, and death. Near death experiences are said to correspond to flow like states in which there is an unusual experience of time and space. Flowing is the fifteenth square and knowledge is the sixteenth square so knowledge and flowing are very interlinked. Flow states, which involve different subjective experiences of space and time, are

described by people who had near death experiences and as I discussed death and knowledge correlate, in that knowledge can only be attained with death of the ego. The fourth quadrant is death of the ego body/identity.

Knowledge, the 16th square, points to being, the 17th square. The only knowledge one can attain is of being. Being is the source of knowledge. The Truth is knoweldge what is, and knowledge is correct, justified belief of what is true. In the case of ancient alien hypothesizers, beings, or aliens, bestow knowledge. According to Plato, the World of Forms, which is the True epitome of being, is where knowledge is derived. Plato states that all knowledge is just recalled by humans, and the way that Truth is recalled, he proposes, is by the soul. Plato states that souls come from the realm of the world of the Forms, and therefore souls have knowledge of the Truth, and any knowledge attained in the physical earthly world is just knowledge recalled from the World of the Forms. According to shamans the spiritual realm, which they describe as the manifestation of true being, is where knowledge is attained. These shamans often get into trances to enter this realm. In near death experiences people also describe attaining great knowledge, and they describe experiencing the source, or in other words being. In order to experience being, which is synonymous with experiencing the Truth, a sort of transcendence of the body/ego must coincide. Drugs are sometimes used to facilitate this physical transcendence.

In the Bible Adam and Eve eat from the fruit of the tree of knowledge. Rabbis say that this fruit was a grape and thus Adam and Eve drank wine. Wine is a drug. Rabbis say that Adam and Eve had sex, and that was the original sin. Wine reduces inhibitions and can lead to sex. So in this story is seen a relationship between sex and knowledge, or the knowledge of good and evil. After this God tells Adam and Eve that they will surely die. So there is a connection between sex, knowledge, and death. Also God says Adam and Eve may "become like Us". After attaining the knowledge from the fruit. Knowledge points to being. Being is related to God. Thus, from gaining the knowledge, God says that Adam and Eve may become like "Us". Another example in the Bible of sex and death being related

is when Samson dies. Samson is grinding grain. Rabbis say that the word grinding is synonymous with the word sex. Thus Rabbis say that Samson was having sex. As he was grinding the grain his hair grows and he regains his strength and he then tears down pillars, making the roof fall on him and the Philistines. So sex is related with his death. There are numerous examples and parallels in the bible illustrating this principle. The symbol of the cross itself is said to be originally a symbol of sexual intercourse. In Egypt, the ankh symbol was like the cross and was a symbol of the penis going into the vagina. It is hypothesized that the symbol of the cross derives from the ankh.

Knowledge is the 16th square, so it encompasses everything before it. It is true that knowledge derives from sensations, perceptions, what you do, emotions, beliefs, behaviors, and so on and so forth. The previous squares bring about knowledge.

Knowledge is also power. Knowledge is related to sex. There is nothing more powerful than sex. I described that the cross itself, the form of existence itself, can be seen as a symbol of a sexual union. Also death and violence are very powerful along with sex. Most popular movies and things on the internet are full of sex and violence. The bible itself is full of sex and violence. Sex and violence are related to transcendence of the body. Also drugs are very powerful. Drug trade it is said rules the world. Drugs are also associated with transcendence of the body/ego (although artificially). Sports, which is a sublimation of drugs and sex, is also extremely popular and powerful. Drugs it can be seen is related to sex through the language used while describing drugs. I stated that you say you scored with a woman when you had sex with her. You also say I scored blow when you get drugs. You similarly say I scored a basket when playing sports Sports is also related to flow experiences, which are related to transcendence of the body/ego. It is described when people take drugs that they can experience flow like experiences and gain knowledge and insight.

To know something you have to be intimately connected with it. To be intimately connected with something you must transcend your separate body/ego. In the bible knowing somebody is synonymous

with having sex with that person. Socrates described that the reason men and women want sex is because they want to unite as one and break out of their separate bodies/egos. In other words, the desire for sex is a desire to create oneness or no thingness. Similarly it can be argued that people desire to kill their enemies in order to create a sort of oneness. By destroying your enemy, you destroy the separation, and thus you create oneness. The penetration of the two perpendicular lines in the cross represents a merging of opposites into oneness. Hegel said that history is characterized by the conflict of opposing ideologies, which he calls a dialectic, and their eventual merging into one. The star of David it is also said represents the same thing. It is said to represent a penis going into a vagina. Some physicists argue that a three d representation of the star of david, called a double tetrahedron, or merkaba, is a fundamental shape underlying all existence.

Metaphysicists can argue that truly there is no thing, and that there is only oneness, especially with the advent of the quadrant model theory. The cross represents- oneness, or no thingness. The cross is two opposite, or perpendicular things coming together and cancelling each other out. There truly is no thing. It can be argued, that there is one thing, the quadrant model pattern, but the pattern is not really a thing, for the quadrant, or cross itself represents no thingness. Everything is an emergence or reitteration of the same pattern- the quadrant model pattern. This is the truth. The Truth is that there is no thing. If you know the Truth, therefore, you know that you do not exist. Everything is one. So to know the Truth you must transcend your ego/body. Knowing is tied to transcending the ego/body or identity.

The fourth quadrant, which is the knowing quadrant, is related to ego transcendence. When you flow you are not preoccupied with your image. When you flow you have transcended your ego and are a part of something larger than yourself, and connected to a higher harmony. As a result, ironically, what you do is more pure and perfect than if you tried to produce the results. When you flow you are no longer in insider-outsider, superior/inferior consciousness, but are focused on something greater than you. When you flow you are not

concerned with how you look, what your next step will be, but you are in the moment, or in the now. You are no longer focused on your identity and image, and the ego is dissolved. When you flow you are connected with God. Similarly when you contemplate you are focusing on the oneness of things and things as they are and not how you want them to be, and to do this your identity/ego which contaminates your consciousness must dissolve. In the word know is now. When you flow you are in the now. The dual connotation of knowing is no thing. When you know you recognize there is no thing, but everything is one.

A lot of times people who claim to be gay focus on this identity and flaunt it and allow it to boost their egos and make them feel special or superior. A person who considers himself a straight person may also use this identity to make himself feel superior or like an insider and he may call a gay person names to boost his ego. Both people are caught up in ego oriented thinking and are trapped in a virtual reality drama in which they are concerned with how they look and their identities. In being the victim, the gay person may actually get a sense of superiority over the straight person and it may cement further his constructed ego and make him feel more firmly that he knows who he is and he will fight for it. But there is no such thing as a gay person or straight person. These people are caught up in an ego drama and are trapped in inferior superior, good guy bad guy, insider outsider, predator prey, dualistic consciousness. An individual may be attracted to men and be a man, but that doesn't make him a gay person. Things like black and white, gay and straight, man and woman are social constructions. These ego-identities are not what people are. When you are not in transpersonal consciousness you are preoccupied with your ego identity and your image. When you are flowing your ego is dissolved and you are a part of something larger than you. All sin derives from ego preoccupations. To have eternal life is to be in the now, which is eternal, because all that there is is the now.

There is one thing in existence. That is the cross/ the pattern that emerges from the cross. But the cross itself represents no thing. So the one thing

that exists represents no thing. So there is one thing that exists but the one thing that exists is no thing. It blows your mind. Reality is a paradox.

The symbol of the cross is the symbol of two opposites coming together. When two opposites come together they cancel each other out. They neutralize each other. The cross is the symbol of a penis going through a vagina, although it can also be a symbol of a spear penetrating an enemy. The cross is the symbol of existence itself.

Now let me explain a revolutionary theory that I discovered. I call it the Oedipal theory of Genesis. It has been postulated by many psychologists that babies have a sort of oceanic consciousness. In this consciousness the baby cannot distinguish itself from its mother. The baby also feels one with everything and cannot differentiate. This is representative of a kind of bliss in the womb where the baby is kind of at one with the Universe and superbly protected. But then the baby is kicked out of the womb where differentiation occurs and the baby no longer has an oceanic awareness, which is seen by psychologists as a birth trauma. I say that the story of genesis is an allegory of this trauma. Adam and Eve are in the Garden of Eden. The Garden of Eden represents the womb. They are in bliss and feel at one with everything. Then they are kicked out of the womb. They are kicked out of the garden by eating from the tree of knowledge and disobeying God's command. The tree of knowledge represents the ego. At first they were in a flow state in the garden. Now they are corrupted by fruit they gathered from the tree of knowledge- things they memorized plans thoughts, and they are kicked out of bliss and the flow. The whole Bible is about the descendants of Adam and Eve trying to return to the Garden. But God put up flaming Cherubim in the gardenn blocking their way. The Cherubim have swords.

I say that these swords are swords of castration. They are designed to cut off Adam's penis. This is where the Oedipal theory comes in. Adam and eve were kicked out of the Garden of Eden for being bad and disobeying God the Father. The Garden of Eden represents the womb/ the mother. They are kicked out of the womb but they want to return. Freud said the reason why the child wants to have sex with the mother may be to return to the womb

and the oceanic bliss. But the Father God has put up flaming castration swords, threatening to castrate Adam if he comes too close.

What I say is not a stretch. Adam in the gospels is called a "son of God". So as the son, according to Freud, he runs the risk of castration. Israel itself is called the son of God in the Bible. In the Bible when Israel leaves Egypt, God says "I called my son out of Egypt". Israel is described as disobeying God and being kicked out of the land of Israel as punishment Israel is described as disobeying God and being kicked out of the land of Israel as punishment. In Galatians Jerusalem is called "our Mother". Jerusalem is the mother of the Israelites. The Israelites wish to return to Jerusalem but again they run the risk of being castrated if they do not behave in the world they have been kicked out into. Returning to Jerusalem would be like returning to the Mother (having sex with the Mother)

In the Bible also it is described that "the sons of God had sex with the daughters of men". By doing this they are being disobedient to God the Father and thus are punished. The sons of God are then kicked out of heaven. Heaven could be seen as Jerusalem, or the Garden of Eden. The Israelites are the sons of God (Jesus calls them sons of God), the sons of God in heaven are the sons of God, and Adam was the son of God. The sons of God are kicked out of heaven, Adam is kicked out of the Garden, and the Israelites are kicked out of Jerusalem. These are all the same story a question can be raised if the Israelites/Adam/ son of God are all the same thing.

Ken Wilber's Quadrant Model

Mind	*Body*
Culture	*Society*

CHAPTER XI: The Personality Types

The quadrants have been identified so far in terms of personality types. In Quadrant 1 the four squares are the sensor, the perceiver, the responder, and the aware types. Quadrant 2 contains the believer, the faithful person, the behaving person, and the belonger type personalities. The Quadrant 3 includes in its four squares the thinker, the emoter, the doer, and the dreamer personalities. In Quadrant 4 the four squares include the contemplating, the passionate, the flowing, and the knowing personality types.

The four squares in each quadrant correspond to the Myers-Briggs and Keirsey personality models. The Myers-Briggs model, originating with Carl Jung, consists of four dichotomies with sixteen personality types. Jung identified the first three dichotomies. After factor analysis Myers and Briggs discovered that there was another dichotomy, which is different and only later identified. The fourth square is always a sort of maverick in relation to the preceding three. The four dichotomies are:

*Square one; extraversion-introversion (E-I)

*Square two; sensing-intuition (S-N)

*Square three; thinking-feeling (T-F)

*Square four; judging-perceiving (J-P).

Extraverts gain energy by being around others, and are more action oriented. Whereas introverts gain energy by being alone, and are more cerebrally oriented.

Sensing and intuiting types are called the perceiving, information gathering functions. Sensors are concerned primarily with facts and details, while the intuitive are more concerned with comprehending "the big picture" and deeper meanings.

Thinking and feeling are the judging functions. Thinkers care more about logic, consistency, and doing what works. Feelers are more concerned with what other people feel and think, and are interested in maintaining interpersonal

harmony. The third square is always about doing; the personality types in this third square want to do what works and what creates social harmony.

Next is judging and perceiving. The fourth square always points beyond itself, engaging in a larger context. Judging and perceiving deal with how people relate to the outside, wider world. Judging personalities prefer to use their thinking and feeling functions when relating to the world. Perceivers prefer to use their sensing and intuitive functions.   Those who prefer judging tend to want things planned and decided, whereas, perceivers tend to like things to left open-ended.

The varied combinations of these personality types yield sixteen possibilities.   Keirsey separates the types into four temperaments; the Idealist, the Guardian, the Artisan, and the Rational.

Quadrant 1 = the Idealist. Square one, the sensor (INFJ); square two, the perceiver (ENFJ);   square three, the responder (ENFP);   square four, the aware person (INFP).

Quadrant 2 = the Guardian.   In square one is the believer (ISFJ); in square two is the faithful person (ESFJ); in square three is the behaver (ESTJ); square holds the belonger (ISTJ).

Quadrant 3 = the Artisan. In square one the thinker (ISFP); in square two is the emoter (ESFP); in square three is the doer (ESTP); in square four is the dreamer (ISTP)

Quadrant 4= the Rational. In square one is the contemplator (INTJ), in square 2 is the passionate person (ENTJ); in square three is the flow-er (ENTP); in square four is the knower (INTP).

Keirsey's' temperament model

Quadrant 1 - Idealists   Quadrant 3- Artisans

Sensing (INFJ)	Responding (ENFP)	Thinking (ISFP)	Doing (ESTP)
Perceiving (ENFP)	Awareness (INFP)	Emoting (ESFP)	Dreaming (ISTP)
Believing (ISFJ)	Behaving (ESTJ)	Contemplating (INTJ)	Flowing (ENTP)
Faithful (ESFJ)	Belonging (ISTJ)	Passion (ENTJ)	Knowing (INTP)

Quadrant 2- Guardians   Quadrant 4- Rationals

This chapter is the most important chapter of the book because all other examples of the quadrant model are going to be analogized to these personality types in future chapters.

There are two dichotomies that yield Keirsey's four temperaments: dichotomy 1--concrete and abstract; dichotomy 2--cooperative and utilitarian. Concrete people care more about details and facts. Abstract people care more about the big picture and connections. Cooperative people focus on maintaining social harmony, while utilitarian people care more about what works.

In Quadrant 1 are found the Idealists. Idealists are abstract and cooperative. Like all other "residents" in the first square, they are weird. They are intelligent, and like social harmony, wanting to belong and fit in. But at the same time they do not fit in because they are very abstract in their consciousness, and are perceived by the group as weird. They are sensitive, perceptive, responsible and aware, caring deeply about things like the environment and nature. They are very spiritual,

which is a characteristic of the first quadrant, and they want to be helpful. The first quadrant is conservative, which coincides with being helpful. Idealists are sensitive to others and can help others to feel better. They put others before themselves. When asked about the meaning of life the idealists say it is "to find yourself". Awareness is of the self. They desperately want to belong, and look up to guardians. Idealists make up only about ten percent of the population. The first quadrant is linked to the self. Idealists are very mental and even are inclined to see the universe as a mind. They are empathetic and compassionate but can run the risk of not being compassionate or sensitive to people they don't like. Idealists are more likely vegetarians. They are smart but their ideas can run wild and they are likely to believe in aliens and other things considered weird. Some may say they need a straight jacket for their ideas but they are brilliant. They sometimes run the risk of trying to belong too much though and caring too much about what others think. They are cooperative and want to be seen as responsible and they can be described sometimes as too nice and too sensitive and a critique against them is that they can work too hard to try to make everybody happy, and I the process can sometimes be disingenuous. Idealists tend to feel responsibility is important and are responsible themselves and expect others to be responsible. They are into self reliance. Idealists recall are aware. When you are aware you can't quite put your finger on something completely but are just aware of it. Idealists like to say things like "the world is so incomprehensible it's beyond our comprehension". They also like to express awe of the cosmos and being idealists, like to portray to others their awe and inspire them. Idealists are likely to believe that things like levitation or walking on water are really possible, which is kind of magical thinking, but they will try to explain it scientifically or metaphysically. They love to inspire and help people and make people feel good. They tend to be into things like crystals, astrology, the occult, and literature, in part because these are weird and idealists are weird, and in part because these are avenues for finding the self and better understanding the self, which idealists love.

Quadrant 2 contains the Guardians. Guardians are concrete and cooperative. Unlike the Idealists, they are normal and fit in. Idealists tend to like guardians and look up to guardians and want to be them. The first square wants to be the second, the second wants to be the third, and the third wants to be the fourth. The second square focuses on homeostasis; it is about maintaining order. The second square thinks in "black and white". Guardians are very concerned with right and wrong, and morality. Not extremely deep thinkers, they are concrete thinkers concerned

with facts. But they are also cooperative and concerned with social harmony and belonging. They tend to be religious; even if not religious about religion, they are religious about other things. Being religious connotes believing deeply and having strong faith in something in spite of not necessarily having a deep knowledge or understanding of it. They maintain order and structure, and are good at producing social harmony and establishing strong friendships. They will "give you the shirt off their backs".   When asked about the meaning of life a Guardian will likely say that it is to "put food in the fridge, and to take care of family". Guardians are very into family and friends, while also envying the Artisans who are more spontaneous and into having fun. While looking down on Artisans because of their wild and destructive behavior, and appearance of being less intelligent,

simultaneously they wish to be more like the Artisan. They tend to like white people and like order. They try to play the role they feel is assigned to them, whether it is the role they thing a Black man should play if they are Black, or a woman, and so on. They are less likely to think very deeply about topics and are more likely to believe whatever they feel will help them belong. Guardians make up about fifty percent of the population.

In Quadrant 3 are the Artisans. The third square is characteristically very physical. Artisans are very into the physical.   They are concrete, and utilitarian They are rational, and "cool". They are good at thinking, yet are also emotional. As doers they love to get things done while having fun. They can be very spontaneous and even destructive; the third square is destructive, and often viewed as bad. They like sports and art. However, they can envy those who are able to think abstractly, often turning to drugs in pursuit of the abstract and elusive. Artisans like respect, and like to have authority and they are not afraid to hurt feelings and be renegades and be politically incorrect. Unlike their opposites, the idealists they don't mind doing what they feel works even if it disrupts social harmony and is not empathetic. Donald Trump is an example of an artisan. They are showmen. Artisans are plentiful, making up about thirty five percent of the population

In Quadrant 4 are found the Rationals. Rationals are abstract and utilitarian, and somewhat "weird", which is a characteristic of the fourth square.   Abstract people look for principles, patterns, and connections. The fourth quadrant is knowledge and contemplation. Rationals are very contemplative, tend to be calm, but can also be passionate. They may not show emotions, but when they do they

tend to lose control or be very intense. Rationals are utilitarian, doing what works best, not caring particularly about social harmony, hence they can be destructive. This allows them to be philosophical and a transformative force. Einstein was a Rational. He had a hard time taking care of himself. Rationals are said to "have their heads in the clouds". They are good at contemplating, thereby transcending the normal world. They also can be chameleons, fitting in with the other types by pretending to be like them. Benjamin Franklin is a good example. Especially the INTP is able to "see the big picture". Rationals care most about gaining truth and want to press people and promote debate, which other types might feel is threatening and even confrontational. But Rationals do not really hold onto beliefs, and will just pretend to hold to one in order to spark debate so they can gain deeper insights and produce greater inquiry. Rationals are rare, making up about five percent of the population. The fourth is always different, and seems not to belong with the other three. Whereas idealists are very into values and have emotional investment in their ideas, Rationals tend to be less sensitive and don't have as much emotional investment in beliefs. A Rational may appear to take a stance in order to promote inquiry and debate, but he really does not have one, and this may confuse idealists.

CHAPTER XII: The Four Fields of Inquiry

The four personality types relate to the four fields of inquiry, which are Science, Religion, Art, and Philosophy.

*Square one: Science. Science, like the Idealist, is abstract, concerned with belonging, and is somewhat weird, which is the nature of the first square. Philosophers of science, including Kuhn and Popper, point out that science likes to consider itself objective, but is very much shaped by authority. Scientists are tempted to see only what they are looking for. Science is sensation and perception. An example of this occurred in observations of photos of the pyramids that showed evidence of cavities within them. But nobody took note of that evidence. An architect looking at the photos, being aware of the capacity to build something from the inside out, was the first to realize those cavities were used to build the pyramids.

Science, as well as the Idealist, is very much shaped by consensus and tradition. Boltzmann, a scientist, proposed that atoms were real things, and people thought he was crazy. Scientists are often afraid to shake up the status quo, tending instead to hold consensus-established views. He ended up committing suicide. Only after his death did the scientific community realize that he was right. This occurs often in science; often proposals are considered by fellow scientists to be crazy, only later to be proven valid. It is difficult to trust science because it is based on sensation and perception, which are limited and somewhat flawed.

Science is subjective, not objective. Its initial findings are shaped by prejudices. For a long time eugenics, the study of race, was very popular. But after world war II such studies became politically incorrect and taboo. Cultural norms shape science, which is very dependent on volunteer funding, so scientists are constantly trying to appeal to people and worrying about what others think. Science and Idealists, are very into helping, like fighting cancer, or saving the environment. Scientists are concerned with problems like the climate and asteroids, also examine weird stuff like aliens, often studying supernatural

phenomena like astral projection.   Science, like the Idealists, can be considered weird, often exploring beyond the boundaries of the normal, which some call "the spiritual". Physics is actually mostly about the study of invisible forces, which evidences this "spiritual" quality. Fields like quantum mechanics are very weird, studying how thoughts affect reality. The first square is weird. The race associated with the first square is Asian, and Asians are associated with being good scientists.

　　　*Square two: Religion.   Religion, like the Guardian is concerned with homeostasis, maintaining the status quo, and protecting order and stability. Religions provide laws and ways of living designed to create harmony. Religions are about belief, faith, behavior, and belonging (Quadrant 2).   Religions often separate people along ethnic lines. For instance, in Europe different ethnic groups adopted different religions; northern Germany adopted protestantism, while southern Germany adopted catholicism. It can be argued that this separation was due to ethnic differences. In Asia different ethnic groups adopted alternate forms of Buddhism. In Arab lands different ethnic groups adopted alternate forms of Islam. So belonging is very tied into religion.

　　　Religions tend to be very concerned with behavior--distinguishing right from wrong. Like the Guardian, religions are concerned with morality and maintaining order, a fundamental characteristic of the second square.   Religion and art are often considered to be completely separate, however, being in the first two squares they form a duality, remaining interconnected. Science has always informed religion, and religion has always informed science. The big bang theory was proposed by a priest. Mendel, who discovered punnet square genetics, was a monk. Science also tries to explain religion. Scientists studying ancient astronaut possibilities try to explain the Bible and other holy texts as products of alien visitations to earth. The second square race is White, and Whites are most associated with religion. Even most Muslims are White, even the one's that say they are Arabs, because Arabs are White genetically, although it can be argued that they are brown and some more than others.

　　　　*Square three: Art.   Art corresponds to the Artisan; it is about thinking, emotion, doing, and dreaming (Quadrant 3). Art includes painting, music, dance, and literature. Van Goh declared that he painted his dreams.   Artists often claim that they express their emotions through their art. Music has been described as emotion in sound form. Art makes people think. It can be destructive by causing people to question their assumptions and the status quo, as it deals with subjects such as race and religion. The third square has the nature of being destructive.

Like the Artisan, it can generate great discomfort; it can "show off" and engage in "having fun". Art is at its best when spontaneous. Art can be used to support the status quo, but more often it shakes up the status quo. The third square race is Black, and Blacks are most associated with art.

*Square four: Philosophy. Philosophy keeps company with the Rational. The fourth square always engulfs the previous three squares; there is a philosophy of science, a philosophy of religion, and a philosophy of art. Philosophy is contemplation, passion, flowing, and knowing (Quadrant 4). Philosophy is the love of knowledge. Knowledge is the understanding of what exists beyond simple sensation and perception, preferring instead a very deep understanding. Philosophy deals with the study of knowledge, the study of being, and the study of concepts that are beyond the reach of rational comprehension. The forth square is associated with the transrational. Philosophy is viewed as not belonging with the other three fields of inquiry; the fourth is always different. Philosophers, like Rationals, are seen as having their heads in the clouds. Philosophy is interested in contemplating trans-rational qualities and realities, like the Good, Beauty, Truth, Love, and God. The forth square race is Brown, and Brown people are most associated with philosophy.

It can be argued that there is a fifth field of inquiry history. But many say that history is a science. Science is the first square so it is the light. History would be the true light, so it is like a science, but also it is not in that it is not very empirical. History instead is shaped greatly by philosophy. Again, the fourth square, philosophy, points to the fifth, history.

The Fields of Inquiry

Science	Art
Religion	Philosophy

Aristotle, one of the first physicists, believed that four elements containing four qualities comprised everything. He identified the qualities as hot, cold, wet and dry. Relating these qualities to the personality model, hot corresponds to abstract. Hot things rise, hot things are weird, Abstract people are weird. Cold corresponds to concrete: cold things sink, and are normal, as are concrete people. Wet corresponds with cooperative: wet things fill their containers; cooperative people try to conform, and in a manner fill their containers/environments. Dry corresponds with utilitarian. Dry things are individuals, are solid, and "do their own thing". Utilitarian people are individuals who do what they want, and are not influenced by others over what they think is best. These four qualities yield four elements.

*Square one: Wind. Wind is hot and wet, and corresponds to the Idealist who is abstract and cooperative. Wind is hot in that it is weird, and rises. Hot corresponds with abstract. It is wet in that it fills all parts of its container, making it cooperative. Cooperative people fill their containers- they don't do their own thing but mold to their environments.

*Square two: Water. Water is cold and wet, corresponding to the Guardian who is concrete and cooperative. Water is cold in that it is normal, and sinks. Cold corresponds with concrete. It is wet in that it fills its container. The second square is concerned with homeostasis. Water is healing and cleansing. The second square is homeostasis and thus is healing.

*Square three: Earth. Earth is cold and dry, and corresponds to the Artisan who is concrete and utilitarian. Earth is cold in that it is normal and sinks. It is dry in that it is an individual. It does its own thing, and is solid. The third square is always the most solid--Earth is solid and hard.

*Square four: Fire. Fire is hot and dry, corresponding to the Rational who is abstract and utilitarian. Fire is hot in that it is weird, and rises. Fire is utilitarian in that it is an individual, and seems solid, wanting to "do its own thing", as opposed to filling its container. Square four is separate from the previous three, consistently evidencing differences. The fourth square has a quality of being like pure energy. Fire is like wind, water, and earth because it is ephemeral. Like the wind it rises, it flows like water, yet it seems solid like Earth.

*Square five: Aether. Aristotle postulated a possible fifth element, which he called the aether, relating it to the divine. The fifth is always related to the transcendent and the divine.. The fifth is God. Aristotle said that nothing exists without the aether, and the aether was located in the stars.   While the fourth square hints at the transcendent, the fifth is always ultra transcendent.

Aristotle theorized that everything is composed of varying amounts of these five elements. Various cultures throughout the world also had a four/five element system. Some identified the fifth element as life, or the void. Interestingly the word, "one" sounds like wind; the word "two", sounds somewhat like water, and has the "t" and "w" in it like water; the word "three" sounds like earth, having letters "erth" in it;   the word "four" sounds like
fire. Five clearly sounds like life, which is considered in some cultures to be the fifth element.

Aristotle's elements

Wind- hot and wet	Earth- cold and dry
Water- cold and wet	Fire- hot and dry

It is important to note that the four distinct squares of the quadrant model are often divided by two dichotomies which yield four results.
These four elements relate to the four phases of matter.
*Square one is gas. This corresponds to wind.
*Square two is liquid. This corresponds to water
*Square three is solid. This corresponds to earth.
*Square four is plasma. This corresponds to fire.

Many of the examples of the quadrants have this quality of four squres produced by two dyads. In the case of the **quadrant model there is 16 squares based upon four dyads.**

A Reminder and Refresher;
Summary of the Quadrants and Attributes of the Squares

The Quadrant Pattern of Reality expresses itself in four main Quadrants, each containing four squares. A fifth Quadrant outside the first four contains three squares. In total there are nineteen squares. Each square represents its own unique attributes. The first square in each quadrant is typically somewhat weird and conservative, having a sort of "loner" quality. It always engages in a duality with the second—while appearing to be opposites the two are intricately linked. The second square in each quadrant is more normal and homeostatic, characteristically maintaining order and structure, keeping things clean and organized. The third square, which is the doing quadrant, is the most physical and solid, tending to be both spontaneous and destructive, while also linked with, thereby forming a triad with the first two. The fourth square is strange, and does not seem to belong to the previous three. Yet by containing elements of the first three it encompasses while transcending them. The fourth is also mental, and points to a fifth, which becomes a new quadrant. Never seeming to belong, the fifth does not seem to be necessary or relevant.

There are many examples of how the quadrant form manifests in existence. In the third quadrant of thinking, emotion, doing, and dreaming, thinking and emotion creates a duality. The first two squares are always

the duality. They are very similar. The third square of doing is different from the first two. Doing is more physical than thinking and emotion. The third square is always the most solid. Doing refers to physical actions. Following the duality is the triad. The third is the most physical. With the fourth, the quadrant is complete. The fourth is always different from the previous three, transcending the previous three, yet encompassing them. The fourth square has the qualities of the squares that precede it, yet it transcends them, incorporating many different attributes. The fourth always points to a fifth. Dreaming the fourth square of the third quadrant, points to contemplation, the first square of the fourth quadrant. While dreaming you transcend the body and the ego. Contemplation involves transcendence of the ego similar to dreaming. The fourth points to the fifth and the fifth becomes its own quadrant.

All phenomena throughout the Cosmos are "Re-presentations" of the Quadrant Model of Reality—the Real and intangible Form of Existence presented in discernible form.

Now finally the book will get into many examples of the quadrant model in nature. Prepare for your mind to be blown. These examples are just scratching the surface of the manifold cases of the quadrant model's permeation of reality. The quadrant model is in fact the organizing principle of all reality.

Science

Physics chapter

The angles are the four Cardinal points of an astrological chart: the Ascendant, the Midheaven, the Descendant and the Imum Coeli.

The astrological chart is a schematic representation of the sky at any given moment of time, projected upon the ecliptic--or the apparent path of the Sun as seen from the Earth—which forms the circle in which the chart is enclosed. The longitudinal positions of the planets are plotted onto this circle, because the planets (except Pluto) and many stars, lie very close to the Sun's path in celestial latitude.

How this map of the sky is seen from the Earth is determined by where the horizon is at the time for which the chart is cast. The horizon forms the boundary between what can be seen, or the visible sky, and sky which exists on the opposite side of the earth, which exists at the same time and space, but cannot be seen.

The line of the horizon cuts across the circle of the chart horizontally, and forms the most important angle of the chart: the Ascendant, or the exact place where the Sun's path crosses the horizon in the East. It is at this point that all planets and many stars appears to rise up out of what cannot be seen and become apparent to the observer. This is because the Earth's daily rotation reveals sky objects from East to West, and makes them appear to be moving from the eastern horizon across the sky to the western horizon, where they disappear again to the observer, dipping down again to the unseen sky. The western horizon, where the Sun's path meets the horizon in the West, is called the Descendant.

The other very important angle of the chart is the Midheaven (also called the M.C. for the Latin Medium coeli, or "middle of the sky.") The Midheaven represents the highest point in the sky reached by the Sun, or its culmination, as it crosses from one horizon to the other—the noon point in a chart which is plotted for dawn. At the Earth's equator, it is the point on the ecliptic which is directly overhead from the observer; as the observer moves north or south from the Equator, the midheaven appears to withdraw, so that from points north of the equator, the noon point of the Sun appears lies in the southern sky, and south of the equator, it appears in the northern sky.

The point opposite the Midheaven, which is in the unseen sky, and would be the midnight point in a chart cast for dawn, is the anticulmination of the Sun, or the Imum Coeli, which is Latin for the "bottom of the sky." This is the last of the four angles.

The angles are crucial to the understanding of the meaning of the sky map to the individual or event for which it was cast. There are no more individual points in chart. Much has been made by astrologers (deriving from the Theosophical tradition that is closely linked to much of modern astrological practice) of the quality of "coming into being" that they represent, as they represent going from the unseen to the seen. Since Theosophical astrology was tied to the idea of manifesting from the spiritual to the bodily form, the angles have come to symbolize this connection. However, even if this theory is discounted, as Bernadette Brady[1] has noted, to all ancient peoples, the horizon was the place where the gods came into contact with the earth and became available to human supplication. Without this connection, the spiritual realm and the world had nothing to do with one another, and for that reason, astrology, which seeks to communicate between the two spheres, must use this place of connection to derive significance for the world from the sky.

In astrology, an angular house, or cardinal house, is one of four cardinal houses of the horoscope, which are the houses in which the angles of the chart (the Ascendant, the Midheaven, the Imum Coeli and the Descendant) are found. The angular houses of the horoscope are considered to be the most ardent, or forceful, and are considered to have the greatest impact in the chart. The influential 17th-century astrologer William Lilly states

simply: "Planets in angles do more forcibly show their effects." [1] Angular houses rule those critical things in our life, such as our appearance and how we behave, our family life, our married life or partnerships, and our career.

First house[edit]

The first house, of which the cusp is often (but not always) the Ascendant, signifies the person in the chart, his or her personality, and his or her behaviour. Quite often, the Ascendant can overshadow a person's Sun sign. For example, a person who has Leo on the cusp of his or her first house and Virgo as his or her Sun sign can be quite dynamic and dramatic, but the fastidious, efficient, self-effacing part of him- or herself will not be readily apparent until people are able to pierce through the persona and see the real person.

Fourth house[edit]

The fourth house, of which the cusp is often (but not always) the Imum Coeli, signifies a person's home, security, family, and those things in early life that served as a foundation for them. Sometimes the fourth house also is connected with endings, such as a person's end of life. This house is affiliated often with our parents. For the ancients, it was the House of the Father, but in modern charts, it tends to have a more general parental significance.

Seventh house[edit]

The seventh house, of which the cusp is often (but not always) the Descendant, shows the type of mate the native is likely to be attracted to and all partnerships in general. For Hellenistic astrologers, the seventh house was in general a fortunate one, especially for benefics, but there are some difficulties which may arise from these placements because the house is "the Setting Place" or the place where the Sun falls.[2]

Tenth house[edit]

The tenth house, of which the cusp is often (but not always) the Midheaven, refers to our careers, vocations, creative output, and how we would like the world to see us. For Ptolemy, it also was the house where our children's impact can be seen.

Natal astrology, also known as genethliacal astrology, is the system of astrology based on the concept that each individual's personality or path in life can be determined by constructing a natal chart for the exact date, time, and location of that individual's birth. Natal astrology can be found in the Indian or Jyotish, Chinese and Western astrological traditions.

The houses are grouped into four main categories or hemispheres.[5] Horoscopes appear 'upside down' in relation to how the compass points usually appear, with the ascendant marking the eastern horizon traditionally appearing on the left hand side. For this reason the southern hemisphere appears in the upper part of the horoscope.

Upper (southern) hemisphere The 7th, 8th, 9th 10th, 11th and 12th houses. A subject with most of his or her planets in this hemisphere will not be too deeply affected by the actions of other people. He or she will be able to distance themselves from those around them and from public events and movements, focusing firmly on their own needs and feelings, or the general cause of humanity that is important to them. If the planets are grouped in the 8th, 9th or 12th houses, the subject will have strong spiritual needs and values. Planets grouped in the 10th house will make the subject ambitious and politically astute; while if they are in the 11th house he or she will be interested in humanitarian causes and education.

Lower (northern) hemisphere The 1st, 2nd, 3rd, 4th, 5th and 6th houses. A subject with most of his or her planets in this part of the chart will be sensitive to the moods and feelings of others, and may suffer a good deal as a result. The person may try to live though their family rather than for themselves, and may be too subjective in their thinking. They may also choose to do most of their thinking and working at home.

Eastern hemisphere The 10th, 11th, 12th, 1st, 2nd, 3rd houses. A subject who has most of his or her planets in this hemisphere will be a self-starter who chooses their own path through life and sets their own boundaries. They are not happy being a burden to other people, or being kept by someone else. They also have the burden themselves of being an initiator at work and in their personal life, as little is likely to be done for them by others. When the planets are in the 1st, 2nd and 3rd houses, the subject is likely to be very self-absorbed and convinced that his or her own opinions are the only ones that matter.

Western hemisphere The 4th, 5th, 6th, 7th, 8th, and 9th houses. A subject with most of these planets in this hemisphere will need to be very diplomatic in order to keep those around him on their side. They may be looked after in some way by others, or else spend their lives supporting and motivating others. When the majority of planets are in the 6th, 7th and 8th houses he or she will use their energy to fulfil the needs to others. The subject may bring about a situation of being needed by bringing a number of children into the world to love and care for.

There are four primary angles in the horoscope. These are, in order of power:

First House (Ascendant – East Angle)
Tenth House (Midheaven or M.C. – North Angle)
Seventh House (Descendant – West Angle)
Fourth House (Imum Coeli or I.C. – South Angle)
The ascendant is the easternmost or sunrise point where the ecliptic and horizon intersect; the ascendant and the midheaven are considered the most important angles in the horoscope by the vast majority of astrologers. In most systems of house division, the ascendant is the cusp of the 1st house and the midheaven is the cusp of the 10th house.

The placement of the planetary ruler of the ascendant, called the chart ruler is also considered to be significant. The point in the west diametrically opposing the ascendant is called the descendant, normally the cusp of the 7th house; and the point opposing the M.C. is the cusp of the 4th house, the northernmost point of the chart, called the imum coeli or I.C.

In creating a horoscope the ascendant is traditionally placed at the "nine o'clock" position on the left-hand side of the chart wheel (though traditional rectangular chart formats need not follow this convention). During the course of a day, because of the Earth's rotation, the entire circle of the ecliptic will pass through the ascendant and will be advanced by about 1°. This movement provides us with the term rising sign, which is the sign of the zodiac rising over the eastern horizon at the moment of birth. The point on the ecliptic that is furthest above the plane of the horizon at the time is called the Midheaven, or medium coeli (M.C.), placed at the "twelve o'clock position" effectively where the Sun would be if the birth time was midday.

The simplest prime knot is the trefoil with three crossings. The trefoil is actually a (2, 3)-torus knot. The figure-eight knot, with four crossings, is the simplest non-torus knot. For any positive integer n, there are a finite number of prime knots with n crossings. The first few values (sequence A002863 in OEIS) are given in the following table.

In knot theory, a figure-eight knot (also called Listing's knot) is the unique knot with a crossing number of four. This is the smallest possible crossing number except for the unknot and trefoil knot. The figure-eight knot is a prime knot.

By way of example, the unknot has crossing number zero, the trefoil knot three and the figure-eight knot four. There are no other knots with a crossing number this low, and just two knots have crossing number five, but the number of knots with a particular crossing number increases rapidly as the crossing number increases.

In mathematics, 4-manifold is a 4-dimensional topological manifold. A smooth 4-manifold is a 4-manifold with a smooth structure. In dimension four, in marked contrast with lower dimensions, topological and smooth manifolds are quite different. There exist some topological 4-manifolds which admit no smooth structure and even if there exists a smooth structure it need not be unique (i.e. there are smooth 4-manifolds which are homeomorphic but not diffeomorphic).

4-manifolds are of importance in physics because, in General Relativity, spacetime is modeled as a pseudo-Riemannian 4-manifold.

Incas regarded space and time as a single concept, referred to as pacha (Quechua: pacha, Aymara: pacha).[3][4] The peoples of the Andes maintain a similar understanding.[5]

The idea of a unified spacetime is stated by Edgar Allan Poe in his essay on cosmology titled Eureka (1848) that "Space and duration are one". In 1895, in his novel The Time Machine, H. G. Wells wrote, "There is no difference between time and any of the three dimensions of space except that our consciousness moves along it", and that "any real body must have extension in four directions: it must have Length, Breadth, Thickness, and Duration".

Marcel Proust, in his novel Swann's Way (published 1913), describes the village church of his childhood's Combray as "a building which occupied, so to speak, four dimensions of space—the name of the fourth being Time".
The forth is always different. The forth dimension is time and time is seen as an illusion

The geometry of spacetime in special relativity is described by the Minkowski metric on R4. This spacetime is called Minkowski space. The Minkowski metric is usually denoted by \eta and can be written as a four-by-four matrix:

\eta_{ab} \, = \operatorname{diag}(1, -1, -1, -1)
where the Landau–Lifshitz time-like convention is being used. A basic assumption of relativity is that coordinate transformations must leave spacetime intervals invariant. Intervals are invariant under Lorentz transformations. This invariance property leads to the use of four-vectors (and other tensors) in describing physics.

Strictly speaking, one can also consider events in Newtonian physics as a single spacetime. This is Galilean–Newtonian relativity, and the coordinate systems are related by Galilean transformations. However, since these preserve spatial and temporal distances independently, such a spacetime can be decomposed into spatial coordinates plus temporal coordinates, which is not possible in the general case.

A four by four matrix is the quadrant model

In cosmology the four pillars of the standard cosmology are
Square 1: expansion of the Universe
Square 2: Origin of the cosmic background radiation
Square 3: Nucleosynthesis of the light elements
Square 4: Formation of galaxies and large scale structures

The way that Nikola Tesla invented alternating current was he got four coils with four alternating currents and put them in a quadrant formation and made an egg (called a tesla egg) spin with them. It showed how rotary movement could be produced by an alternating current. Out of this model he invented polyphase transmission. From this large power stations could be built anywhere, and away from populated areas. The model with the four coils and four alternating currents equidistant apart, reflected the quadrant image.

Hertz tried to discover electricity through Maxwells waves existed by carrying a receiver that would spark if electricity was produced. The receiver he carried was a metal quadrant. Lodge later created sensation by creating an apparatus that could make a bell ring through electricity over a distance with the same quadrant metal form receiver.

In astronomy, a tetrad is a set of four total lunar eclipses within two years.

Tetrad analysis can be used to confirm whether a phenotype is caused by a specific mutation, construction of strains, and for investigating gene interaction. Since the frequency of tetrad segregation types is influenced by the recombination frequency for the two markers, the segregation data can be used to calculate the genetic distance between the markers if they are close on the same chromosome. Tetrad analyses have also contributed to detection and study of the phenomena of gene conversion and post-meiotic segregation.[2] These studies have proven central to understanding the mechanism of meiotic recombination, which in turn is a key to understanding the adaptive function of sexual reproduction. The use of tetrads in fine-structure genetic analysis is described in the articles Neurospora crassa and Gene conversion.

General procedure[edit]
Crosses are performed between haploid MATa and MATα mating strains, then the resulting diploids are transferred to sporulation media to form a tetrad containing four haploid spores. Tetrads can then be prepared with Zymolyase, or another enzyme, to digest the wall of the ascus. The spores are then separated with a micromanipulator needle and deposited in separate positions on a petri dish.

Tools[edit]
Traditionally, tetrad dissection has a reputation as "dark art".[3] However, instruments have since been developed specifically for tetrad dissection; the most advanced allow easy and semi-automated separation of tetrads [2] . Most micromanipulators use a glass fiber

needle to which the spores adhere due to the formation of a water meniscus between the agar and the needle.

In general relativity, a frame field (also called a tetrad or vierbein) is a set of four orthonormal vector fields, one timelike and three spacelike, defined on a Lorentzian manifold that is physically interpreted as a model of spacetime. The timelike unit vector field is often denoted by $\vec{e}_0$ and the three spacelike unit vector fields by $\vec{e}_1, \vec{e}_2, \, \vec{e}_3$. All tensorial quantities defined on the manifold can be expressed using the frame field and its dual coframe field.

Frames were introduced into general relativity by Hermann Weyl in 1929.

Results from the Rosetta and Philae spacecraft show that the nucleus of 67P/Churyumov–Gerasimenko has no magnetic field, which suggests that magnetism may not have played a role in the early formation of planetesimals.[30][31] Further, the ALICE spectrograph on Rosetta determined that electrons (within 1 km (0.62 mi) above the comet nucleus) produced from photoionization of water molecules by solar radiation, and not photons from the Sun as thought earlier, are responsible for the degradation of water and carbon dioxide molecules released from the comet nucleus into its coma.[32][33] Instruments on the Philae lander found at least sixteen organic compounds at the comet's surface, four of which (acetamide, acetone, methyl isocyanate and propionaldehyde) have been detected for the first time on a comet

Desert biomes can be classified according to several characteristics.
There are four major types of deserts:

Hot and dry
Semiarid
Coastal
Cold

Chemistry chapter

Gürcütepe is a Neolithic site on the southeastern outskirts of Şanlıurfa in Turkey, consisting of four very shallow tells along Sirrin Stream that flows from Şanlıurfa. All four hills are now covered by modern buildings, so they are no longer recognizable. In the late 1990s a German archaeological team under the direction of Klaus Schmidt carried out soundings on all four hills and made extensive excavations on the second hill seen from the east.

Originally it was assumed that the four hills were settled in a specific time sequence, that one of these settlement phases would coincide with the nearby Gobekli Tepe. However, the excavations have indicated that all four hills were settled during the PPNB period; the easternmost hill is from the later PPNC period.

Gürcütepe joins a group of Neolithic localities in Turkey, all rammed-earth buildings possessing space subdivisions next to larger community buildings. The small finds correspond to what we previously knew already. Overall, the Gürcütepe gives the impression of a rural settlement which was significantly younger than the famous Göbekli Tepe.

Gurcutepe is considered one of the oldest archeological sights and one of the most important archeogloical sights in history. It fits the quadrant pattern with the fours

Göbekli Tepe is situated on a flat and barren plateau, with buildings fanning in all directions. In the north, the plateau is connected to a neighbouring mountain range by a narrow promontory. In all other directions, the ridge descends steeply into slopes and steep cliffs.[10] On top of the ridge, there is considerable evidence of human impact in addition to the actual tell. Excavations have taken place at the southern slope of the tell, south and west of a mulberry that marks an Islamic pilgrimage,[11] but archaeological finds come from the entire plateau. The team has also found many remains of tools.

Plateau[edit]

Göbekli Tepe surrounding area

Complex E
The plateau has been transformed by erosion and by quarrying, which took place not only in the Neolithic, but also in classical times. There are four 10 m (33 ft) long and 20 cm (8 in) wide channels on the southern part of the plateau, interpreted as the remains of an ancient quarry from which rectangular blocks were taken. These are possibly related to a square building in the neighbourhood, of which only the foundation is preserved. Presumably, this is the remains of a Roman watchtower which belonged to the Limes Arabicus. However, this is not known with certainty.[12]

Most structures on the plateau seem to be the result of Neolithic quarrying, with the quarries being used as sources for the huge, monolithic architectural elements. Their profiles were pecked into the rock, with the detached blocks then levered out of the rock bank.[12] Several quarries where round workpieces had been produced were identified. Their status as quarries was confirmed by the find of a 3-by-3-metre piece at the southeastern slope of the plateau. Unequivocally Neolithic are three T-shaped pillars that have not been levered out of the bedrock. The biggest of them lies on the northern plateau. It has a length of 7 m (23 ft) and its head has a width of 3 m (10 ft). Its weight may be around 50 tons. The two other unfinished pillars lie on the southern Plateau.

At the western edge of the hill, a lion-like figure was found. In this area, flint and limestone fragments occur more frequently. It was therefore suggested that this could have been some kind of sculpture workshop.[13] It is unclear, on the other hand, how to classify three phallic depictions from the surface of the southern plateau. They are near the quarries from classical times, making their dating difficult.[14]

Apart from the tell, there is an incised platform with two sockets that could have held pillars, and a surrounding flat bench. This platform corresponds to the complexes from Layer III at the actual tell. Continuing the naming pattern, it is called "complex E." Owing to its similarity to the cult-buildings at Nevalı Çori it has also been called "Temple of the

Rock." Its floor has been carefully hewn out of the bedrock and smoothed, reminiscent of the terrazzo floors of the younger complexes at Göbekli Tepe. Immediately northwest of this area are two cistern-like pits, believed to be part of complex E. One of these pits has a table-high pin as well as a staircase with five steps.[15]

At the western escarpment, a small cave has been discovered in which a small relief depicting a bovine was found. It is the only relief found in this cave.[16]

Layer III[edit]

Pillar 2 from Enclosure A (Layer III) with low reliefs of what are believed to be a bull, fox, and crane.
At this early stage of the site's history, circular compounds or temene first appear. They range from 10 to 30 metres in diameter. Their most notable feature is the presence of T-shaped limestone pillars evenly set within thick interior walls composed of unworked stone. Four such circular structures have been unearthed so far. Geophysical surveys indicate that there are 16 more, enclosing up to eight pillars each, amounting to nearly 200 pillars in all. The slabs were transported from bedrock pits located approximately 100 metres (330 ft) from the hilltop, with workers using flint points to cut through the limestone bedrock.[17]

Two taller pillars stand facing one another at the centre of each circle. Whether the circles were provided with a roof is uncertain. Stone benches designed for sitting are found in the interior.[18] Many of the pillars are decorated with abstract, enigmatic pictograms and carved animal reliefs. The pictograms may represent commonly understood sacred symbols, as known from Neolithic cave paintings elsewhere. The reliefs depict mammals such as lions, bulls, boars, foxes, gazelles and donkeys; snakes and other reptiles, arthropods such as insects and arachnids; and birds, particularly vultures. At the time the edifice was constructed, the surrounding country was likely to have been forested and capable of sustaining this variety of wildlife, before millennia of settlement and cultivation led to the near–Dust Bowl conditions prevalent today.[7] Vultures also feature prominently in the iconography of Çatalhöyük and Jericho. Professor of Archaeology Steven Mithen, suggests that in the early Neolithic culture of Anatolia and the Near East the deceased were deliberately exposed in order to be excarnated by vultures and other carrion birds. (The head of the deceased was sometimes removed and preserved — possibly a sign of ancestor worship.)[19] This, then, would represent an early form of sky burial, as still practiced by Tibetan Buddhists and by Zoroastrians in Iran and India.[20]

Pillar 27 from Enclosure C (Layer III) with the sculpture of a predatory animal

Pillar with the sculpture of a fox
Few humanoid figures have appeared in the art at Göbekli Tepe. However, some of the T-shaped pillars have human arms carved on their lower half, suggesting that they are intended to represent the bodies of stylized humans (or perhaps gods). Loincloths also appear on the lower half of a few pillars. The horizontal stone member on top is thought to

symbolize a human head. The pillars as a whole therefore have an anthropomorphic identity.[21] Whether they were intended to serve as surrogate worshippers, symbolize venerated ancestors, or represent supernatural, anthropomorphic beings is not clear.

At Pillar 27, Enclosure 2, Layer III, the discovery of a predator—perhaps a leopard—has excited particular interest for being carved almost in the round, hinting at a degree of artistic training and division of labor that is again surprising in a hunter-gatherer society.

Some of the floors in this, the oldest, layer are made of terrazzo (burnt lime), others are bedrock from which pedestals to hold the large pair of central pillars were carved in high relief.[22] Radiocarbon dating places the construction of these early circles in the range of 9600 to 8800 BC. Carbon dating suggests that (for reasons unknown) the enclosures were backfilled during the Stone Age.

Layer II[edit]
Creation of the circular enclosures in layer III later gave way to the construction of small rectangular rooms in layer II. Rectangular buildings make a more efficient use of space compared with circular structures. They are often associated with the emergence of the Neolithic.[23] But the T-shaped pillars, the main feature of the older enclosures, are also present here, indicating that the buildings of Layer II continued to serve as sanctuaries.[24] Layer II is assigned to Pre-Pottery Neolithic B (PPNB). The several adjoining rectangular, doorless and windowless rooms have floors of polished lime reminiscent of Roman terrazzo floors. Carbon dating has yielded dates between 8800 and 8000 BCE.[25] Several T-pillars up to 1.5 meters tall occupy the center of the rooms. A pair decorated with fierce-looking lions is responsible for the name "lion pillar building" by which their enclosure is known.[26]

Layer I[edit]
Layer I is the uppermost part of the hill. It is the shallowest, but accounts for the longest stretch of time. It consists of loose sediments caused by erosion and the virtually uninterrupted use of the hill for agricultural purposes since it ceased to operate as a cult center.

The site was deliberately backfilled sometime after 8000 BCE: the buildings were buried under debris, mostly flint gravel, stone tools, and animal bones that must have been imported from elsewhere.[27] In addition to Byblos points (weapon heads, i.e. arrowheads etc.) and numerous Nemrik points, Helwan-points and Aswad-points dominate the backfill's lithic inventory.

Gobekli Tepe is considered one of the oldest archeological sights in history and it is considered very close to the most important maybe the most important. It also fits the quadrant model pattern with four parts to the complex

Göbekli Tepe is regarded as an archaeological discovery of the greatest importance since it could profoundly change the understanding of a crucial stage in the development of

human society. Ian Hodder of Stanford University said, "Göbekli Tepe changes everything".[3][39] It shows that the erection of monumental complexes was within the capacities of hunter-gatherers and not only of sedentary farming communities as had been previously assumed. As excavator Klaus Schmidt put it, "First came the temple, then the city."[40]

Not only its large dimensions, but the side-by-side existence of multiple pillar shrines makes the location unique. There are no comparable monumental complexes from its time. Nevalı Çori, a Neolithic settlement also excavated by the German Archaeological Institute and submerged by the Atatürk Dam since 1992, is 500 years younger. Its T-shaped pillars are considerably smaller, and its shrine was located inside a village. The roughly contemporary architecture at Jericho is devoid of artistic merit or large-scale sculpture, and Çatalhöyük, perhaps the most famous Anatolian Neolithic village, is 2,000 years later. It is where Archeologists think that farming began in Europe, and it fits the quadrant form

Harris' Laws of Archaeological Stratigraphy[edit]
Law of superposition[edit]
Main article: Law of superposition
In a series of layers and interfacial features, as originally created, the upper units of stratification are younger and the lower are older, for each must have been deposited on, or created by the removal of, a pre-existing mass of archaeological stratification.

Law of original horizontal[edit]
Main article: Principle of original horizontality
Any archaeological layer deposited in an unconsolidated form will tend towards a horizontal disposition. Strata which are found with tilted surfaces were so originally deposited, or lie in conformity with the contours of a pre-existing basin of deposition.

Law of original continuity[edit]
Any archaeological deposit, as originally laid down, will be bounded by the edge of the basin of deposition, or will thin down to a feather edge. Therefore, if any edge of the deposit is exposed in a vertical plane view, a part of its original extent must have been removed by excavation or erosion: its continuity must be sought, or its absence explained.

Law of stratigraphic succession[edit]
Any given unit of archaeological stratification takes its place in the stratigraphic sequence of a site from its position between the undermost of all units which lie above it and the uppermost of all those units which lie below it and with which it has a physical contact, all other superpositional relationships being regarded as redundant.

These laws were published in 1979. A fifth law of archaeological stratigraphy has also been added following papers presented at the "Interpreting Stratigraphy a Review of the Art" conferences [1] in the UK from 1992 to 2003.

There are four laws of stratigraphy to Harris

The Toba supereruption was a supervolcanic eruption that occurred some time between 69,000 and 77,000 years ago at the site of present-day Lake Toba (Sumatra, Indonesia). It is one of the Earth's largest known eruptions. The Toba catastrophe hypothesis holds that this event caused a global volcanic winter of 6–10 years and possibly a 1,000-year-long cooling episode.

In 1993, science journalist Ann Gibbons suggested a link between the eruption and a population bottleneck in human evolution, and Michael R. Rampino of New York University and Stephen Self of the University of Hawaii at Manoa gave support to the idea. In 1998, the bottleneck theory was further developed by Stanley H. Ambrose of the University of Illinois at Urbana-Champaign.

Both the link and global winter theories are highly controversial.

The Toba event is the most closely studied super-eruption.[2][3][4]

Supereruption[edit]
The Toba eruption or Toba event occurred at the present location of Lake Toba, in Indonesia, about 75000±900 years Before Present (BP).[5][6] This eruption was the last and largest of four eruptions of Toba during the Quaternary period, and is also recognized from its diagnostic horizon of ashfall, the youngest Toba tuff (YTT).[7][8] It had an estimated volcanic explosivity index of 8 (the maximum), or a magnitude ≥ M8; it made a sizable contribution to the 100×30 km caldera complex.[9] Dense-rock equivalent (DRE) estimates of eruptive volume for the eruption vary between 2000 km3 and 3000 km3 – the most common DRE estimate is 2800 km3 (about 7×1015 kg) of erupted magma, of which 800 km3 was deposited as ash fall.[10]

The erupted mass was 100 times greater than that of the largest volcanic eruption in recent history, the 1815 eruption of Mount Tambora in Indonesia, which caused the 1816 "Year Without a Summer" in the northern hemisphere.[11] Toba's erupted mass deposited an ash layer approximately 15 centimetres (6 inches) thick over the whole of South Asia. A blanket of volcanic ash was also deposited over the Indian Ocean, and the Arabian Sea and South China Sea.[12] Deep-sea cores retrieved from the South China Sea have extended the known reach of the eruption, suggesting that the 2800 km3 calculation of the erupted mass is a minimum value or even an underestimation.[13]

There were four such eruptons

Fig. 632 – The fourfold analysis of the City completed, as given by Volker WELTER (2002). The scheme consists of a four-division (cross), which is filled with three-divisions. Geddes envisaged an anti-clockwise movement from town folk (work) – school knowledge – cloister ideas to city polity as a human '*Werdegang*'. The highest

aim was polity (*politeía*), a Greek term referring to the city states with an assembly of citizens involved in a political process, but is now also a general term for any political organization of a group.

An analysis of Geddes' ideas points to dualism rather than higher division thinking, as the (swastika) cross and four-fold division suggest. At best, it is a double two-fold affair – which is still 'higher' than a pure oppositional way of thinking. Geddes puts – in particular in his later '*Notation of Life*' (published in 1949) – the *vita activa* against the *vita contemplativa*. The lower half is the *in-world* of both an individual and a town, while the upper half represents their *outer-world*. This change of mind represented a move from the individual to the collective (fig. 633). His (linear) approach started with a simple practical life (1), moved to a simple mental life (2), then further into a full inner life (3) and ended into a complete effective life (4). Geddes brought some interesting vistas of the human position in life, but he was unable to get rid of an oppositional approach.

LEVEL (1905)	TOWN-CITY (Notation of life)	ACT-DEED	ACT-DEED
1. Out-world	Town	Facts	Acts
2. In-world	School	Memories	Facts
3. In-world	Cloister	Plans	Dreams
4. Out-world	City	Acts	Deeds

Fig. 633 – This comparison of the 'Town-City' and 'Act-Deed' formulas by Patrick Geddes during the course of his life indicates a shift from an individual to a communal psychology.

Frank Lloyd Wright (1867/1869 – 1959; research by his biographer Henry-Russell HITCHCOCK revealed that his birthday was two years earlier than Lloyd Wright self indicated; see also an article by HINES, 1967) was the American equivalent of an architect, who searched for the ideas behind the ideal city. He found solutions in the

selective use of technical achievement (of the 'old' order) and used them in the new order. Increased mobility (the motor car) brought a new element in city planning, for good and worse. Rent had to be abolished, because it made man to a slave. Pleasure in work and leisure became the dictum for the free citizen.

Brasilia (Brasil), Islamabad (Pakistan), Chandigarh (India) and Canberra (Australia) are examples of ideal cities, which were realized in the second half of the twentieth century. The cities had certain socio-political features in common, of which a cry for identity was probably the most obvious. An extensive literature on these cities exists, mainly written in the aftermath of their foundation. They are still a reference point in more recent publications on urbanism. The quadralectic approach will try to point out the types of division thinking, as caught in the visible reality of these urbanizations.

James HOLSTON (1989) gave an anthropological critique of Brasilia as a 'modernist city', which was inspired by (hidden) political ideas. His 'human' (political) approach offers a good insight into the mental position of the decision makers – although no reference to division thinking was made. The conception of Brasilia in the 1950's as a utopian urban planning project provided – for those able to distinguish the importance of division thinking in decision making – a spectacular display of communication at work. All the elements of interaction, from the initial barren land (I), the ideas about a beginning (II), its subsequent execution under the architect Oscar Niemeyer (III) and its ongoing evaluation (IV), are present.

A quarter, short for quarter dollar, is a U.S. coin worth 25 cents, one-fourth of a dollar. It has been produced since 1796.[1] The choice of 1⁄4 as a denomination—as opposed to the 1⁄5 more common elsewhere—originated with the practice of dividing Spanish milled dollars into eight wedge-shaped segments. At one time "two bits" (that is, two "pieces of eight") was a common nickname for a quarter.

There are four main scales, or sizes of systems, dealt with in meteorology: the macroscale, the synoptic scale, the mesoscale, and the microscale.[4] The macroscale

deals with systems with global size, such as the Madden-Julian Oscillation. Synoptic scale systems cover a portion of a continent, such as extratropical cyclones, with dimensions of 1,000-2,500 km (620-1,550 mi) across.[5] The mesoscale is the next smaller scale, and often is divided into two ranges: meso-alpha phenomena range from 200-2,000 km (125-1,243 mi) across (the realm of the tropical cyclone), while meso-beta phenomena range from 20–200 km (12-125 mi) across (the scale of the mesocyclone). The microscale is the smallest of the meteorological scales, with a size under two kilometers (1.2 mi) (the scale of tornadoes and waterspouts).[6] These horizontal dimensions are not rigid divisions but instead reflect typical sizes of phenomena having certain dynamic characteristics. For example, a system does not necessarily transition from meso-alpha to synoptic scale when its horizontal extent grows from 2,000 to 2,001 km (1,243 mi).

QMRFour-wave mixing (FWM) is an intermodulation phenomenon in non-linear optics, whereby interactions between two wavelengths produce two extra wavelengths in the signal. It is similar to the third-order intercept point in electrical systems. Four-wave mixing can be compared to the intermodulation distortion in standard electrical systems.

The four stages in coal formation are peat, lignite, bituminous and anthracite. Each of these stages must be completed for coal to form.

Stage one in coal production is peat. Peat is a fibrous substance that is oxidized by water and carbon dioxide. When a plant dies, and stays under water, it builds up an accumulation of peat. Peat, when burned, produces a lot of smoke and a large flame and therefore is rarely used as a heat source.
Stage two of the coal formation process is lignite. Lignite forms when peat is put under considerable vertical pressure. It contains small amounts of plant matter and is very fragile so it must never be handled before burning.
Bituminous coal is the third stage of coal production. The lignite continues receiving heavy vertical pressure until it turns a dark brown and becomes soft coal. Bituminous coal is used as an energy source in many parts of the world.
The final stage of coal production is the anthracite stage. During this stage, soft coal becomes hard coal. It takes on a certain luster and is formed due to intense pressure and high temperatures. Anthracite produces little smoke and is the coal most people are familiar with.

Coal has been very important in human history. It is no coincidence the process through which it goes reflects the qudrant pattern.

Von Schelling considered the four parts of the world and the four directions as a basic division-method. He applied this scheme to the four elements nitrogen (N), carbon (C), hydrogen (H) and oxygen (O) by placing them in a quinquennial position with water as an undifferentiated medium in the middle

Synthetic polymers are human-made polymers. From the utility point of view they can be classified into four main categories: thermoplastics, thermosets, elastomers and synthetic fibers. They are found commonly in a variety of consumer products such as money, super glue, etc.

The first serious attempts to formulate a geological time scale that could be applied anywhere on Earth were made in the late 18th century. The most influential of those early attempts (championed by Abraham Werner, among others) divided the rocks of Earth's crust into four types: Primary, Secondary, Tertiary, and Quaternary. Each type of rock, according to the theory, formed during a specific period in Earth history. It was thus possible to speak of a "Tertiary Period" as well as of "Tertiary Rocks." Indeed, "Tertiary" (now Paleogene and Neogene) and "Quaternary" (now Pleistocene and Holocene) remained in use as names of geological periods well into the 20th century.

The most common arrangement of liquid water (H_2O) molecules is tetrahedral with two hydrogen atoms covalently attached to oxygen and two attached by hydrogen bonds. Since the hydrogen bonds vary in length many of these water molecules are not symmetrical and form transient irregular tetrahedra between their four associated hydrogen atoms. Water is what keeps organisms alive and its polar nature is also very important in chemistry. It is no coincidence that it is tetrahedrally arranged. Four is very important.

The term Quaternary ("fourth") was proposed by Giovanni Arduino in 1759 for alluvial deposits in the Po River valley in northern Italy. It was introduced by Jules Desnoyers in 1829 for sediments of France's Seine Basin that seemed clearly to be younger than Tertiary Period rocks.

The Quaternary Period follows the Neogene Period and extends to the present. The Quaternary covers the time span of glaciations classified as the Pleistocene, and includes the present interglacial period, the Holocene.

This places the start of the Quaternary at the onset of Northern Hemisphere glaciation approximately 2.6 million years ago. Prior to 2009, the Pleistocene was defined to be from 1.805 million years ago to the present, so the current definition of the Pleistocene includes a portion of what was, prior to 2009, defined as the Pliocene.

Biology chapter

C4 carbon fixation is one of three biochemical processes, along with C3 and CAM photosynthesis, used to fix carbon. It is named for the 4-carbon molecule present in the first product of carbon fixation in the small subset of plants that use that process, in contrast to the 3-carbon molecule products in C3 plants.

C4 fixation is an elaboration of the more common C3 carbon fixation and is believed to have evolved more recently. C4 and CAM overcome the tendency of the enzyme RuBisCO to wastefully fix oxygen rather than carbon dioxide in the process of photorespiration. This is achieved in a more efficient environment for RubisCo by shuttling CO_2 via malate or aspartate from mesophyll cells to bundle-sheath cells. In these bundle-sheath cells, RuBisCO is isolated from atmospheric oxygen and saturated with the CO_2 released by decarboxylation of the malate or oxaloacetate. These additional steps, however, require more energy in the form of ATP. Because of this extra energy requirement, C4 plants are able to more efficiently fix carbon in only certain conditions, with the more common C3 pathway being more efficient in other conditions.

The first experiments indicating that some plants do not use C3 carbon fixation but instead produce malate and aspartate in the first step of carbon fixation were done in the 1950s and early 1960s by Hugo P. Kortschak[1] and Yuri Karpilov.[2] The C4 pathway was elucidated by Marshall Davidson Hatch and C. R. Slack, in Australia, in 1966; it is sometimes called the Hatch-Slack pathway.[3]

In C3 plants, the first step in the light-independent reactions of photosynthesis involves the fixation of CO_2 by the enzyme RuBisCO into 3-phosphoglycerate. However, due to the dual carboxylase and oxygenase activity of RuBisCo, some part of the substrate is oxidized rather than carboxylated, resulting in loss of substrate and consumption of energy, in what is known as photorespiration. In order to bypass the photorespiration pathway, C4 plants have developed a mechanism to efficiently deliver CO_2 to the RuBisCO enzyme. They utilize their specific leaf anatomy where chloroplasts exist not only in the mesophyll cells in the outer part of their leaves but in the bundle sheath cells as well. Instead of direct fixation to RuBisCO in the Calvin cycle, CO_2 is incorporated into a 4-carbon organic acid, which has the ability to regenerate CO_2 in the chloroplasts of the bundle sheath cells. Bundle sheath cells can then utilize this CO_2 to generate carbohydrates by the conventional C3 pathway.

The first step in the pathway is the conversion of pyruvate to phosphoenolpyruvate (PEP), by the enzyme pyruvate orthophosphate dikinase. This reaction requires inorganic phosphate and ATP plus pyruvate, producing phosphoenolpyruvate, AMP, and inorganic pyrophosphate (PPi). The next step is the fixation of CO_2 into oxaloacetate by the enzyme PEP carboxylase. Both of these steps occur in the mesophyll cells:

pyruvate + Pi + ATP → PEP + AMP + PPi
PEP + CO2 → oxaloacetate
PEP carboxylase has a lower Km for HCO3- — and, hence, higher affinity — than RuBisCO. Furthermore, O2 is a very poor substrate for this enzyme. Thus, at relatively low concentrations of CO2, most CO2 will be fixed by this pathway.

The product is usually converted to malate, a simple organic compound, which is transported to the bundle-sheath cells surrounding a nearby vein. Here, it is decarboxylated to produce CO2 and pyruvate. The CO2 now enters the Calvin cycle and the pyruvate is transported back to the mesophyll cell.

Since every CO2 molecule has to be fixed twice, first by 4-carbon organic acid and second by RuBisCO, the C4 pathway uses more energy than the C3 pathway. The C3 pathway requires 18 molecules of ATP for the synthesis of one molecule of glucose, whereas the C4 pathway requires 30 molecules of ATP. This energy debt is more than paid for by avoiding losing more than half of photosynthetic carbon in photorespiration as occurs in some tropical plants,[citation needed] making it an adaptive mechanism for minimizing the loss.

There are several variants of this pathway:

The 4-carbon acid transported from mesophyll cells may be malate, as above, or aspartate
The 3-carbon acid transported back from bundle-sheath cells may be pyruvate, as above, or alanine
The enzyme that catalyses decarboxylation in bundle-sheath cells differs. In maize and sugarcane, the enzyme is NADP-malic enzyme; in millet, it is NAD-malic enzyme; and, in Panicum maximum, it is PEP carboxykinase.

The C4 plants often possess a characteristic leaf anatomy called kranz anatomy, from the German word for wreath. Their vascular bundles are surrounded by two rings of cells; the inner ring, called bundle sheath cells, contains starch-rich chloroplasts lacking grana, which differ from those in mesophyll cells present as the outer ring. Hence, the chloroplasts are called dimorphic. The primary function of kranz anatomy is to provide a site in which CO2 can be concentrated around RuBisCO, thereby avoiding photorespiration. In order to maintain a significantly higher CO2 concentration in the bundle sheath compared to the mesophyll, the boundary layer of the kranz has a low conductance to CO2, a property that may be enhanced by the presence of suberin.[4]

Although most C4 plants exhibit kranz anatomy, there are, however, a few species that operate a limited C4 cycle without any distinct bundle sheath tissue. Suaeda aralocaspica, Bienertia cycloptera, Bienertia sinuspersici and Bienertia kavirense (all chenopods) are terrestrial plants that inhabit dry, salty depressions in the deserts of the Middle East. These plants have been shown to operate single-cell C4 CO2-concentrating mechanisms, which are unique among the known C4 mechanisms.[5][6][7][8] Although the cytology of both

genera differs slightly, the basic principle is that fluid-filled vacuoles are employed to divide the cell into two separate areas. Carboxylation enzymes in the cytosol can, therefore, be kept separate from decarboxylase enzymes and RuBisCO in the chloroplasts, and a diffusive barrier can be established between the chloroplasts (which contain RuBisCO) and the cytosol. This enables a bundle-sheath-type area and a mesophyll-type area to be established within a single cell. Although this does allow a limited C3 cycle to operate, it is relatively inefficient, with the occurrence of much leakage of CO2 from around RuBisCO. There is also evidence for the exhibiting of inducible C4 photosynthesis by non-kranz aquatic macrophyte Hydrilla verticillata under warm conditions, although the mechanism by which CO2 leakage from around RuBisCO is minimised is currently uncertain.[9]

C4 plants have a competitive advantage over plants possessing the more common C3 carbon fixation pathway under conditions of drought, high temperatures, and nitrogen or CO2 limitation. When grown in the same environment, at 30 °C, C3 grasses lose approximately 833 molecules of water per CO2 molecule that is fixed, whereas C4 grasses lose only 277. This increased water use efficiency of C4 grasses means that soil moisture is conserved, allowing them to grow for longer in arid environments.[10]

C4 carbon fixation has evolved on up to 40 independent occasions in different families of plants, making it a prime example of convergent evolution.[11] This convergence may have been facilitated by the fact that many potential evolutionary pathways to a C4 phenotype exist, many of which involve initial evolutionary steps not directly related to photosynthesis.[12] C4 plants arose around 25 to 32 million years ago[11] during the Oligocene (precisely when is difficult to determine) and did not become ecologically significant until around 6 to 7 million years ago, in the Miocene Period.[11] C4 metabolism originated when grasses migrated from the shady forest undercanopy to more open environments,[13] where the high sunlight gave it an advantage over the C3 pathway.[14] Drought was not necessary for its innovation; rather, the increased resistance to water stress was a by-product of the pathway and allowed C4 plants to more readily colonise arid environments.[14]

Today, C4 plants represent about 5% of Earth's plant biomass and 3% of its known plant species.[10][15] Despite this scarcity, they account for about 30% of terrestrial carbon fixation.[11] Increasing the proportion of C4 plants on earth could assist biosequestration of CO2 and represent an important climate change avoidance strategy. Present-day C4 plants are concentrated in the tropics and subtropics (below latitudes of 45°) where the high air temperature contributes to higher possible levels of oxygenase activity by RuBisCO, which increases rates of photorespiration in C3 plants.

About 7,600 plant species use C4 carbon fixation, which represents about 3% of all terrestrial species of plants. All these 7,600 species are angiosperms. C4 carbon fixation is less common in dicots than in monocots, with only 4.5% of dicots using the C4 pathway, compared to 40% of monocots. Despite this, only three families of monocots utilise C4

carbon fixation compared to 15 dicot families. Of the monocot clades containing C4 plants, the grass (Poaceae) species use the C4 photosynthetic pathway most. Forty-six percent of grasses are C4 and together account for 61% of C4 species. These include the food crops maize, sugar cane, millet, and sorghum.[16][17] Of the dicot clades containing C4 species, the order Caryophyllales contains the most species. Of the families in the Caryophyllales, the Chenopodiaceae use C4 carbon fixation the most, with 550 out of 1,400 species using it. About 250 of the 1000 species of the related Amaranthaceae also use C4.[10][18]

Members of the sedge family Cyperaceae, and numerous families of Eudicots, including the daisies Asteraceae, cabbages Brassicaceae, and spurges Euphorbiaceae also use C4.

Given the advantages of C4, a group of scientists from institutions around the world are working on the C4 Rice Project to turn rice, a C3 plant, into a C4 plant. As rice is the world's most important human food—it is the staple food for more than half the planet—having rice that is more efficient at converting sunlight into grain could have significant global benefits towards improving food security. The team claim C4 rice could produce up to 50% more grain—and be able to do it with less water and nutrients.[19][20][21]

The researchers have already identified genes needed for C4 photosynthesis in rice and are now looking towards developing a prototype C4 rice plant. In 2012, the Government of the United Kingdom along with the Bill & Melinda Gates Foundation provided $14 million over 3 years towards the C4 Rice Project at the International Rice Research Institute.[22]

Corn uses the C4 pathway, minimizing photorespiration.
C4 plants capture carbon dioxide in their mesophyll cells (using an enzyme called Phosphoenolpyruvate carboxylase which catalyzes the combination of carbon dioxide with a compound called Phosphoenolpyruvate (PEP)), forming oxaloacetate. This oxaloacetate is then converted to malate and is transported into the bundle sheath cells (site of carbon dioxide fixation by RuBisCO) where oxygen concentration is low to avoid photorespiration. Here, carbon dioxide is removed from the malate and combined with RuBP by RuBisCO in the usual way, and the Calvin cycle proceeds as normal. The CO
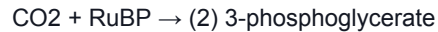2 concentrations in the Bundle Sheath are approximately 10-20 fold higher than the concentration in the mesophyll cells.[6]

This ability to avoid photorespiration makes these plants more hardy than other plants in dry and hot environments, wherein stomata are closed and internal carbon dioxide levels are low. Under these conditions, photorespiration does occur in C4 plants, but at a much reduced level compared with C3 plants in the same conditions. C4 plants include sugar cane, corn (maize), and sorghum.
There are also C3 plants and C2 plants. The fourth square is always different though.

C3 carbon fixation is one of three metabolic pathways for carbon fixation in photosynthesis, along with C4 and CAM. This process converts carbon dioxide and

ribulose bisphosphate (RuBP, a 5-carbon sugar) into 3-phosphoglycerate through the following reaction:

CO_2 + RuBP → (2) 3-phosphoglycerate
This reaction occurs in all plants as the first step of the Calvin–Benson cycle. In C4 plants, carbon dioxide is drawn out of malate and into this reaction rather than directly from the air.

Plants that survive solely on C3 fixation (C3 plants) tend to thrive in areas where sunlight intensity is moderate, temperatures are moderate, carbon dioxide concentrations are around 200 ppm or higher,[1] and groundwater is plentiful. The C3 plants, originating during Mesozoic and Paleozoic eras, predate the C4 plants and still represent approximately 95% of Earth's plant biomass. C3 plants lose 97% of the water taken up through their roots to transpiration.[2] Examples include rice and barley.

C3 plants cannot grow in hot areas because RuBisCO incorporates more oxygen into RuBP as temperatures increase. This leads to photorespiration, which leads to a net loss of carbon and nitrogen from the plant and can, therefore, limit growth. In dry areas, C3 plants shut their stomata to reduce water loss, but this stops CO_2 from entering the leaves and, therefore, reduces the concentration of CO_2 in the leaves. This lowers the $CO_2:O_2$ ratio and, therefore, also increases photorespiration.[citation needed] C4 and CAM plants have adaptations that allow them to survive in hot and dry areas, and they can, therefore, out-compete C3 plants in these areas.

The isotopic signature of C3 plants shows higher degree of 13C depletion than the C4 plants.

Crassulacean acid metabolism, also known as CAM photosynthesis, is a carbon fixation pathway that evolved in some plants as an adaptation to arid conditions.[1] In a plant using full CAM, the stomata in the leaves remain shut during the day to reduce evapotranspiration, but open at night to collect carbon dioxide (CO_2). The CO_2 is stored as the four-carbon acid malate in vacuoles at night, and then in the daytime, the malate is transported to chloroplasts where it is converted back to CO_2, which is then used during photosynthesis. The pre-collected CO_2 is concentrated around the enzyme RuBisCO, increasing photosynthetic efficiency. This metabolism was first studied in plants of the Crassulaceae family. These mainly include succulents. The first time it was studied, Crassula was used as a model organism.

Although the words quadruped and tetrapod are both derived from terms meaning "four-footed", they have distinct meanings. A tetrapod is any member of the taxonomic unit Tetrapoda (which is defined by descent from a specific four-limbed ancestor) whereas a

quadruped actually uses four limbs for locomotion. Not all tetrapods are quadrupeds and not all quadrupeds are tetrapods.

The distinction between quadrupeds and tetrapods is important in evolutionary biology, particularly in the context of tetrapods whose limbs have adapted to other roles (e.g. hands in the case of humans, wings in the case of birds, and fins in the case of whales). All of these animals are tetrapods, but none is a quadruped. Even snakes, whose limbs have become vestigial or lost entirely, are nevertheless tetrapods.

Most quadrupedal animals are tetrapods but there are a few exceptions. For example, among the insects, the praying mantis is a quadruped.

Quadrupedalism or pronograde posture is a form of terrestrial locomotion in animals using four limbs or legs. An animal or machine that usually moves in a quadrupedal manner is known as a quadruped, meaning "four feet" (from the Latin quad for "four" and ped for "foot"). The majority of quadrupeds are vertebrate animals, including mammals such as cattle, dogs and cats, and reptiles, like lizards.

Worms, jellies, crustaceans, gastropods, cephalopods, echinoderms (sea stars, brittle stars, sea urchins, sea cucumbers etc.), millipedes, centipedes, arachnids, insects, fish, caecillians, snakes, birds, cetaceans (whales, dolphins etc.), and humans are usually not quadrupeds, with some exceptions; for example, among the insects, the praying mantis is a quadruped. A few birds may use quadrupedal movement in some circumstances; for example, the shoebill will sometimes use its wings to right itself after lunging at prey.[1]

The French naturalist and zoologist Georges Cuvier (1769 – 1832) embodied another delegate of the new era. He arrived in Paris in 1795 and was eager to find a solution for the evolutionary problems of animals. He proposed, that the four main groups in nature –
Square 1: vertebrates,
Square 2: molluscs,
Square 3: articulata (insects) and
square 4: 'radiata' (radial-symmetric animals) – developed themselves every time anew after a major catastrophe. The fourfold division was, according to Cuvier, the 'ideal specification' of nature (TOULMIN & GOODFIELD, 1965).

Cuvier's rival, Lamarck (1744 – 1829), suggested – in a lecture in the year 1800 – a different solution. Not the catastrophes caused the changes, but the species changed themselves. He pointed to the four classes in the animal kingdom (mammals, birds, reptiles and fish) and their decreasing complexity. They could adapt themselves (within the classes) to changing circumstances. It is curious to note, that the term 'biology' was first used in the year 1800 to describe the science of plant- and animal kingdom

(JORDANOVA, 1984). Apparently, the need for such a word arose at the time that the study of nature became a serious matter.

Cuvier is noted for his division of animals, not into vertebrates and invertebrates, but into four great embranchements: Vertebrata, Mollusca, Articulata (insects and crustaceans), and Radiata. Foucault (1966) considered this the real revolution in biology, by breaking the Great Chain of Being into four embranchements, and he felt that Darwin's subsequent revolution was minor in comparison.

QMRIn Greek and Latin poetry, a choriamb /ˈkɔriˌæmb/ is a metron (prosodic foot) consisting of four syllables in the pattern long-short-short-long (— ‿ ‿ —), that is, a trochee alternating with an iamb. Choriambs are one of the two basic metra[1] that do not occur in spoken verse, as distinguished from true lyric or sung verse.[2] The choriamb is sometimes regarded as the "nucleus" of Aeolic verse, because the pattern long-short-short-long pattern occurs, but to label this a "choriamb" is potentially misleading.[3]

In the prosody of English and other modern European languages, "choriamb" is sometimes used to describe four-syllable sequence of the pattern stressed-unstressed-unstressed-stressed (again, a trochee followed by an iamb): for example, "over the hill", "under the bridge", and "what a mistake!".

English prosody[edit]
In English, the choriamb is often found in the first four syllables of iambic pentameter verses, as here in Keats' To Autumn:

Who hath not seen thee oft amid thy store?
Sometimes whoever seeks abroad may find
Thee sitting careless on a granary floor,
Thy hair soft-lifted by the winnowing wind;
Or on a half-reap'd furrow sound asleep,
Drows'd with the fume of poppies, while thy hook
Spares the next swath and all its twined flowers:
And sometimes like a gleaner thou dost keep
Steady thy laden head across a brook;
Or by a cider-press, with patient look,
Thou watchest the last oozings hours by hours.

The 'Tree of the Principles and Grades of Medicine' as given in the 'Liber Principiorum Medicinae' of Raymond Lull in the edition of the 'Opera omnia' by Ivo Salzinger (Mainz, 1721 – 1742). The 'rota' gives the four 'humores' with a dual four-fold subdivision of the characters: A – hot (calor), B – dry (siccitas); C – wet, moist (humiditas) and D – cold (frigaditas). The 'Lullian' series is not directly connected to the elements, but could be interpreted as the 'Aristotelian type': fire – air – water – earth.

The 'arbor' (tree) and its branches (ramifications) provides a good insight in Lull's position as a transitional figure between the 'old' (left branch, Res contra Naturam) and the 'new doctors' (right branch, Quadrangulus). The classical division of the four temperaments, based on 'humores' (Cholera, Melancholia, Phlegma and Sangius) hides the trunk as a 'rota'. The subdivision in four circles reflects Lull's own 'mathematical' approach based on a dynamic shift of a four-division.

The ABCD-sequence in the four inner circles are explained in the central stem: A (calor/hot), B (siccitas/dry), C (humiditas/moist) and D (frigiditas/ cold). They refer to the dynamic character of the elements within the four major temperaments. Note that the sequence does not correspond with the one given by YATES (1954) in fig. 150.

The primary combination of the choleric temperament is AB (calor – siccitas or warm and dry), but other combination are also possible, like AC, CD and DB. The same holds for the melancholic character, which is primary BD (siccitas – frigaditas or dry and cold), secundary BA, tertiary AC and quaternary CD. The sanguine character is primary CA (humiditas – calor or moist and hot), secundary CD, tertiary DB and quaternary BA. And finally the phlegmatic character is primary DC (frigiditas – humiditas or cold and moist), secundary DB, tertiary BA and quaternary AC.

The four combinations of each major temperament are indicated on the branches to the right of the main stem: the choleric (A/Calor) can be fully developed with its four combinations (circles), which gives a character E with four possibilities (1 – 4), a character F with three possibilities, a character G with two possibilities and a character H with only one option. It is not exactly clear (to me) what these diminishing prospects mean (would it be a decreasing division thinking?).

The same subdivision can be made for the melancholic temperament (B/Siccitas, leading to the characters K, L, M and N), the sanguine character (C/Humiditas, given in the characters O, P, Q and R) and the phlegmatic character (D/Frigiditas, indicated with the letters S, T, V and Y). All subtypes have a decreasing number, from four to one, written around the individual letters.

The previous approach was an addition to the 'old school' of medicine. Lull emphasized the mathematical nature of the combinatory possibilities in the 'new school' of the 'Quadrangulus'. The 'new doctors' were calculators rather than vague observers of the 'Res Innaturales'. The historic world of four-fold (division) thinking, which had lost its dynamism, was restated in the factual-mathematical language of the 'Quadrangulus'. The quadrants were characterized as Perfectio, Esse, Defectus and Privatio.

However, to experience the 'exactness' to the full, required a modern, lower – type of division thinking ('Triangulus'). The world of facts could be hostile to the 'Quadrangulus'. Facts were seldom perfect, although they should be. An efficient way to circumvent this difficulty was a narrowing of division thinking. 'Scientific' observations were made in the

world of the 'Triangulus', in the tri-partition of Principium, Medium and Finis. In terms of quadralectic thinking, there was a shift from the unity of the First Quadrant to the unity of the Third Quadrant.

The illustration of Lull's 'Tree of the Principles and Grades of Medicine', gave an example of the transitory situation of his time: from the old world of static and stale tetradic thinking in terms of elements to the universe of dynamic calculations in a human-centred, tripartite setting.

Lull's life and work was a reflection of this change. He started in the old, quadripartite frame of mind, but found that the 'Triangulus' approach offered far more 'proof'. The elemental features were reduced, first in the 'Ars inventiva (ca. 1289) and later in the 'Ars generalis ultima' or its abridgement 'Ars brevis' (1308), and the ternary system became dominant. Even the traditional seven virtues and seven vices had to be extended to sets of nine to meet the requirements of the system.

The dynamic character – which is a natural constituent of the tetradic way of thinking, but becomes static in a numerological approach – was carried forward by Lull in the ternary phase by 'volvelles'. These concentric wheels or 'rota', appeared in his later Art (fig. 152). It is a striking example of cyclic thinking in which 'everything is connected to everything'. Communication is a matter of turning the concentric circles (and their division) to the appropriate setting.

Swiss physician and pedagogue Ignaz Paul Vital Troxler (1780 – 1866), a nearly forgotten tetragonic mind at the beginning of the nineteenth century. He placed the 'Tetractys' in the center of his anthropology. His theory of illnesses (pathology) and their mutual relation with the different organic systems stands as a model of tetradic thinking.

He was a tetradic thinker avant-la-lettre. 'The tetractys is in many ways the core of Troxler's anthropology' said HEUSSER (1984, p. 88) in his extensive study of his life. The four major constituents (divisions) of human life are, in Troxler's view, as follows:

1. The 'Geist' is the 'Nous' or 'Pneuma' of the classics, the infinite humanity in man ('die unendliche Menschheit im Menschen'). This could be translated as the invisible invisibility of modern quadralectic thinking.

2. The 'Seele' and

3. The 'Leib' are a polarity. The first can be compared with the Psyche and the second with the Soma. Soul and body are the invisible and visible components of human visibility.

4. Finally the 'Körper' (Sarx), as representatives of the lowest member of the human total being ('unterste Glied der menschlichen Gesamt-wesenheit'). The pluriform 'bodies' are the collective element in a visible invisibility (the trees and the wood).

'The four components of the nature of man, represented in the tetractyn as spirit (Geist), soul (Seele), body (Leib) and human beings (Körper) are a unity. The spirit itself shapes the unity and comprises all the other divisions' stated Troxler in his book 'Naturlehre des menschlichen Erkennens oder Metaphysik' (1828). In an earlier book 'Blicke in das Wesen des Menschen' (1812) are these 'Wesensgliedern' (Geist, Seele, Leib and Körper) figured in a scheme of four possibilities:

1. relative active vital process Geist

2. passive Körper

3. relative active organism Seele

4. passive Leib

This four-fold arrangement was interconnected in the following scheme:

SPIRIT (GEIST)

(absolute self-determined)

SOUL (SEELE) BODY (LEIB)

(relative self-determined) (relative impressionable)

HUMAN BEINGS (KÖRPER)

(absolute determined)

Cuvier's most admired work was his Le Règne Animal. It appeared in four octavo volumes in 1817; a second edition in five volumes was brought out in 1829–1830. In this classic work, Cuvier presented the results of his life's research into the structure of living and fossil animals. With the exception of the section on insects, in which he was assisted by his friend Latreille, the whole of the work was his own. It was translated into English many times, often with substantial notes and supplementary material updating the book in accordance with the expansion of knowledge

For the Règne Animal, using evidence from comparative anatomy and palaeontology—including his own observations—Cuvier divided the animal kingdom into four principal body plans. Taking the central nervous system as an animal's principal organ system which controlled all the other organ systems such as the circulatory and digestive systems, Cuvier distinguished four types of organisation of an animal's body:

I. with a brain and a spinal cord (surrounded by parts of the skeleton)
II. with organs linked by nerve fibres
III. with two longitudinal, ventral nerve cords linked by a band with two ganglia positioned below the oesophagus

IV. with a diffuse nervous system which is not clearly discernible

Grouping animals with these body plans resulted in four "embranchements" or branches (vertebrates, molluscs, the articulata that he claimed were natural (arguing that insects and annelid worms were related) and zoophytes (radiata)). This effectively broke with the mediaeval notion of the continuity of the living world in the form of the great chain of being. It also set him in opposition to both Saint-Hilaire and Lamarck: Lamarck claimed that species could transform through the influence of the environment, while Saint-Hilaire argued in 1820 that two of Cuvier's branches, the molluscs and radiata, could be united via various features, while the other two, articulata and vertebrates, similarly had parallels with each other. Then in 1830, Saint-Hilaire argued that these two groups could themselves be related, implying a single form of life from which all others could have evolved, and that Cuvier's four body plans were not fundamental.

The classification adopted by Cuvier to define the natural structure of the animal kingdom, including both living and fossil forms,[17] was as follows, the list forming the structure of the Règne Animal. Where Cuvier's group names correspond (more or less) to modern taxa, these are named, in English if possible, in parentheses. The table from the 1828 Penny Cyclopaedia indicates species that were thought to belong to each group in Cuvier's taxonomy.

I. Vertébrés. (Vertebrates)
Mammifères (Mammals): 1. Bimanes, 2. Quadrumanes, 3. Carnassiers (Carnivores), 4. Rongeurs (Rodents), 5. Édentés (Edentates), 6. Pachydermes (Pachyderms), 7. Ruminants (Ruminants), 8. Cétacés (Cetaceans).
Oiseaux (Birds): 1. Oiseaux de proie (Birds of prey), 2. Passereaux (Passerines), 3. Grimpeurs (Piciformes), 4. Gallinacés (Gallinaceous birds), 5. Échassiers (Waders), 6. Palmipèdes (Anseriformes).
Reptiles (Reptiles, inc. Amphibians): 1. Chéloniens (Chelonii), 2. Sauriens (Lizards), 3. Ophidiens (Snakes), 4. Batraciens (Amphibians).
Poissons (Fishes): 1. Chrondroptérygiens à branchies fixes (Chondrichthyes), 2. Sturioniens ou Chrondroptérygiens à branchies libres (Sturgeons), 3. Plectognates (Tetraodontiformes), 4. Lophobranches (Syngnathidae), 5. Malacoptérygiens abdominaux, 6. Malacoptérygiens subbrachiens, 7. Malacoptérygiens apodes, 8. Acanthoptérygiens (Acanthopterygians).
II. Mollusques. (Molluscs)
Céphalopodes. (Cephalopods)
Ptéropodes. (Pteropods)
Gastéropodes (Gastropods): 1. Nudibranches (Nudibranchs), 2. Inférobranches, 3. Tectibranches, 4. Pulmonés (Pulmonata), 5. Pectinibranches, 6. Scutibranches, 7. Cyclobranches.
Acéphales (Bivalves etc.): 1. Testacés, 2. Sans coquilles.
Brachiopodes. (Brachiopods, now a separate phylum)
Cirrhopodes. (Barnacles, now in Crustacea)
III. Articulés. (Articulated animals: now Arthropods and Annelids)
Annélides (Annelids): 1. Tubicoles, 2. Dorsibranches, 3. Abranches.
Crustacés (Crustaceans): 1. Décapodes (Decapods), 2. Stomapodes (Stomatopods), 3. Amphipodes (Amphipods), 4. Isopodes (Isopods), 5. Branchiopodes (Branchiopods).
Arachnides (Arachnids): 1. Pulmonaires, 2. Trachéennes.
Insectes (Insects, inc. Myriapods): 1. Myriapodes, 2. Thysanoures (Thysanura), 3. Parasites, 4. Suceurs, 5. Coléoptères (Coleoptera), 6. Orthoptères (Orthoptera), 7. Hémiptères (Hemiptera), 8. Névroptères (Neuroptera), 9. Hyménoptères (Hymenoptera), 10. Lépidoptères (Lepidoptera), 11. Ripiptères (Strepsiptera), 12. Diptères (Diptera).
IV. Zoophytes. (Zoophytes, now Cnidaria] and other phyla)
Échinodermes (Echinoderms): 1. Pédicellés, 2. Sans pieds.
Intestinaux (Intestinal worms): 1. Cavitaires, 2. Parenchymateux.
Acalèphes (Jellyfish and other free-floating polyps): 1. Fixes, 2. Libres.
Polypes (Cnidaria): 1. Nus, 2. À polypiers.

Infusoires (Infusoria, various protistan phyla): 1. Rotifères (Rotifers), 2. Homogènes.
Reception

The book was in the library of HMS Beagle for Charles Darwin's voyage.[21] In The Origin of Species (1859), in a chapter on the difficulties facing the theory, Darwin comments that "The expression of conditions of existence,[b] so often insisted on by the illustrious Cuvier, is fully embraced by the principle of natural selection." In fact Darwin did not argue that God could not have created the first living organism, but Darwin did believe that organisms evolved.

The mantis shrimp, or stomatopod, is used in biology as an example of an organism with an extraordinary visual mechanism. They are upheld by biologists as the organism that sees the world in an incredible way and of an organism that has developed a completely different mechanism of seeing than that of humans. But the seeing mechanism of the mantis shrimp fits the quadrant model pattern.

Compared to the three types of color receptive cones that humans possess in their eyes, the eyes of a mantis shrimp carry 16 types of color receptive cones. It was once thought that this gives the crustacean the ability to recognize colors that are unimaginable by other species.

The midband region of its eye is made up of six rows of specialised ommatidia. Four rows carry up to 16 different photoreceptor pigments, 12 for colour sensitivity, others for colour filtering. The vision of the mantis shrimp can perceive both polarised light and multispectral images. Their eyes (mounted on mobile stalks and capable of moving independently of each other) are similarly variably colored and are considered to be the most complex eyes in the animal kingdom

Rows 1–4 of the midband are specialised for color vision, from ultra-violet to longer wavelengths. Their UV-vision can detect five different frequency bands in the deep ultraviolet. To do this they use two photoreceptors in combination with four different colour filters.[

It has four rows with 16 different photoreceptors. The four is the quadrant. 16 is the number of squares in the quadrant model. 12 of the squares are for color sensitivity. That is the first three quadrants. The fourth quadrant is always different. The fourth quadrant has four photoreceptors for colour filtering. Therefore the mantis shrimp, the creature that biologists see as having the most special and unique visual mechanism, has a visual mechanism that fulfills the quadrant model pattern.

Some species have at least 16 different photoreceptor types, which are divided into four classes (their spectral sensitivity is further tuned by colour filters in the retinas), 12 of them for colour analysis in the different wavelengths (including six which are sensitive to ultraviolet light) and four of them for analysing polarised light. By comparison, most humans have only four visual pigments, of which three are dedicated to see colour, and the human lenses block ultraviolet light. The visual information leaving the retina seems to be processed into numerous parallel data streams leading into the central nervous system, greatly reducing the analytical requirements at higher levels.

The species Gonodactylus smithii is the only organism known to simultaneously detect the four linear and two circular polarization components required to measure all four Stokes parameters, which yield a full description of polarization. It is thus believed to have optimal polarization vision.

The vision of the stomatopod is the quadrant model pattern, and for biologists, that is what the creature is special for and what it is studied for.

Moon jellyfish often live in large groups in the sea. You can easily identify them by their four moons' in the middle. These are the reproductive organs. Males have white and females have pink moons'. Moon jellyfish have short tentacles along the edge of the bell and four short arms situated around the mouth for catching food. The tentacles of the moon jellyfish are poisonous for small marine animals but people are not affected by the toxin since it does not penetrate the skin.

Aurelia aurita (also called the moon jelly, moon jellyfish, common jellyfish, or saucer jelly) is a widely studied species of the genus Aurelia. All species in the genus are closely related, and it is difficult to identify Aurelia medusae without genetic sampling; most of what follows applies equally to all species of the genus.

The jellyfish is translucent, usually about 25–40 cm (10–16 in) in diameter, and can be recognized by its four horseshoe-shaped gonads, easily seen through the top of the bell. It feeds by collecting medusae, plankton, and mollusks with its tentacles, and bringing them into its body for digestion. It is capable of only limited motion, and drifts with the current, even when swimming.

It has four bright gonads that are under the stomach

Water striders can walk on water. They are insects. It seems kind of miraculous that they can walk on water

Family Gerridae are physically characterized by having hydrofuge hairpiles, retractable preapical claws, and elongated legs and body.

Hydrofuge hairpiles are small, hydrophobic microhairs. These are tiny hairs with more than one thousand microhairs per mm. The entire body is covered by these hairpiles, providing the water strider resistance to splashes or drops of water. These hairs repel the water, preventing drops from weighing down the body.

They look like little quadrants on the water.

Although web decorations are common in a number of spider species in the families Araneidae, Tetragnathidae and Uloboridae, they are probably best known from spiders of the genus Argiope. This genus includes a number of species known as the Saint Andrew's Cross spiders, so named for their habit of resting in their webs with their legs outstretched in the shape of an X, the traditional shape of the cross of Saint Andrew. Spiders in this genus also construct web decorations as a vertical line, and juveniles commonly construct disc-shaped decorations.[2] Other spiders construct round structures covering the entire hub of the web. The webs of spiders anyways resemble quadrants but this spider explicitly makes quadrant X in his web and biologists are not quite sure why. I say it is because it is demonstrating the quadrant pattern the form of being. One theory is the x helps to block UV light.

In North America, Argiope aurantia is commonly known as the black and yellow garden spider, zipper spider, corn spider, and writing spider, because of the similarity of the web stabilimenta to writing.

In England, Argiope bruennichi, where it is found only on the southern coast, and in other parts of Europe, including Germany, is also known as the wasp spider. In Australia, Argiope keyserlingi and A. aetherea are known as St. Andrew's Cross spiders, for their habit of resting in the web with legs outstretched in the shape of an X, the cross of St. Andrew. The large white zigzag in the centre of its web is called the stabilimentum or web decoration.

The East Asian species Argiope amoena is known in Japan as kogane-gumo. In the Philippines, they are known as gagambang ekis ("X spider", again due to the stabilementa), and gagambang pari ("priest spider", due to the spider's body resembling a priest's head with a mitre).

The average orb web is practically invisible, and it is easy to blunder into one and end up covered with a sticky web. The very easily visible pattern of banded silk made by Argiope is pure white, and some species make an "X" form, or a zigzag type of web (often with a hollow centre). The spider then aligns one pair of its legs with each of the four lines in the hollow "X", making a complete "X" of white lines with a very eye-catching spider coloured bright yellow on a field of black or variegated red white and yellow stripes forming its centre. The white patterns are called stabilimentum and reflect UV light. They have been

shown to play a role in attracting prey to the web, and possibly to prevent its destruction by large animals. The centres of their large webs are often just under 1 metre above the ground, so they are too low for anything much larger than a rabbit to walk under. The overtness of the spider and its web thus has been speculated to prevent larger creatures from accidentally destroying the web and possibly crushing the spider underfoot.

Purebred dogs of one breed are genetically distinguishable from purebred dogs of other breeds, but the means by which kennel clubs classify dogs is unsystematic. Systematic analyses of the dog genome has revealed only four major types of dogs that can be said to be statistically distinct.These include the "old world dogs" (e.g., Malamute and Shar Pei), "Mastiff"-type (e.g., English Mastiff), "herding"-type (e.g., Border Collie), and "all others" (also called "modern"- or "hunting"-type).

I had an English Mastiff growing up. I loved that dog.

In Norse mythology, a bloody, four-eyed dog called Garmr guards Helheim.

Dr Karl Albrecht, a management consultant and conference speaker based in California, is a pioneer in the development of stress-reduction training for businesspeople. He defined four common types of stress in his 1979 book, "Stress and the Manager."

Albrecht's four common types of stress are:
Time stress.
Anticipatory stress.
Situational stress.
Encounter stress.

The tetrad is the four spores of a yeast, other Ascomycota or Chlamydomonas produced after meiosis. After parent haploids mate, they produce diploids. Under appropriate environmental conditions, diploids sporulate and undergo meiosis. The meiotic products, spores, remain packaged in the parental cell body to produce the tetrad. If the two parents have a mutation in two different genes, the tetrad can segregate these genes as the parental ditype (PD), the non-parental ditype (NPD) or as the tetratype (TT)

A tetrad type containing two different genotypes, both of which are parental. A spore arrangement in Ascomycetes that contains only the two non-recombinant-type ascospores.

Non-parental ditype[edit]
A non-parental ditype (NPD) is a spore that contains only the two recombinant-type ascospores (assuming two segregating loci). A tetrad type containing two different genotypes, both of which are recombinant.

Tetratype[edit]
A Tetratype is a tetrad containing four different genotypes, two parental and two recombinant. A spore arrangement in Ascomycetes that consists of two parental and two recombinant spores indicates a single crossover between two linked loci.

Linkage analysis[edit]
The ratio between the different segregation types arising after the sporulation is a measure of the linkage between the two genes.

Tetrad dissection[edit]
Tetrad dissection has become a powerful tool of yeast geneticists, and is used in conjunction with the many established procedures utilizing the versatility of yeasts as model organisms. Use of modern microscopy and micromanipulation techniques allows the four haploid spores of a yeast tetrad to be separated and germinated individually to form isolated spore colonies

Tetrad is another word for chromosomes, which carry genetic information for all creatures. It is no coincidence they resemble the quadrant.
Prophase I is typically the longest phase of meiosis. During prophase I, homologous chromosomes pair and exchange DNA in a process called homologous recombination. This often results in chromosomal crossover. This process is critical for pairing between homologous chromosomes and hence for accurate segregation of the chromosomes at the first meiosis division. The new combinations of DNA created during crossover are a significant source of genetic variation, and result in new combinations of alleles, which may be beneficial. The paired and replicated chromosomes are called bivalents or tetrads, which have two chromosomes and four chromatids, with one chromosome coming from each parent. The process of pairing the homologous chromosomes is called synapsis. At this stage, non-sister chromatids may cross-over at points called chiasmata (plural; singular chiasma).[10] Prophase I has historically been divided into a series of substages which are named according to the appearance of chromosomes

A chiasma (plural: chiasmata), in genetics, is thought to be the point where two homologous non-sister chromatids exchange genetic material during chromosomal crossover during meiosis (sister chromatids also form chiasmata between each other (also known as a chi structure), but because their genetic material is identical, it does not cause

any change in the resulting daughter cells). The chiasmata become visible during the diplotene stage of prophase I of meiosis, but the actual "crossing-over" of genetic material is thought to occur during the previous pachytene stage. When each tetrad, which is composed of two pairs of sister chromatids, begins to split, the only points of contact are at the chiasmata.

Chiasma means cross

A tetrad is an area 2 km x 2 km square. The term has a particular use in connection with the British Ordnance Survey national grid, and then refers to any of the 25 such squares which make up a standard hectad.[1]

Tetrads are sometimes used by biologists for reporting the distribution of species to maintain a degree of confidentiality about their data,[2] though the system is not in universal use.[1]

The tetrads are labelled from A to Z (omitting O) according to the "DINTY" system as shown in the grid below, which takes its name from the letters of the second line

The kangaroo /ˌkæŋɡəˈruː/ is a marsupial from the family Macropodidae (macropods, meaning "large foot"). In common use the term is used to describe the largest species from this family, especially those of the genus Macropus: the red kangaroo, antilopine kangaroo, eastern grey kangaroo, and western grey kangaroo. Kangaroos are endemic to Australia. The Australian government estimates that 34.3 million kangaroos lived within the commercial harvest areas of Australia in 2011, up from 25.1 million one year earlier.

There are four species that are commonly referred to as kangaroos:

The red kangaroo (Macropus rufus) is the largest surviving marsupial anywhere in the world. The Red Kangaroo occupies the arid and semi-arid centre of the country. The highest population densities of the Red Kangaroo occur in the rangelands of western New South Wales. Red kangaroos are commonly mistaken as the most abundant species of kangaroo, but eastern greys actually have a larger population.[18] A large male can be 2 metres (6 ft 7 in) tall and weigh 90 kg (200 lb).[19]
The eastern grey kangaroo (Macropus giganteus) is less well-known than the red (outside Australia), but the most often seen, as its range covers the fertile eastern part of the country. The range of the Eastern Grey Kangaroo extends from the top of the Cape York Peninsula in north Queensland down to Victoria, as well as areas of south-eastern Australia and Tasmania. Population densities of Eastern Grey Kangaroos usually peak near 100 per km2 in suitable habitats of open woodlands. Populations are more limited in

areas of land clearance, such as farmland, where forest and woodland habitats are limited in size or abundance.[18]

The western grey kangaroo (Macropus fuliginosus) is slightly smaller again at about 54 kg (119 lb) for a large male. It is found in the southern part of Western Australia, South Australia near the coast, and the Darling River basin. The highest population densities occur in the western Riverina district of New South Wales and in western areas of the Nullarbor Plain in Western Australia. Populations may have declined, particularly in agricultural areas. The species has a high tolerance to the plant toxin sodium fluoroacetate, which indicates a possible origin from the south-west region of Australia.[18]

The antilopine kangaroo (Macropus antilopinus) is, essentially, the far-northern equivalent of the eastern and western grey kangaroos. It is sometimes referred to as the 'Antilopine Wallaroo,' but in behaviour and habitat it is more similar to Red and grey kangaroos. Like them, it is a creature of the grassy plains and woodlands, and gregarious. Their name comes from their fur, which is similar in colour and texture to that of antelopes. Characteristically, the noses of males swell behind the nostrils. This enlarges nasal passages and allows them to release more heat in hot and humid climates

Kangaroos are known for their pouches in which they hold their young.Once in the pouch, a baby kangaroo fastens onto one of the four teats and starts to feed.

Punctuating a kangaroo's big back legs are a pair of unique feet. Kangaroos have feet resembling other marsupials, where some of their toes are fused together. Kangaroos have four or five toes. If present, the first toe is extremely small, while the second and third toes are fused together. The fourth toe is much larger than the others, aligned with the lower leg and used as a springboard for hopping. Their smaller fifth toe supports the fourth by adding additional thrust for each hop

In Plantinga's evolutionary argument against naturalism, he argues that the truth of evolution is an epistemic defeater for naturalism (i.e. if evolution is true, it undermines naturalism). His basic argument is that if evolution and naturalism are both true, human cognitive faculties evolved to produce beliefs that have survival value (maximizing one's success at the four F's: "feeding, fleeing, fighting, and reproducing(fucking)")

All horses move naturally with four basic gaits: the four-beat walk, which averages 6.4 kilometres per hour (4.0 mph); the two-beat trot or jog at 13 to 19 kilometres per hour (8.1 to 11.8 mph) (faster for harness racing horses); the canter or lope, a three-beat gait that is 19 to 24 kilometres per hour (12 to 15 mph); and the gallop.[80] The gallop averages 40 to 48 kilometres per hour (25 to 30 mph),[81] but the world record for a horse galloping over a short, sprint distance is 88 kilometres per hour (55 mph).[82] Besides these basic gaits, some horses perform a two-beat pace, instead of the trot.[83] There also are several four-beat "ambling" gaits that are approximately the speed of a trot or pace, though smoother to ride. These include the lateral rack, running walk, and tölt as well as the diagonal fox trot. Ambling gaits are often genetic in some breeds, known collectively as gaited horses. Often, gaited horses replace the trot with one of the ambling gaits.

The horse is the animal whose family tree is known to the highest precision by biologists.

Before the availability of DNA techniques to resolve the questions related to the domestication of the horse, various hypothesis were proposed. One classification was based on body types and conformation, suggesting the presence of four basic prototypes, labeled the "Tarpan", "Forest horse", Draft and "Oriental", each of which was hypothesized to have adapted to their environment prior to domestication. However, more recent studies suggest that all domesticated horses originated from a single wild species and that the different body types of horses were entirely a result of selective breeding after domestication,[3] or possibly landrace adaptation.

Before the availability of DNA techniques to resolve the questions related to the domestication of the horse, various hypotheses were proposed. One classification was based on body types and conformation, suggesting the presence of four basic prototypes that had adapted to their environment prior to domestication. Another hypothesis held that the four prototypes originated from a single wild species and that all different body types were entirely a result of selective breeding after domestication. However, the lack of a detectable substructure in the horse has resulted in a rejection of both hypotheses

In one of the Āgama Scriptures, there is the following passage:
The Buddha once told his monks that there were four kinds of horses. The first, upon seeing the shadow of the riding crop, is startled and forthwith follows the wish of its rider. The second, startled when the crop touches its hair, forthwith follows the wish of its rider.

The third is startled after the crop touches its flesh. The fourth is awakened only after the touch of the riding crop is felt in its bones.

The first horse is like the person who hears about the death of someone in a distant monastic community and forthwith feels aversion for things of the world. The next horse is like the person who hears of the death of someone within their own monastic community and then feels aversion for things of the world. The third horse is like the person who hears of the death of someone near and dear to them and then feels aversion for things of the world. The fourth horse is like the person whose own body experiences sickness and suffering, and only then feels aversion for things of the world.

⌷OBJ⌷

Shōbōgenzō: On 'The Four Horses' 1046

⌷OBJ⌷This is the metaphor of the four horses in the Āgama Scriptures. When you are exploring through your training what the Buddha's Dharma is, this is certainly a good place to study. Those among ordinary people or those in lofty stations who emerge as spiritually good friends and guides, later, as emissaries of the Buddha, become Ancestral Masters. All of them have invariably explored this Teaching through their practice and pass it on for the benefit of their disciples. Those who do not know it are not spiritually good friends and guides for ordinary people or for those more lofty. Those human disciples who have grown good, thick roots and are intimate with the Buddha's words and ways have invariably been able to hear this Teaching. Those who are ever so far from the Buddha's words and ways have not heard it, nor do they know it. Hence, those who would be master teachers should consider presenting it without delay, and disciples should pray that they may hear of it without delay.

The meaning of 'feeling aversion for things of the world' has been given in the Vimalakirti Scripture, as follows:

When the Buddha gives voice to a single utterance of Dharma, sentient beings are able to free themselves from suffering in accord with their type. Some will experience fear, some will feel joy, some will give rise to aversion for things of the world, some will cut through their doubts.

❀

The Great Scripture on the Buddha's Parinirvana quotes the Buddha as saying the following:

Next, my good disciples, it is like training horses. Generally speaking, there are four kinds of horses. With the first, contact is made through their hair. With the second, contact is made through their skin. With the third, contact is made through their flesh. With the fourth, contact is made through their bones. They obey the trainer's wish, depending on which part is contacted.

The situation is also like this for the Tathagata. By means of four methods, He restrains and subdues sentient beings. With the first, the Buddha explains for their benefit what 'being alive' means, whereby they accept what He says. They are like horses who follow the wish of their rider once he has made contact with their hair. With the second, the Buddha explains what 'being alive, along with aging' means, whereby they accept what He says. They are like horses who follow the wish of their rider once he has made contact with their hair

Shōbōgenzō: On 'The Four Horses'

and skin. With the third, the Buddha explains what 'being alive, along with aging and sickening' means, whereby they accept what He says. They are like horses who follow the wish of their rider once he has made contact with their hair, skin, and flesh. With the fourth, He explains what 'being alive, along with aging, sickening, and dying' means, whereby they accept what the Buddha says. They are like horses who follow the wish of their rider once he has made contact with their hair, skin, flesh, and bones.

O my good disciples, there is nothing assured when it comes to a rider training a horse, but with the World-honored Tathagata's restraining and subduing sentient beings, His efforts are assured and never in vain. This is why the Buddha was given the epithet of Tamer and Subduer of Those Who Are Strong in Their Determination.

This is called "The Four Horses of the Great Scripture on the Buddha's Parinirvana". There are no trainees who have failed to learn of it and no Buddhas who have failed to teach it. We hear it when we follow the Buddha. Of necessity, we pay heed to it whenever we encounter and offer our service to a Buddha. Once we have had the Buddha Dharma Transmitted to us, we continually give expression to It for the sake of sentient beings. When we ultimately arrive at Buddhahood, we voice It for the sake of the great assembly of bodhisattvas* and all others—worldly and celestial—who will listen, just as if it were the first time that our wish to realize the Truth had arisen. This is why the Three Treasures of Buddha, Dharma, and Sangha have continued on without interruption

The best-known "color breed" registries that accept horses from many different breeds are for the following colors:

Buckskin (horse), a color which cannot breed "true" due to the cream gene which creates it being an incomplete dominant
Palomino, a color which cannot breed "true" due to the cream gene which creates it being an incomplete dominant
Pinto horse
White (horse). Some of these animals are registered in the United States with the American creme and white horse registry, which was once called an "Albino" registry until it was understood that true albino does not exist in horses. (see White (horse) and Dominant white for details)

European scholars such as Jimmy Speed, Ruy d'Andrade, Hermann Ebhardt and Edward Skorkowski, postulated four basic body types, which were not considered to be named species.[4] They were:

Pony Type 1, in northwestern Europe, resistant to cold and wet, similar to the modern Exmoor pony
Pony Type 2, in northern Eurasia, larger than type 1, resistant to cold, similar to the modern Highland pony and Fjord horse

Horse Type 1, in central Asia, resistant to heat and drought, similar to the modern Sorraia and Akhal-Teke
Horse Type 2, in western Asia, small and fine-boned, resistant to heat, similar to the modern Caspian horse.

American paleontologist Deb Bennett[5][6] postulated that the early form of E. caballus developed into seven subspecies,[7] of which four supposedly contributed most to the ancestry of the domesticated horse, both directly and via assorted crossbred lineages between them.[8] These were:

"Warmblood subspecies", Equus caballus mosbachensis, the oldest hypothetical subspecies, supposedly ancestor of the Latvian horse, Groningen horse and some warmblood breeds.
"Draft subspecies", Equus caballus caballus, ancestor of the Exmoor Pony, Shetland pony, Suffolk Punch and Belgian horse.
"Oriental subspecies", Equus caballus pumpelli, adapted to arid climates, thought to be the progenitor of the modern Arabian horse, Plateau Persian and Marwari horse.
"Tarpan", Equus caballus gmelini[9] or Equus caballus ferus, supposed ancestor of Przewalski's Horse as well as the Konik, Vyatka horse, Hucul and most Mongolian horses

A theory associated with James Cossar Ewart in Scotland and Johann Ulrich Duerst in Germany postulated three primitive horse types, considered subspecies of Equus caballus, as ancestors of modern breeds. They were:[4]

Square 1: "Forest Horse", Equus caballus germanicus, descendant of a "Diluvial Horse", Equus caballus silvaticus
Square 2: Asiatic Wild Horse or Przewalski horse, then considered Equus caballus przewalskii
Square 3: Tarpan, then considered Equus caballus gmelini.
Square 4: To these Elwyn Hartley Edwards adds a fourth, the "Tundra Horse", supposedly ancestor of the Yakut pony, and "largely unconsidered by hippologists".

The Jersey Shore shark attacks of 1916 killing 4 people in the first 2 weeks of July 1916 along the New Jersey shore and Matawan Creek in New Jersey, started media attention on shark attacks in the United States of America

The Jersey Shore shark attacks of 1916 were a series of shark attacks along the coast of New Jersey, in the United States, between July 1 and July 12, 1916, in which four people were killed and one injured. Since 1916, scholars have debated which shark species was responsible and the number of animals involved, with the great white shark and the bull shark most frequently cited. The incidents occurred during a deadly summer heat wave and polio epidemic in the Northeastern United States that drove thousands of people to the seaside resorts of the Jersey Shore. Shark bites on the Atlantic Coast of the United States outside the semitropical states of Florida, Georgia, and the Carolinas were rare, but scholars believe that the increased presence of sharks and humans in the water led to them in 1916.

The Jersey Shore bites immediately entered into American popular culture, where sharks became caricatures in editorial cartoons representing danger. The bites became the subject of documentaries for the History Channel, National Geographic Channel, and Discovery Channel, which aired 12 Days of Terror (2004) and the Shark Week episode Blood in the Water (2009).

Between July 1 and July 12, 1916, five people were bitten along the coast of New Jersey by sharks; only one of the victims survived. The first major bite occurred on Saturday, July

1 at Beach Haven, a resort town established on Long Beach Island off the southern coast of New Jersey. Charles Epting Vansant, 25, of Philadelphia was on vacation at the Engleside Hotel with his family. Before dinner, Vansant decided to take a quick swim in the Atlantic with a Chesapeake Bay Retriever that was playing on the beach. Shortly after entering the water, Vansant began shouting. Bathers believed he was calling to the dog, but a shark was actually biting Vansant's legs. He was rescued by lifeguard Alexander Ott, and bystander Sheridan Taylor who claimed the shark followed him to shore as they pulled the bleeding Vansant from the water. Vansant's left thigh was stripped of its flesh; he bled to death on the manager's desk of the Engleside Hotel at 6:45. p.m.[1]

Despite the Vansant incident, beaches along the Jersey Shore remained open. Sightings of large sharks swarming off the coast of New Jersey were reported by sea captains entering the ports of Newark and New York City but were dismissed. The second major bite occurred 45 miles (72 km) north of Beach Haven at the resort town of Spring Lake, New Jersey. The victim was Charles Bruder, 27, a Swiss bell captain at the Essex & Sussex Hotel. Bruder was killed on Thursday, July 6, 1916, while swimming 130 yards (120 m) from shore. A shark bit him in the abdomen and severed his legs; Bruder's blood turned the water red. After hearing screams, a woman notified two lifeguards that a canoe with a red hull had capsized and was floating just at the water's surface. Lifeguards Chris Anderson and George White rowed to Bruder in a lifeboat and realized he had been bitten by a shark. They pulled him from the water, but he bled to death on the way to shore. According to The New York Times, "women [were] panic-stricken [and fainted] as [Bruder's] mutilated body ... [was] brought ashore." Guests and workers at the Essex & Sussex and neighboring hotels raised money for Bruder's mother in Switzerland.

The next two major bites took place in Matawan Creek near the town of Keyport on Wednesday, July 12. Located 30 miles (48 km) north of Spring Lake and inland of Raritan Bay, Matawan resembled a Midwestern town rather than an Atlantic beach resort. Matawan's location made it an unlikely site for shark-human interaction. When Thomas Cottrell, a sea captain and Matawan resident, spotted an 8 ft (2.40m) long shark in the creek, the town dismissed him.[5] Around 2:00 p.m. local boys, including epileptic Lester Stillwell, 11, were playing in the creek at an area called the Wyckoff dock when they saw what appeared to be an "old black weather-beaten board or a weathered log." A dorsal fin appeared in the water and the boys realized it was a shark. Before Stillwell could climb from the creek, the shark pulled him underwater.

The boys ran to town for help, and several men, including local businessman Watson Stanley Fisher, 24, came to investigate. Fisher and others dived into the creek to find Stillwell's body, believing him to have suffered a seizure; Fisher was also bitten by the shark in front of the townspeople. He was pulled from the creek without recovering Stillwell's body. His right thigh was severely injured and he bled to death at Monmouth Memorial Hospital in Long Branch at 5:30 p.m.[8] Stillwell's body was recovered 150 feet (46 m) upstream from the Wyckoff dock on July 14.

In 1974, writer Peter Benchley published Jaws, a novel about a rogue great white shark that terrorizes the fictional coastal community of Amity Island. Chief of police Martin Brody, biologist Matt Hooper, and fisherman Quint hunt the shark after it kills four people. The novel was adapted as the film Jaws by Steven Spielberg in 1975. Spielberg's film makes reference to the events of 1916: Brody (Roy Scheider) and Hooper (Richard Dreyfuss) urge Amity's Mayor Vaughn (Murray Hamilton) to close the beaches on the Fourth of July after the deaths of two swimmers and a fisherman.

The 1916 fatal bites are the subject of three studies: Richard G. Fernicola's In Search of the "Jersey Man-Eater" (1987) and Twelve Days of Terror (2001) and Michael Capuzzo's Close to Shore (2001). Capuzzo offers an in-depth dramatization of the incident, and Fernicola examines the scientific, medical, and social aspects of the bites.[69][70] Fernicola's research is the basis of an episode of the History Channel's documentary series In Search of History titled "Shark Attack 1916" (2001) and the Discovery Channel's docudrama 12 Days of Terror (2004).[71][72] Fernicola also wrote and directed a 90-minute documentary called Tracking the Jersey Man-Eater. It was produced by the George Marine Library in 1991; however, it was never widely released.[73]

In 2009, Discovery Channel's Shark Week had a two-hour documentary about all the biting incidents and the days after, titled Blood in the Water. The bites at Matawan are the subject of the National Geographic Channel documentary Attacks of the Mystery Shark (2002), which examines the possibility that a bull shark was responsible for killing Stanley Fisher and Lester Stillwell.[42]

In 2010, "Shore Thing", a fictional short film using the accounts of the Matawan events was released. Directed by Lovari and James Hill,[74] it received the award for Best Suspense Short at the 2010 NY International Film And Video Festival and was additionally screened at The Coney Island Film Festival.

In 2011, Smithsonian Channel's examines the series of events in detail and explores the varying perspectives.

The most famous shark incident which spawned the fear of the great white shark fit the quadrant model pattern.

Only a few sharks are dangerous to humans. Out of more than 480 shark species, only three are responsible for two-digit number of fatal unprovoked attacks on humans: the great white, tiger and bull; however, the oceanic whitetip has probably killed many more castaways, not recorded in the statistics.

The great white shark is one of only four kinds of sharks that have been involved in a significant number of fatal unprovoked attacks on humans.

The "three now cosmopolitan commensal rodent pest species"[118] (the brown rat, the black rat and the house mouse) have been dispersed in association with humans, partly

on sailing ships in the Age of Exploration, and with a fourth species in the Pacific, the Polynesian rat (Rattus exulans), have severely damaged island biotas around the world.

There are four particles that we can detect in a cloud chamber : proton, electron, muon (probably) and alpha. They are important because they are where antimatter was discovered

Cockroaches are widespread, and are one of the hardest household pests to control. Four types of cockroaches cause problems for people. These are the four cockroaches known as pests.

German
American
Oriental
Brown Banded

After eggs hatch into nymphs, the nymphs will go through a series of moults until they become adults. In some species, eggs go through four moulting stages while nymphs go through three.[60] Nymphs first moult into workers, and then some workers go through further moulting and become soldiers or alates; workers become alates only by moulting into alate nymphs.

Ingerophrynus quadriporcatus is a species of toad in the Bufonidae family. Its common names are long-glanded toad,[4] four-ridged toad and greater Malacca toad. It is found in Peninsular Malaysia, Singapore, Borneo (Sabah, Brunei, Sarawak, and Kalimantan), Sumatra, and the Natuna Islands. Its natural habitats are swamp forests, but it has also been found on rubber plantations. It breeds in standing water.

Many chelicerates have four pairs of walking legs. These include scorpions and spiders.

The chelicerata originated as marine animals, possibly in the Cambrian period, but the first confirmed chelicerate fossils, eurypterids, date from 445 million years ago in the Late Ordovician period. The surviving marine species include the four species of xiphosurans (horseshoe crabs), and possibly the 1,300 species of pycnogonids (sea spiders), if the latter are indeed chelicerates

I described that dragonflies are known for their flight by biologists and studied for their amazing flight capacities and that their flight reflects the quadrant model pattern. The mantis shrimp is studied by biologists for its sight, which reflects the quadrant model pattern. Ruminants like giraffes and cows are known for having to digest cellulose which other animals cannot do so they have four stomachs, reflecting the quadrant pattern.

The catfish is studied by biologists for its incredible capacity of perception called chemical perception. Catfish are known for their amazing ability to eat in muddy water where it cannot see. The way that it detects food is through its four pairs of barbels.

Catfish also have a maxilla reduced to a support for barbels; this means that they are unable to protrude their mouths as other fish such as carp.

Catfish may have up to four pairs of barbels: nasal, maxillary (on each side of mouth), and two pairs of chin barbels, even though pairs of barbels may be absent depending on the species. Catfish barbels always come as pairs. Many larger catfish also have chemoreceptors across their entire bodies, which means they "taste" anything they touch and "smell" any chemicals in the water. "In catfish, gustation plays a primary role in the orientation and location of food". Because their barbels and chemoreception are more important in detecting food, the eyes on catfish are generally small. Like other ostariophysans, they are characterized by the presence of a Weberian apparatus. Their well-developed Weberian apparatus and reduced gas bladder allow for improved hearing as well as sound production.

Catfish are known for their capacity to eat and survive in muddy waters. The four pairs of barbels are what makes it possible for a catfish to live.

The channel catfish is an example of a catfish with four pairs of barbels.

Psychology chapter

Four Eleven Forty Four or 4-11-44 is a phrase that has appeared repeatedly in popular music and as a reference to numbers allegedly chosen commonly by poor African Americans while gambling.

Contents [hide]
History of usage[edit]
The roots of the phrase can be traced to the illegal lottery known as "policy" in nineteenth-century America. Numbers were drawn on a wheel of fortune, ranging from 1 to

78. A three-number entry was known as a "gig" and a bet on 4, 11, 44 was popular by the time of the Civil War.

The New York Clipper,a sporting and theatrical weekly, ran a serial story by John Cooper Vail in April and May of 1862 titled "'4-11-44!' or The Lottery of Life in the Great City," indicating that the number was already a gambling cliché. The Secrets of the Great City, an 1869 book by Edward Winslow Martin, references 4-11-44 and attributes the section on policy to "the New York correspondent of a provincial journal", but does not name the writer. Nor does he date the article, except to say it was published "recently".

The combination became known as the "washerwoman's gig" after it featured on the cover of Aunt Sally's Policy Players' Dream Book, published by H. J. Wehman of New York sometime in the 1880s. The stereotypical player of the washerwoman's gig was a poor black male.

In the 1890 How the Other Half Lives: Studies Among the Tenements of New York, Jacob A. Riis wrote:

Notice how there is a lot of fours in there

Of all the temptations that beset him, the one that troubles him and the police most is his passion for gambling. The game of policy is a kind of unlawful penny lottery specially adapted to his means, but patronized extensively by poor white players as well. It is the meanest of swindles, but reaps for its backers rich fortunes wherever colored people congregate. Between the fortune-teller and the policy shop, closely allied frauds always, the wages of many a hard day's work are wasted by the negro; but the loss causes him few regrets. Penniless, but with undaunted faith in his ultimate "luck," he looks forward to the time when he shall once more be able to take a hand at "beating policy." When periodically the negro's lucky numbers, 4-11-44, come out on the slips of the alleged daily drawings, that are supposed to be held in some far-off Western town, intense excitement reigns in Thompson Street and along the Avenue, where someone is always the winner. An immense impetus is given then to the bogus business that has no existence outside of the cigar stores and candy shops where it hides from the law, save in some cunning Bowery "broker's" back office, where the slips are printed and the "winnings" apportioned daily with due regard to the backer's interests.

A song entitled "4-11-44" appeared in The Major, a musical theater piece by Edward Harrigan and David Braham. In 1889, H. J. Wehman listed "Four 'eleven forty-four" in their extensive song book. The published song was possibly as performed in an unsuccessful musical show "4-11-44" by Bert Williams and George Walker, but few details have survived and this has not been verified. Certainly, Bob Cole published a song entitled "4-11-44: A Coon Ditty" in 1897 and he performed this with the Black Patti Troubadour Company in the musical skit "At Jolly Cooney Island" around the same time.

Twentieth century[edit]

The phrase "four eleven forty-four" appeared in the racist coon song, "Every Race Has a Flag but the Coon" by Will A. Heelan and J. Fred Helf, in 1900. In an ironic twist, the song went on to inspire the creation of the Pan-African flag in 1920. Meanwhile, the phrase appeared in a 1909 episode of the newspaper comic Little Nemo in Slumberland by Winsor McCay: the numbers 4, 11 and 44 can be seen on a sign, hanging from the tail end of an imaginary creature.

In 1912, the New York Times anticipated superstition surrounding the date April 11, 1944,

The 4-11-44 that may then be written will of course bring out into the letter writing industry every soul that ever hugged a rabbit's foot, or threw a horseshoe over the left shoulder, or a trembled when he broke a mirror or walked under a ladder.[1]

— New York Times

Many uses of the term "4-11-44" occurred in later blues and jazz recordings; practically without exception the phrase had nothing whatsoever to do with gambling, but rather with sex[according to whom?]. In 1925 the phrase "four eleven forty-four" featured in "The Penitentiary Bound Blues" by Rosa Henderson and the Choo Choo Jazzers. Papa Charlie Jackson recorded a blues number with the title "4-11-44" in 1926. Pinetop & Lindberg released a different song called "4-11-44" in the 1930s.

A jazz piece of the same name was composed and recorded in 1963 by New Orleans saxophone player Pony Poindexter on his album Gumbo for Prestige Records, featuring Booker Ervin and Al Grey. Liverpudlian Pete Wylie released his original song "FourElevenFortyFour" on his 1987 album Sinful. California band The Blasters made their "4-11-44" the name of both their 2004 album, and its title track. Jawbone (AKA Bob Zabor) released yet another track called "4-11-44" in 2005.

One possibility suggested by the Social Psychology (Soc Psych) research on morale (called Affect) is the Affect Grid. It's not much more complicated than the Good / Meh / Bad choices, but it does involve the dreaded four choices. It's just that they're not linear.

The Affect Grid

Social psychologists sometimes use the term Valence to describe the continuum of pleasant to unpleasant mood, and the term Activation to describe a continuum from high to low mental activity (think engaged to disengaged, not napping vs. jumping jacks). If we decide that it is still safe and simple, but offers more understanding of morale, we could have these four choices.

The choices are square 1: active and happy/pleasant- excited, alert

square 2: inactive and happy/pleasant- serene content

Square 3: active and unhappy/ unpleasant- tense stressed
 square 4: inactive and unhappy/ unpleasant- bored sad

The Four Fundamental Concepts of Psychoanalysis is the 1978 English-language translation of (French: Le séminaire. Livre XI. Les quatre concepts fondamentaux de la psychanalyse) published in Paris by Le Seuil in 1973. The text of the Seminar, which was held by Jacques Lacan at the École Normale Supérieure in Paris between January and June 1964 and is the eleventh in the series, was established by Jacques-Alain Miller.

Sociology chapter

To be hanged, drawn and quartered was from 1351 a statutory penalty in England for men convicted of high treason, although the ritual was first recorded during the reign of King Henry III (1216–1272). Convicts were fastened to a hurdle, or wooden panel, and drawn by horse to the place of execution, where they were hanged (almost to the point of death), emasculated, disembowelled, beheaded and quartered (chopped into four pieces). Their remains were often displayed in prominent places across the country, such as London Bridge.

Quartering may in truth be considered the most horrible penalty ever invented. This punishment dates from the remotest ages. In almost all cases, the victim had previously to undergo various accessory tortures: sometimes his right hand was cut off, and the mutilated stump was burnt in a cauldron of sulphur; sometimes his arms, thighs, or breasts were lacerated with red-hot pincers, and hot oil, pitch, or molten lead was poured into the wounds. After these horrible preliminaries, a rope was attached to each of the limbs of the criminal, one being bound round each leg from the foot to the knee, and round each arm from the wrist to the elbow. These ropes were then fastened to four bars, to each of which a strong horse was harnessed, as if for towing a barge. These horses were first made to give short jerks; and when the agony had elicited heart-rending cries from the unfortunate man, who felt his limbs being dislocated without being broken, the four horses were all suddenly urged on with the whip in different directions, and thus all the limbs were strained at one moment. If the tendons and ligaments still resisted the combined efforts of the four horses, the executioner assisted, and made several cuts with a hatchet on each joint. When at last, for this horrible torture often lasted several hours - each horse had drawn out a limb, they were collected and placed near the hideous trunk, which often still showed signs of life, and the whole were burned together. Sometimes the sentence was, that the body should be hung to the gibbet, and that the limbs should be displayed on the gates of the town, or sent to four principal towns in the extremities of the kingdom. When this was done, "an inscription was placed on each of the limbs, which stated the reason of its being thus exposed."

Religion chapter

In their shamanic ceremonies, Manchus worshipped a number of gods, including non-Tungusic deities. Guandi and the bodhisattva (Buddhist "enlightened being") Guanyin were two of a "handful of Chinese gods" who were integrated into the rituals of the state tangse and Kunning Palace.[64] One of the four ritual sites in the tangse was a large hall where the Buddha, Guanyin, and Guandi received offerings several times a year, including at the New Year.[65] Ordinary Manchu households rarely sacrificed to Buddhist deities, but almost all of them worshipped Guandi because of his association with war.[66]

QMRAnthony F.C. Wallace proposes four categories of religion, each subsequent category subsuming the previous. These are, however, synthetic categories and do not necessarily encompass all religions.[19]

Individualistic: most basic; simplest. Example: vision quest.
Shamanistic: part-time religious practitioner, uses religion to heal, to divine, usually on the behalf of a client. The Tillamook have four categories of shaman. Examples of shamans: spiritualists, faith healers, palm readers. Religious authority acquired through one's own means.
Communal: elaborate set of beliefs and practices; group of people arranged in clans by lineage, age group, or some religious societies; people take on roles based on knowledge, and ancestral worship.
Ecclesiastical: dominant in agricultural societies and states; are centrally organized and hierarchical in structure, paralleling the organization of states. Typically deprecates competing individualistic and shamanistic cults.

Buddhism Chapter

O Gotama, there are Samanas (wandering monks) and Brahmanas (religious leaders) who are leaders of their sects, who are well-esteemed by many people, such as Purana Kassapa, Makkhali Gosala, Ajita Kesakambala, Pakudha Kaccayana, Sancaya Belatthaputta and Nigantha Nataputta. Do all of them have knowledge and understanding as they themselves have declared? Or do all of them have no knowledge and understanding?"

The reply by Buddha was:

"Subhadda, in whatever teaching is not found the Noble Eightfold Path, neither in it is there found a Samana of the first stage, nor a Samana of the second stage, nor a Samana of the third stage, nor a Samana of the fourth stage."

Christianity chapter

The number of metrical feet in a line are described using Greek terminology: tetrameter for four feet and hexameter for six feet, for example.[45] Thus, "iambic pentameter" is a meter comprising five feet per line, in which the predominant kind of foot is the "iamb". This metric system originated in ancient Greek poetry, and was used by poets such as Pindar and Sappho, and by the great tragedians of Athens. Similarly, "dactylic hexameter", comprises six feet per line, of which the dominant kind of foot is the "dactyl". Dactylic hexameter was the traditional meter of Greek epic poetry, the earliest extant examples of which are the works of Homer and Hesiod.[46] Iambic pentameter and dactylic hexameter were later used by a number of poets, including William Shakespeare and Henry Wadsworth Longfellow, respectively.[47] The most common metrical feet in English are:[48]

Lamentations consists of five distinct poems, corresponding to its five chapters. The first four are written as acrostics – chapters 1, 2, and 4 each have 22 verses, corresponding to the 22 letters of the Hebrew alphabet, the first lines beginning with the first letter of the alphabet, the second with the second letter, and so on. Chapter 3 has 66 verses, so that each letter begins three lines, and the fifth poem is not acrostic but still has 22 lines. The fifth is always ultra transcendent

Another book, the 13th-century Kabbalistic text Sefer HaTemunah, holds that a single letter of unknown pronunciation, held by some to be the four-pronged shin on one side of the teffilin box, is missing from the current alphabet. The world's flaws, the book teaches, are related to the absence of this letter, the eventual revelation of which will repair the universe.[19] Another example of messianic significance attached to the letters is the teaching of Rabbi Eliezer that the five letters of the alphabet with final forms hold the "secret of redemption". The reason the four pronged shin is so important is because it is the quadrant four. Most shins have three prongs but the box that Jews put on their forehead in the morning to pray with has four. The fourth is different. That is because it is reflecting the quadrant four.

Four thieves vinegar was a secret herb mix believed to be consumed by thieves during the plague in France.

These herbs were said to be the reason thieves could rob the sick and dead without getting sick themselves. The four herbs were thyme, lavender, sage and rosemary.

The bible mentions the four chariots of Zechariah. (Zc 6,1)

Several prominent facts come to associate the number four to the cross of the Christ: the four segments of the cross; the four kinds of wood which were used for the construction of the cross of Christ, and also for Noah's Ark: the palm tree, the olive-tree, the cedar and the cypress, according to visions of Ann-Catherine Emmerick; the four Roman executioners who crucified Jesus on the Calvary, according to visions of Maria Valtorta; the four letters I.N.R.I. engraved on the cross. Concerning this last inscription, the Christians interpreted it as "Iesus Nazarenus Rex Iudaeorum", Jesus the Nazarene, King of the Jews. The esoterists attribute another sense to it: "Igne Natura Renovatur Integra", The Nature will be Renovated by the Fire.

Augustine said that there were four stages of salvation history. His famous four stage scheme of the human condition was
Square 1: ante legum

Square 2: sub lege

Square 3: sub gratia

Square 4: pace

The four-fold way, with its peaceful intentions, had strong supporters. Beda (672 – 735) – as 'the first English historian and most learned man of his time' (LEFF, 1958) – reworked the contribution of Augustine on this subject ('De gratia et libero arbitrio' and 'De praedestinatione sanctorum') into a more palatable tetradic form. He softened, just like Eriugena did more than a century later, the extreme positions of Augustine, who thought of an unrelenting predestination and full dependency on the mercy of God.

Communication consisted, according to Beda (De Praed., 2,2), of four phases, which are directly related to a tetradic frame of mind:

———————————— 1. esse – the essence, the Source

———————————— 2. sapare – the knowledge or insight

———————————— 3. scire – the investigation

———————————— 4. destinare – the positioning

Bede was the first to refer to Jerome, Augustine, Pope Gregory and Ambrose as the four Latin Fathers of the Church.

Beda defined the 'sacred' tetradic way of thinking, which leads up to the 'ratiocinationes quadrivium' as an established method of communication. The 'quadriformis ratio' is the name, which was (later) given to the cognitive mechanism, which ruled the interaction between people (and God). The mind is divided in four quadrants, with their own specific type of visibility. This was not explicitly described, but felt in the four senses (or interpretations), which were ways of seeing.

More than a century later Eriugena's 'De Divisione Naturae' put a crown on the early period of tetradic thinking, by describing its conceptual territory. The book was not to the liking of those, who sought dogmatic knowledge. Bishop Hincmar of Reims, who gave Eriugena the assignment, was the first to be embarrassed by his work and avoided any notice of it.

A rejection followed in 855, at the Council of Valence. Eriugena was labeled as a heretic. However, in 860 the tide turned at the Council of Toucy, and the four articles of Chiersey, who expressed the moderate view of bishop Hincmar (and Eriugena), prevailed (GARDNER, 1900):

———————————— 1. There is only one predestination of God;

———————————— 2. The free will of man is restored by grace;

———————————— 3. God wills all men to be saved;

———————————— 4. Christ suffered for all.

In the Western church four eminent Fathers of the Church attained this honour in the early Middle Ages: Saint Gregory the Great, Saint Ambrose, Saint Augustine, and Saint Jerome. The "four Doctors" became a commonplace among the Scholastics, and a decree of Boniface VIII (1298) ordering their feasts to be kept as doubles in the whole Church is contained in his sixth book of Decretals (cap. "Gloriosus", de relique. et vener. sanctorum, in Sexto, III, 22).

In art there is a lot of work portraying the four Latin doctors.

In the Eastern Church three Doctors were pre-eminent: Saint John Chrysostom, Saint Basil the Great, and Saint Gregory Nazianzen. The feasts of these three saints were made obligatory throughout the Eastern Empire by Leo VI the Wise. A common feast was later instituted in their honour on 30 January, called "the feast of the three Hierarchs". In the Menaea for that day it is related that the three Doctors appeared in a dream to John Mauropous, Bishop of Euchaitae, and commanded him to institute a festival in their honour, in order to put a stop to the rivalries of their votaries and panegyrists. This was under Alexius Comnenus (1081–1118; see "Acta SS.", 14 June, under St. Basil, c. xxxviii). But sermons for the feast are attributed in manuscripts to Cosmas Vestitor, who flourished in the tenth century. The three are as common in Eastern art as the four are in Western. Durandus (i, 3) remarks that Doctors should be represented with books in their hands. In the West analogy led to the veneration of four Eastern Doctors, Saint Athanasius being added to the three hierarchs.

The fourth square is always different and does not seem to belong

Aquinas produced four theological syntheses

Anselm of Canterbury is considered one of the greatest medeival philosophers. His renowned philosophy had and argument that God exists because nothing can be greater than God

Guano was another very famous philosopher of the time. He is known for his parody and refutation of Anselm's argument. Gaunilo's had four arguments, that parodied Anselms.

Anselms argument was

Philosophers often attempt to prove the ontological argument wrong by comparing Anselm's with Gaunilo's. The former runs:

God is that being than which no greater can be conceived.
It is greater to exist in reality than merely as an idea.
If God does not exist, we can conceive of an even greater being, that is one that does exist.
Therefore, God must indeed exist in reality.

Gaunilo's four part parody was

1.The Lost Island is that island than which no greater can be conceived.
2. It is greater to exist in reality than merely as an idea.
3.If the Lost Island does not exist, one can conceive of an even greater island, that is one that does exist.
4. Therefore, the Lost Island exists in reality.

It is interesting that Abrahams original name was Abram, and God changes his name to Abraham after He makes his covenant with him. Abraham is described as a hebrew. Hebere means "to cross over". Abrham crossed over a river, going from the Chaldeans to Cannan. It is significant that his name means crossing over, because of the significance of the cross. The

cross is the form of existence. Abraham is described as crossing over from sin, to God's law. God makes his covenant with Abraham after Abraham fights a war against people who took his brother Lot. I described that according to Darwinian genetics, people will be willing to fight for their brothers because they share a lo genetically in common with them. Abraham is described as saving his brother and also saving the people and goods that were taken with his brother. The king of Sodom then offers Abraham, at the time Abram riches, and Abraham says that he does not want to accept Sodom's riches. This is importnat. Abraham does not want to accept riches from a corrupt land like Sodom. Sodom did not follow the law of God. It was full of sin. It is fascinating that it is after Abraham refuses these riches that God makes his covenant with Abraham in the stories. I do no think it is a coincidence that Abrahams refusing the riches from Sodom coincided with him receiving his covenant with God. The riches of Sodom represent the carnal world, and Abraham had broken free of it, and was prepared to follow the God's ways and his laws which are antithetical to the carnal. It is ineresting that the reward of God's covenant is that God tells Abraham that his offsrping will be as numerous as the sands of the se a shore. According to a genetic Darwinian perspective, this is the ultimate reward. According to genetic Darwinism, every creature is ultimaely driven by a desire to perpetuate his genes, and by having his offspring as numerous as the sands of the sea shore, Abraham is perpetuating and promoting his genes. Also, it is described to Abrhaam that the whole world will be blessed by his offsrping. From a genetic Darwinian perspective, this would also be a plus, because all humans are related genetically, and Abraham would wantall mankind to be blessed through him. God makes his covenant with Abraham and Abraham wants to know if the covenant is ensured. God tells Abraham to make an offering. The offering fits the quadrant model pattern.

square 1: a heifer. This is a female cow who has net yet had a calf. The first two squares are conservative. The first two squares are more feminine. The second two squares are more destructive. They are more masculine. It is interesting that Samson in the bible talks about somebody "plowing his heifer". To plow somebodys heifer means to have sex with his woman.

square 2: a goat.

square 3: a ram. The goat is the second square. Goats aren't that physical or solid. Rams run into each other and are violent. They have hard solid horns. The ram is physical. This is the nature of the third square.

square 4: a dove. Notice how the fourth is different from the previous three. The fourth square is a bird. The previous three squares are mammals. The fourth is always different from the previous three. The fourth always doesn't seem to belong. Also the dove is not cut in half whereas the previous three are cut in half.

square 5: a pigeon. The fourth always indicates the nature of the fifth. The fourth is the dove. The fourth is a bird. The fifth is a pigeon. The fifth is also a bird. It is also not cut in half.

Again, the quadrant model is revealed in the order of how things manifest in the myths of the bible. In this particular story, the ordering of the sacrifices reveals the quadrant model pattern. Abraham ends up having a son with his maidservant Hagar, and his son's name is Ishmael. God comes to Abraham in the form of three angels, and they tell Abraham that his wife Sarah will conceive. Sarah has a child and his name is Issac. Sarah tells Abraham to send Hagar and her son into the desert. God does not seem to mind that Ishmael is sent to the desert after Ishmael is seen mocking by Sarah, and tells Abraham to listen to what Sarah tells him to do. God says

his covenant will be established through Israel, and the descendents of Ishmael are the Ishmaelies who are arabs.

Then God tells Abraham to sacrifice his son Issac. Abraham has to have a lot of faith in God to do this. God had promised Abraham that he would have descendants as numerous as the sands of the sea shore and that he will establish his covenant through Issac. Abraham proceeds to sacrifice Issac but God stops Abraham right as he is about to kill his son. Kierkegaard, a famous philosopher, describes this as a leap of faith. Kierkegaard says that faith is absurd, and faith in Christianity is absurd, because Kierkegaard says it doesn't make any sense. Kierkegard thinks that the idea of Abraham sacrificing his son is absurd. In a genetic Darwinian perspective a mans son is 50 percent of his genes. Sacrificing him is extremely hard to do. Abraham had to be very submissive to God to do this, and he had to have a lot of faith. It is interesting that before Abraham goes to sacrifice Issac, Abraham tells his servants that he and his son will be back. It is possible hat Abraham was not lieing, and he really did believe tha he and his son would return. It is possible that Abraham knew that God would not allow him to kill his son. But because he had so much faith in God, he was willing to kill him anyways.

I say that it is not random that Abraham is told to sacrifice his son at this instant in the stories. The reason I say this is because the sacrifice fits into a pattern tat I noticed in the Bible. Recall that I described that Jepthahs daughter has to be sacrificed as a result of defeating the Philistines. The Israelites should have been killed due to their sins. But because a sacrifice is made, the sacrifice of his daugher, Israel is killed. The same pattern is in the story of Samson. The Israelites should be killed by the Philistines due to their sins, but Samson is sacrificed, and he destroys the Philistines in his sacrifice by having the walls of the Philistines fall on them, and as a result the Israelties are saved from their enemies and the punihsment of their sins, which should have been death. Another example of this is the story of Jonah. The Israelites are sinning during the time of the Babylonian empire. The Israelites should be killed because of their sins. Jonah is an Israelite. Jonah is told by God to convert the Ninevites, an enemy group to the Israelites, to the law of God. Jonah does not want to preach to non Israelies so he runs away and goes on a boat to flee. But on the boat there is a storm and Jonah recognizes that the storm is there to kill him for disobeying God, so he tells the people in the boat to throw him overboard and sacrifice him. So Jonah is a sacrifice. But Jonah survives. He is swollowed by a fish for three days and emerges alive. He then goes to the Ninevites and they are converted to the law of God. The ninevites were a carnal, sinful people, but Jonah converts them to give up their carnal ways and put on sackcloth. The ninevites were an enemy to the Israelites and they were going to destroy the Israelites. Then the Ninevites became an ally to the Israelites. This probably helped to save the Israelites during the time when they were in the Babylonian empire. The Israelites enemy became their friend, and as a result the Israelites were saved. After converting the Ninevites Jonah is sad because he feels that they do not deserve it because he sees them as non Israelites and thus not worthy of God's law. But God tells Jonah that they have a lot of cattle and there is a lot of them. I read this in a genetic Darwinian perspective. The Israelites made an ally with an enemy that had a lot of people and a lot of cattle. By making allies with them by converting them to their God, the Israelites have a lot of people that will be able to support them. These people have a lot of cattle. The cattle can be used for food for the Israelites if there is a famine or something. Jonah, by converting an outside group, is helping his

own group in this story. It is later described that the Ninevites were destroyed by God because they turned back away from the law of God back to sin. This reminds me of the Philistines being destroyed by Samson. The Philistines were an enemy of the Israelties that were destroyed by the sacrifice of Samson. The Ninevites were an enemy of the Israelites that were destroyed by the sacrifice of Jonah. The Philistines could no longer kill the Israelites because they were killed by Samson. The Ninevites could no longer kill the Israelites because they were killed by Jonah. At first they weren't killed. At first they were converted to be friends of the Israelties, and thus they were neutralized as a threat to the Israelites and made into friends. They were made into friends that could share resources and even fight with the Israelites. But then later, when they began to sin, they were destroyed.

I say that the same pattern holds true in the story of Jacob and Esau. Isaac is going to end up having two sons, Jacob, and Esau. Jacob becomes Esaus enemy by stealing Esaus birthright to Israel, and as a result Esau wants to kill him. But the night before Jacob meets with Esau Jacob fights with an angel of God. This kind of represents a death and a resurrection. Jacob interestingly crosses a body of water. Crossings are often associated with contact with God. Remember crossings are related to the cross. Then Jacob fights with an angel of God. The angel touches Jacobs hip and Jacob then becomes paralyzed in his hip. His name is then changed from Jacob to Israel. Israel means perseveres with God. This kind of represents a death and resurrection. I described how contact with God in the bible is often related to death. There is the saying that you cannot see God and live. Jacob wrestles with an angel of God and he becomes paralyzed in his hip and his name is changed. This represents a transformation, or a sort of death and resurrection. Right after this death and resurrection Jacob sends envoys to Esau's to give him gifts, and Esau then makes a treaty with Jacob, promising that he will not kill him but that they will be allies. AFter this death and resurrection, Jacob no longer has to be killed. Jacob was sinning, and he should have been killed due to his sins, but there is the kind of sacrifice of himself, in his wrestling with God, that allows him to be forgiven of his sins, and not have to be killed.

This same pattern holds true with the story of Joseph

Joseph is one of Jacobs 12 sons. Joseph has a dream that his Dad and his Mom and his brothers one day will bow to him. Jacob has a multicolored coat because he is his Dad's favorite son. Multicolored coats, I would say, have a genetic Darwinian purpose behind them. There is a phenomenon in the pick up artist community known as peacocking. I described earlier that peacocks have a lot of feathers in order to attract mates. The more feathers you have, and the more elaborate, the healthier you are and stronger you are, and thus the better genes you have. Therefore, sometimes humans dress elaborately in order to attract mates. If a human can dresss very lavishly, he signals to other humans that he is rich and has a lot of resources, and if he can signal this, then other humans will think that he has good genes, because he can afford to put so much time and effort in accumulating these resources. You see this phenomenon with literal pimps. Literal pimps dress in colorful coats and fancy hats and carry lavish chains often made of gold, and this helps to make women attracted to them. Well, because Joseph is Jacob's favorite son, Jacob gives Joseph a multicolored coat. Josephs siblings are already jealous of him. They probably wish that they had multicolored coats. Moreover, they are upset by Josephs dream. So they decide to get together and sell Joseph to the Egyptians. This is the

sacrifice. And this is another example of a death and ressurection. This is a sort of death and ressurection like in the case of Jonah. Josephs brothers, who are the patriarchs of the tribes of Israel, sell Joseph to the Egyptians, but they take his coat and cut it up and they dip it in goats blood. They pretend like they have killed him, although they did not really kill him. They show Jacob, their Dad the coat, and they tell him that it is Joseph's coat and he had been killed by an animal. Jacob is devestated because he thinks that his favorite son had been killed. Recall the genetic Darwinian perspective. This was Jacob's favorite son. Joseph probably had the best genes of his brothers. He was probably the healthiest and strongest and the most athletic and smartest. Jacob probably thought that Joseph had the best prospects of perpetuating his genes. Whether or not Joseph thought this consciously does not matter in the evolutionary psychology perspective. What matters is that Joseph probably subconsciously thought this. So Jacob is devastated when he hears that his son is dead. I described earlier that Joseph ends up though becoming second in command in Egypt to the Pharaoh. Being second and command in Egypt Joseph becomes a sort of God King to the Egyptians. Egyptians saw their leaders as sort of God kings. I described that Joseph helped the Egyptians to anticipate a famine and he helps the Pharaoh to prepare for it so that the Pharaoh's people will survive it. In a genetic Darwinian perspective, it is important for the Pharaoh that his people are not devastated during a famine. One reason could be that a lot of Egyptians are from his ethnic group, and he wants them to survive. Another reason is he is the Pharaoh and he has a royal son and he wants to perpetuate his genetic line of power. If there is a devastating famine and the people are too unhappy, then the Pharaoh might be overthrown by angry mobs, and then his position of power will be gone and his genetic line of power destroyed. Therefore the Pharaoh does not want to lose his position of power. Joseph's 12 brothers go to Egypt during the famine for help, and at first they do not recognize Joseph. Ultimately they recognize Joseph and Joseph sends for his Dad Jacob and his Mom. As a result of this whole series of events, Joseph and his 11 brothers survive the famine, and their genetic line is perpetuated. If they would have never sacrificed Joseph, then they all would have been died during the famine. They would not have been able to go to Egypt to seek help, and Egypt would have not been able to help them even if they could, because the Pharoah would not have been prepared for the famine in the first place, because it was Joseph who prepared him and Egypt for the famine. So the sacrifice of Joseph saved Israel. Jacob, when he sees Joseph, says that Joseph was dead but now he is alive. In other words, in Jacob's eyes, Joseph died and ressurected. This death and ressurection/sacrifice saves Israel from death, which they should have had due to their sins.

I described that the same pattern holds true in the story of Mordecai and Esther. Esther, a Jew, becomes the King of Persia's wife. Her brother is Mordecai. The Jews are sinning in Persia. As a result they should all be killed. Haman wants to kill all of the Jews because Mordecai will not bow down to him. Haman sets up a pole to sacrifice Mordecai. Mordecai represents the sacrifice. But then Esther reveals to the King of Persia that she is a Jew and she tells him that she wants Haman killed and the Jews to live. So then the King of Persia, because Esther is his favorite wife, kills Haman and kills all of the enemies of the Jews, and he saves the Jews. This is the same pattern as the Egypt story. Egypt was an enemy to the Israelites. Egypt could not have helped the Israelites. But Egypt was converted to be friends of the Israelites due to the death and resurrection/sacrifice of Joseph. In the story of Mordecai the Persian Empire is an enemy to

the Jews and they cannot help the Jews. But thanks to the sacrifice/ death and resurrection of Mordecai, the Jews are not killed, and ultimately the temple is rebuilt.

Interestingly the same pattern holds true in almost every story of the bible

The same pattern holds true in the

story of elijah. There is a death and a resurrection/sacrifice and the saving of Israel from its enemies from death due to its sin

the same holds true with the story of Jeremiah

the same holds true with the story of [Daniel](#)

The point I'm going to make is the same pattern holds true in this story of Abraham. Right before the sacrifice / death and resurrection of Isaac Abraham makes a treaty with Abimelech who could have destroyed Abraham. The sacrifice of Isaac represents a sacrifice that died for Abrahams sins and prevented him from being killed by Abimelech, and instead he made a treaty with Abimelech. The same pattern holds true with the story of Jesus. The Jews in the Roman empire are sinning. The Jews are not following the law of God and as a result the Jewish people should be destroyed.

But Jesus dies as a sin offering sacrifice/death and ressurection that saves the Jews from their sin so they do not have to bear the punishment of the law which is death. The way this works is the Roman Empire, which was once an enemy to the Jews, then becomes an ally to the Jews. Also the lost tribes of Israel in the Roman empire are reintroduced to he torah. Thus Israel is saved from death by the sacrifice/ death and ressurection of the prophet Jesus in the story. The way that works is the enemy of the Jews, the Roman Empire, is transformed from an enemy that wanted to destroy the Jews to an ally that adopted the torah. There is a historian named Gibbons who says that Christianity actually was the catalyst that destroyed the Roman Empire. Like the ninevites died after adopting the torah, the Roman empire dies after adopting the torah. I described that the torah is antithetical to empires. The torah is against caranlity. Empires are multicultural and multi ehnic and are all about carnality. Christianity was antithetical to the Roman empire and was a catalyst that brought its demise. Things like homosexuality, and lavish living like lavish dress and food, and prostitution, and promiscuity and other such things in the Roman empire that were popular in the Roman empire were destroyed by the Christian doctrine, which especially at first, preached the torah. Like the torah and the God of Israel is depicted as destroying the Egyptian Empire, and the Cannanite empire and the Babylonian Empire, and the Assyrian Empire, and the Persian Empire, and the Philistines, and all of these empires, the torah and the God of Israel is depicted as destroying the Roman Empire. I discussed how the Cannanite empire was destroyed by the Israelites, and how the Cannanite empire was a sinful empire full of prostitution and tremendous stratification. Jericho it is depicted in the bible, falls right after the Israelites circumcize themselves and celebrate the passover. The circumcision, it is described, represents the Israelites getting rid of their ties with Egypt again. Remember that Egypt symbolized pleasure and hedonism, which is represented by the foreskin. Then the Israelites celebrate the passover. Recall that the passover commemorates the sacrifice of the sacrificial sin offering lamb that forgives Israel of it sin so the Israelites don't have to be killed, and kills the Israelites enemies the Egyptians. It is no coincidence that after celebrating passover Jericho falls. Jericho represents Egypt in Canaan. The Israelites had been sinning in the desert on their way to Canaan. They sinned so much that every Israelite that had

left Egypt had died over the 40 years of wandering, except a few, and that is why they needed to all be circumcised. They should have all died due to their sin but they celebrate the passover, representing the sin offering, and as a result they live, and they destroy their sinful enemies the Canaanites at Jericho. These connections are not coincidental, but are explicit. After the passover, when the Israelites march around Jericho, they carry the ark of the covenant. The arc of the covenant contains within it the torah, which is the law of God. They blow trumpets and the wall falls. Remember that the torah is antithetical to sinful empires. Jericho was the product of a sinful empire. This is sort of a representation of the torah destroying Jericho and Cannan. Remember that historians think that Jericho and the Canaanite city states fell due to internal slave rebellions Archeologists notice that new city states emerged from these rebellions in which there was less art and less stratification. It is very likely, in my opinion, that the outcome of these slave rebellions was new more peaceful societies. Then there is another story that has the same pattern following the battle of Jericho. Israel burns Jericho to the ground and they take its treasures. It is important to note that after destroying Egypt Israel took Egypts treasures. Empires are characterized of being full of treausres. The treasures that Israel takes from Egypt is devoted to the tabernacle of God. This is symbolic. Israel does not devote its treasures to worldly thing but to God. After Jericho is destroyed Israel takes its treasures and it goes into Israels treasury. Immediately after this Israel tries to attack the Cannaite city state of Ai. But the Israelits are defeated. Remember that in the bible, when you are defeated by your enemies and when there is death, and plagues, and famines and other disasters, this is the consequence of sin. Joshua realizes that Israel has sinned, and he goes to the arc of te Lord where the commandments of God are located. Here Joshua falls face down and God tells him that he has to kill the man who sinned against Israel. God says Israelites had "taken some of the devoted things; they have stolen, they have lied, they have put them with their own possessions." Recall that the treasures stolen from Jericho should be devoted to God and not to individuals personal glory. represents carnality and greed to take the possessions for yourself. Then God says that he will no be with Israel anymore unless they purge the evil people that have went against His Law. So Joshua holds an assembly and says that the enemies of God who have disobeyed His Law shall be destroyed by fire. A man named Achan comes fourth and he says hat he had coveted the treasures of Jericho and due to his greed took them for himself and hid them in his tent. It is fascinating that Joshua calls Achan "my son". This is reminiscent of when Abraham sacrifices Issac and when God is represented as sacrificing Jesus. Achan admits to his sin and he must be sacrificed. But the sacrifice of Achan forgives Israel of its sins. Again, Israel should have been destroyed for its sins and the Cannanite city of Ai should have defeated the Israelites. But because of the sacrifice/ sin offering, Israel is forgiven and they destroy Ai in the next chapter. It is described that Israel stoned and burned Achan and his family. This represents a sin offering that again saves Israel from death by allowing Israels enemies to be destroyed. It is described that the Israelites kill every single member of the city of Ai. Again, historians say that Ai was a Cannanite city state that was very stratified. It was a city state full of sin. Historians think that it was destroyed due to internal rebellions. It is described that the Israelites lured the army of Ai out of the city and while they were ou of it the Israelites burned the city to the ground. Then they ambushed the army of Ai and killed them, and then they illed every single inhabitant left in Ai. Many historians again, think that really what happened was that the slaves of Ai

rebelled and burned dwon the city, and then they made up this story that an outside force called Israel destryed the city, really when they themselves were Israel. It is described that Joshua impaled the king of Ai on a pole. The king of Ai represents sin and decadence, and he is depicted as being destroyed by Israel. It is then described that after Ai was destroyed, Joshua read to Israel the law of God on top of a mountain. Recall that historians say that after these sinful Cannanite city states were destroyed, new societies emerged that were less stratified. The product of sin is usually stratification. Joshua, aftter the destruction of Ai, reading the law of God, represents the formulatin of a new society under a different law. Like I already describbed, historians say that after ai and these other Cannanite city states fell, new societies emerged. Immediately after this the Gideonites fool the Israelites into making a treaty with them. This is a common theme in the bible. An enemy of the Israelites become the Israelites ally. The Gideonites are explained to be scared of the Israelites because of what they did to Jericho and Ai. The Amorites in the story are ruling over Jerusalem and Hebron and other city states which are now in the modern day state of Israel. The Amorites decide to attack the Gibeonites for making an alliance with Israel. The Gibeonites alliance with Israel entailed that the Gibeonites become water carriers and wood cutters for the Israelites. Because Israel's ally is attacked, Israel attacks the Amorites. It is described that the sun stands still and meteors fall from the sky and destroy the Amorites. I described that this phenomenon of the sun standing still can be interpreted as a flow event. When people are in battle and under a lot of stress there can be a different subjective experience of time and space. The Israelite army get into the zone and destroy their enemies the Amorites. It is interesting that this is represented by hailstones falling from the sky and landing on them. This is like when pillars fall on the Philsitines when Samson dies. Samson is having sex when he dies. Sex and knowledge are related in the bible, and sex and flowing are related. I discussed this at length. You can say that Samson was in the zone when he killed the Philistines, the enemy of Israel and the enemy of the torah. Here the Israelites are in the zone when the Amorites are killed, and the Amorites are an enemy of Israel and an enemy of the torah. The Israelites destroy the Amorites and the five kings of the Amorites are put on five poles to be an example. Again, the kings of the Amorites represent the Canaanite Empire system, which was anti torah and thus sinful. Hisorians, I already described, argue that an extrenal force did not really take over a people called the Amorites, but hat there were slave rebellions in statified Cannanite city states like in Jerusalem and Hebron where the bible describes the amorites resided, and what emerged from these rebellions was new cities that followed the law of God. Some historians do think that there was an external force as well that is now known as the Israelites. Some historians think that there was an external Israelite force, as well as slave rebellions in the cities. It is then described that Joshua and the Israelites go to all of the Cannanite city states and kill all of their members and impale all of their kings. Many of the city states are described as being burned to the ground. After the Cannanite cities are all desroyed in the stories and most all of their inhabitants killed, as God commanded, the Israelites set up their own Israelite cities and the tribes separate to different parts of Cannan and form the nation of Israel and Cannan no longer is Cannan but the land of Israel. The destruction of Cannan and the killing of its inhabitants is depicted as a good thing because the Cannanites are depicted as sinful, being against the law of God. Joshua tells the Israelites before he dies that they better follow the law of God while in the land of Cannan/Israel or else hey will be

punished and destroyed. Then the Book of Judges describes how the Israelites constantly fall away from the law of God and they are then punished by being overtaken by enemy peoples who do not follow the law of God. Samson, Gideon, and Jepthah were Judges. Judges are men who return Israel o the law of God and deliver Israelites from their enemies. Another example of a Judge is Ehud. In the story of Ehuds the Israelites are sinning, and thus the Moabites take over the Israelites, with the help of the Amalekites and Ammonites. The Moabites are depicted as antithetical to the law of God. They are a sinful people. Ehud is a left handed Benjamite. Ehud goes to the king of the Moabites with a double edged sword strapped to his right thigh. Ehud tells the Moabite king that he has a message for him from God. The Moabite king tells his servants to leave him with Ehud. Ehud the Israelite has the trust of the Moabite. King. The Moabite king is depicted as extremely fat. He is the embodiment of empire and carnality. Recall Jesus in the stories and his disciples are expressed as being against the fleshly world. They describe that gluttons and people like this are not Godly. The Moabite king is extremely fat and fleshly. The Moabite king wants to know what the message of God is. Ehud reaches for his sword and stabs the Moabite king, slashing his stomach

It is interesting that in the New Testament the word of God is described as a double edged sword. The word of God is the torah. The Word of God is the law of God. The word of God is antithetical to empire and fleshliness. The circumcison recall symbolizes extracting the fleshly preoccupations. The double edged sword, which is symbolic of the Word of God, destroys the Moabite King, who represents the antithesis of the Word of God. Another example of an Isaelite Judge is the female Israelite Judge Deborah. It is described once again that the Israelites are not following the law of God. This is because the bible says Ehud was dead. Again, the sword of Ehud represents the Word of God, the torah, and now that the Word of God is no longer being spoken through Ehud and destroying the carnality of the Israelites, represented by the death of the Moabite king by Ehud's sword, the Israelites have fallen back into sin. Not all of the Cannanites were killed by the Israelites. God was upset about this because He said they would become a thorn in their sides. Sisera is a Cannanite commander. He wears a fancy robe. Again the fancy robe represents empire and being against the law of God. People wear fancy robes in societies that emphasize carnality and are antithetical to the law of God. The Israelites are under the thumb of the Cannanites because the Israelites had sinned against God. The cannanites have charriots fitted with iron. This is a common theme. These charriots represent empires that are anithetical to the torah. They are physically superior to the forces of the Israelites. But the Israelites still defeat them. These empires on the other hand do not have the law of God and thus they are stratified and weak because they are decadent and full of sin and stratification. The stratification is represented by the nomadic tent dweller that kills Sisera. Recall that the Egyptian forces chariots were swollowed by the Read Sea and destroyed by the Israelites. Later the Ethiopian iron chariots will also be destroyed by the Israelites. Deborah commands the an Israelite named Barak to kill Sisera the Canaanite, and he does. Barak vanquishes the Canaanite troops and Sisera hides in the tent of a kenite woman. The Kenites have an alliance with the Canaanite king, but Sisera is depicted as kind of rude. He bosses the Kenite woman around. Like Rahab, the Kenite woman represents the poor and the oppressed in an empire system that does not follow the torah. Like Rahab, he Kenite woman deflects to the side of the ISraelites and she kills the lavishly dressed Canaanite ruler by stabbing a tent peg in

his head. The Kenite woman is a tent dweller, so she represents the weak and the oppressed, and because she is oppressed, she sees Truth in the torah, which is a law that helps the oppressed. Like Rahab, she helps the Israelites to destroy the Israelites enemy. She is also like the Ninevites, who went to the side of the ISraelites in the Babylonian empire. She is also like the oppressed women in the Assyrian empire hat went to the side of the ISraelites and helped the Israelites to destroy the Assyrian empire by even helping the Israelites to kill the Assyrian King. I want to mention that this even reminds me of when Samson destroys the Philistines. Recall that I said that Samson used a donkey jawbone to kill thousands of Philistines. A donkey is a beast of burden. A donkey is a worker. This killing of a lavish ruler by a worker slave is symbolic of a sort of Marxist revolution, the killing of the group in power by the workers. More on Marx in a little bit. But Samson is also sort of depicted as a worker when he brings the pillars down on the Philistines. Samson is depicted as grinding grain. I described that rabbis say that grinding grain is like sex, but also grinding grain can be literally seen as grinding grain. Samson is depicted as a slave. He is depicted as a worker slave for the Philistines. And he is the one who brings the pillars down on the Philistiens heads. Samson destroying the Philistiens sort of represents a marxist revoluiton, in which the workers destroy their oppressors. The exodus from Egypt sort of represents the same thing. Recall that the Israelites are slaves in sinful Egypt. Egypt does not follow the law of God. it is a carnal land. They oppress the weak and and marginalized, represented by how they are torturing the Israelites. The Israelites who are slaves destroy Egypt. One of the plagues in Egypt is the killing of the first born sons of the Egyptians. The first born sons of the Egyptians would represent the nobility fo th eEgyptians. the killing of the nobility would be the killing of the upper class/ rulers. This again kind of can be aruged to represent a marxist revolution, in which the workers destroy the elite. In the case of the the kenite woman killing the Cannanite ocmmander the same thing is represented. the Cannanie commander is the embodiment of sin. He wears the lavish robe. The Cannanites do not follow the law of God and they are extremely fleshly. As a result, the Kenite woman, who is an oppressed woman in the empire, destroys him. After this Deborah sings with joy, describing how the sinful Cannanite commander with the lavish robe was killed. The ideologies of Deborah and her zeal for the torah may have sparked the Kenites womans courage to help the Israelites to kill their Cannanite oppressors, who kept them from the law of God.

I want to mention something that is pretty interesting. Remember when I discussed at depth knowledge. I discussed how knowledge sex and drugs and death and sports are related. I discussed that knowledge is power. Another thing that is associated with power is money. Money is also deeply related to sex, drugs, and death and sports. The highest grossing movies are full of violence and sex. People get lost in video games that are full of violence and sex like grand theft auto or 007. I discussed that while in the flow you lose yourself. When you flow there is a different subjective experience oftime and space. People describe this when they play video games. People also describe playing women and having sexing with them. There is a pick up artist group that describes picking up women as being like a video game. They analyze the process of picking up a woman and having sex with her as being like a game. People also describe playing people as using people and even hurting people. People play sports and I described how sports are sublimations of sex and violence. Flow experiences are often connected with sports. Sometimes people when they run for a long time pass out and if they are

dehydrated have near death experiences. I described that during near death experiences you leave your body and you can have an experience of traveling through time and space. Remember that during the flow there is a different subjective experience of time and space and the flow is connected to death. When people die a drug is released in their brains that gives flow experiences. This drug is called DMT. It is ineresting that scientists think that this drug may even be connected with dreams. Dreaming is the routh square of the third quadrant. Dreaming points to the fourth quadrant, which is the knowledge/flowing quadrant. When you drema there is a differn subjective exprience o time. Also sometimes when people sleep and dream they describe near death types of experiens. For instanace, I described that when people have near death experiences they describe leaving their bodies and having astral bodies and being able to look down upon their bodies and travel around in their astral bodies. People describe seeing things that they could not have seen if they weren't flying around in an astral body. For instance, people describe seeing things in the hospital that they could not have seen otherwise during near death experiences. People sometimes describe leaving their bodies and being in an astral body in dreams as well, and they describe seeing things that they could not have seen unless they were in an astral body. For instance people will sleep and be in an astral body and look at what people are doing in another room and the next day tell them what they saw and the people will be amazed because what the person describes will be accurate. Dreaming is related to death and points to the fourth quadrant which is the death quadrant. I also described how dreams are very related to sex. Men usually wake up with boners. Freud said that dreams were completely sublimations of sex. But I did not mention anoher thing. Almost all professions are related to sex and death. For instance, grinding grain is farming. Rabbis say that grinding is synonymous with sex. People plow the field. Samson tells the Philisitnes that they had plowed his heifer. Samson is saying that they had sex with his wife. In sports people plow down defenders. People plow down drinks. In People build houses and they drill holes in walls. People also describe drilling women, which means having sex with them. People describe drilling down their enemies with bullets. So sex and death we see are related. People drill their defenders with hits or they run drills on the football field. All of these things are related. It is interesting that these professions involving these sexual/violence sublimations are also related to flow experiences. Builders sometiems describe getting in the zone. Painters stroke the brush on the walls. When people have sex there is the description of stroking the vagina. When people have a nice shot in basketball it is described as a nice stroke. People stroke down a few shots when drinking. These working professions are related to sex and death and knowledge. Women often describe being turned on by working men, probably because their professions remind them of sex and death, which turns people on. People when they build or paint houses describe getting in the zone. There is also chemicals that they use that can contribute to them getting high. These jobs are also dangerous literally. A lot of people are killed doing these jobs when they make mistakes with their tools. The male penis is also often called a tool. So knowledge, sex, death, sports, and professinal jobs, and drugs are related in the bible. All of these I described are related to money. People make money by doing these jobs. Most money goes into pornography or violence, like the UFC. Even in the UFC there is models that walk around almost naked, and there is violent music. UFC fighting is like gladiator fighting of ancient Rome. The Egyptians also had forms of gladiator fighting. I explained that knowledge is power.

There is nothing more powerful than sex, and death. I now described that sports and these professions are sublimations of sex and death. We see that most money goes into things that are related to sex and death. Money is power. People also get addicted to gambling, which involves money. Much of money centers around drugs and the trade of drugs. Psychiatriss and meical doctors sell and distribute drugs. Some people say that all food is drugs because food is chemicals and these chemicals have an affect on your body. After people eat a lot they often have sleep comas. Recall that drugs and death are related. Sleep coma makes people want to sleep and sleeping is related to dreaming. People buy sex with money and pay money to watch sports. People who play sports and have sex get money. Money is a form of power. Marx describes in the communist manifesto that the workers of the world will one day become sick of being exploited and they will overthrow their exploiters and set up a new society. Many people have completely misunderstood Marx like people have misunderstood Jesus. Marx is associated with cultural marxism today. Cultural marxism usually teaches equality of men and women and teaches equality of races and sexualities. But Karl Marx himself was racist, sexist, and homophobic. Karl Marx said that Africans were innately violent and dumb, according to his words. Karl Marx also did not see men and women as equal and he was not a fan of homosexuality. Karl Marx thought the workers of the world are exploited and one day they will overthrow their rulers and start new societies. I think that an example of a true Marxist revolution can be seen in the bible where people overthrow the sinful societies. Karl Marx described that in an ideal society money would be more evenly distributed and people would not be so exploited. That is the consequence of the torah. If the torah is followed money is more evenly distributed and people are not exploited. In hedonistic societies like Egypt people are constantly building huge pyramids and doing magnificent things. These things are carnal in nature. The reason why people built pyramids was to entrench power into the Pharoah and his genetivc line. In societies like ancient Rome people similalry were forced to work for the nobility. Gladiator fights kept the masses content. Also they reminded the masses of their mortality which tends to keep the masses from rebelling, according to sociologists. But the masses were not happy and they sought something more. And in the ancient Roman empire, Jesus and his disciples and apostles are depicted as spreading the Word of God to people who yearned for it. And this is depicted as destroying the Roman empire, like the torah is depicted as destroying the Cannanite empire, and the Egyptian empire, and all of the empires. The torah may itself be the consequence of Marxist revolutions, and a reaction to and against empires. But a point I was making with the story of Deborah is also that the Israelites defeated their enemy by converting their enemy to their side. This was represented by converting the kenite worker woman to their side. The same thing happened in the roman empire. The religious Jews were saved by the Roman empire after the Romans were converted to Christianity- a Jewish religion.
Let me give more examples of the Israelites destroying their enemies through a sacrifice, and as a result not having to die due to their sins. This example is in 1 Samuel. This is a fascinating story. Eli is a priest, and God had made a promise that his family line would be a family line of priests. But Elis sons are sinning and thus God is upset. God ends up continuing Eli's family line as he promised, but God does have killed these two sons. In the stories Samuel ministers before Eli. Samuel has an experience that fits the quadrant model pattern. Square 1: Samuel is asleep and God calls Samuel. Samuel runs to Eli and says "here I am. You called me." But Eli

says, "I did not call you go back and lie down". Square 2: Samuel heres the voice of God and he runs to Eli and says "here I am. You called me" Eli says "I did not call. Go back and lie down". These two first squares are the duality. The first two squares are always a duality. They are very similar. Square 3: The bible describes that God calls Samuel a third time. Samuel goes to Eli and says "Here I am, you called me". A psychiatrist may at this point think that Samuel is suffering from schizophrenia because he is hearing voices and he needs medication. But Samuel says, "Go and lie down, and if he calls you, say, 'Speak, Lord, for your servant is listening.'" Square 4: This time Samuel hears the Lord say "Samuel Samuel". The bible says "The Lord came and stood there, calling as at the other times, '"Samuel! Samuel!" Then Samuel said, "Speak, for your servant is listening."' The fourth is related to God. The fourth time that God speaks Samuel responds to God. The fourth is always different from the previous three. This fits the quadrant model pattern. God tells Samuel how Elis house has sinned and he says there needs to be a sin offering. After this the Israelites fight the Philiistines, but the two Sons of Eli are killed and the arc of God is stolen by the Philistines, and Eli falls and breaks his neck and dies when he hears the news. Many Israelites die. This is a punishemnt due o the sin of Elis family. At Elis death Elis daughter in law though gives birth to a son. This kind of represents a death and ressurection of Eli. Eli dies and at the same time though his line continues through this son. The sons name though means "The glory has departed from Israel" because the arc of God has been stolen by the Philistines. So we see a kind of death and ressurection. This is the sacrifice. The sacrifice of Eli is the sacrifice that needs to occur to atone and forgive Israels sin so Israel does not have to be completely destroyed. This is how the story plays out. This relates to the story of Jesus in Rome. I'm going to explain that. In this story, the Philistines set up that arc of the God of Israel in their temple. The Philistines are a multiculural empire system with many Gods. Their laws are hedonistic and carnal, and thus they cannot handle the God of Israel, who is anithetical to this. As a result, their God Dagon, who is a God of carnality, is found with its head and hands cut off. The God of Israel has destroyed Dagon. The torah has destroyed Dagon because the torah is the opposite of Dagon. Then the Arc of God gives the Philistine people tumours. The arc of God is too powerful for them, and they are killed by it. This parallels completely the story of Samson where Samson is sacrificed and then the Philistines fall due o the sacrifice. Here Eli is sacrificed, and after his sacrifice, the Philistines begin to fall. The Philistines have the arc of God, which contains the torah, and this is killing them. The torah is the opposite of the law of the Philistins, and as a result their carnal society is falling apart. I described how being too close to God is related to death a lot in the bible. Knowledge and being close to God are related, and knowledge and death are related. Here the Philistines are being killed through their vicinity with the arc of God. The Philistines like the romans were a European agricultural people that the Israelites destroyed. The Israelites were a nomadic people being oppressed by the Philistines.This story is also directly related to the story of Jonah. Jonah is sacrificed and he ressurects like Eli has a symbolic death and ressurection through the birth of a son with his daughter in law. Right after this Jonah converts the Ninevites, an enemy of the Israelites, to the torah. It is described that the Ninevites put on sackcloth. It is described later that this enemy, the Ninevites, were destroyed by God because they then sinned against God and God killed them. This story of the Philistines with the arc also directly parallels the story of Jesus. In the story of Jesus Jesus and his disciples ultimately make the Roman Empire

Christian. This means that the Roman empire has adopted the torah. The law of the torah was completely antithetical to the law o the roman empire, and historians agree that the fall of the Roman empire coincided with the adoption of Christianity. So the enemy of the Israelites, the Roman empire, was destroyed by the Israelites by the Israelites giving them the torah and converting them to the side of the Israelites. The Israelites hsould have beeen killed by the Roman empire due to their sin, but God forgive sthem of their sin through the sacrifice of Jesus, which destroys the Roman empire, because it is through this sacrifice thta the Roman emprie adopts Christianity. Here the enemy of the Israelites, the Philistines, similarly are destroyed by adopting the torah/arc of God. Teh Isrelites should have been destroyed by the Philistines due to the Israelites sin, but the sacrifice of Eli is an atoning offering that forgives the ISraelites of their sins, and the ISraelites do not have to be destroyed by the Philsitnes because the caranl Philistne system is destroyed by the torah. The Philsitnes end up sending the arc of God back to Israel because it is destroying their society and killing them. This is like when the Roman empire started to ry to discount the law of the torah and catholicism began to teach to move away from the law of God. This attempt by the catholic Church was in part an attempt to save the roman Empire, because the law of God, which Jesus and his disciples and apostles taught, would have utterly annihilated it. So the Philistines are badly hurt but they still survive, and the Roman Empire was badly hurt, but it still survived. The Philisitnes give Israel their gold to say sorry for stealing their arc. This is like when the Egyptians gave the Israelites their gold after the ISraelites destroyed Egypt, or the Israelties got the godl of the Cannanites after they destroyed the Cannanite empire system. I described that when Jonah converts the Ninevites God tells Jonah, there is a lot of them and they have a lot of cattle. The Israelties defintiely got a lot of gold from the Ninevites in their allliance with them. Similalry the Jews got a lot of gold from the Roman empire after it converted to Christianity. The Roman Empire was converted during a famine in Rome according to the stories of the New Testament. Recall that Joseph converted the egyptian empire to help the israelites during a famine in Egypt. All of these stories are connected and they fit the same form. I hope that its apparent that the form of these stories is similar. There is sin. Israel should be killed due to the sin. There is a sacrifice. As a result Israel does not have to be destroyed. The sacrifice coincides with the conversion of the enemy to the torah and or destruction of the enemy.

The same thing then happens in the next story in Samuel. The Israelites are going to be killed by the Philistines again due to their sins. But Samuel makes a sin offering to God. Then right after this the Israelites destroy the Philistines. It's the same pattern every time.

Let's go back to Abraham. The reason why I went through this seeming tangent where I described the reason why there is sacrifices is I described that Abraham's sacrifice coincides with Abraham's treaty with Abimelech, a man who wanted to kill Abraham. The sacrifice is a sin offering that makes it so Abraham does not need to be killed by his enemy, and instead his enemy is made his ally. So back to Abraham.

God prevents Abraham from sacrificing his son although he was going to do it. This represents a sort of death and resurrection like the death and resurrection of Jesus. After this Abrahams wife dies and Abrhaham finds a wife for his son Issac. The wife is rebeccah. Abraham's servant is sent to find a wife and finds her at a well. this is a common theme in the bible. There are continuities throughout the Bible. One continuity is that wives are often found at wells.

Rebekkah is a virgin and this is avery good. According to the toah and oral torah a woman needs to be a virgin to get married. It is interesting that the wife is given to Issac right after his Mom's death. Freud describes that the man wants to have sex with his Mom. It is described that getting a wife comforts Isaac after his Mom's death. Freud would argue that the represents a displacement of his Mom, and it is no coincidence that Issac attains a wife right after his Mom's death. Isaac's sons are Jacob and Esau. Jacob and Esau are twins. Jacob is the second born and usually the first born gets the birthright. The interesting thing is Esau kind of represents the fleshly and the carnal. Esau is impulsive and sells his birthright to Esau for a bowl of soup. Jacob pretends to be Esau by dressing like Esau, with the help of his Mom Rebekah, and he steals Esaus birthright. It is interesting again a woman is depicted as lieing and being manipulative. She helps Jacob fool his Dad. But it works out so that Jacob gets the birthright of Israel.

Jacob goes to Paddan Aram. There Jacob marries his relative Laban's two daughters Rachel, and Leah. It is described that Jacob has to work seven years for Laban to marry Rachel, and he accidentally marries Leah because he has sex with her but thinks that it is Rachel. Laban tricked him into doing this so Jacob will work another seven years for him. Leah's servant is Zilpah and Rachel's servant is Bilhah.

Jacob's 12 sons are the patriarchs of the tribes of Israel. The order of the sons fits the quadrant model pattern. It is no coincidence that this is so. Existence reveals the quadant model pattern, and the quadrant model pattern is expressed through the stories of religions. Jacob's sons are Quadrant 1: These are Leah's children. Leah is no loved by Jacob, but Rachel is. But according to the Bible, because of this, Leah bears the first four sons of Jacob. All of these children are named in relationship to a perception. Remember that the first quadrant is sensation and perception. This is no coincidence. The ordering of the children is meant to reveal the quadrant model pattern.

Square 1: Reuben. Reuben means "the Lord has SEEN my misery". Remember that the first square is the light. The first square is related to sight. Seeing is associated more with the mind and it is more spiritual. This is the science square.

Square 2: Simeon. Simeon means "the Lord has HEARD that I am not loved". Recollect that the second square is the word. The second square is hearing. Hearing is more relational, and that is the nature of the second square. This is the religion square.

Square 3: Levi. Levi means ATTACHED. Leah says "Now at last my husband will become attached to me, because I have borne him three sons". This is related to the sense of touch. The thid square is the body square. The third square is the flesh. This is the art square.

Square 4: Judah. Judah means PRAISE. After having Judah Leah says, "This time I will praise the Lord." The fourth sense is the sense of taste. This is related to the mouth. The fourth square is the true word. This is the philosophy square.

Quadrant 2. There is a demarcation in the action, signalling the beginning of a new quadrant. The first four sons are all Leahs sons. This is not a coincidence. This is the first quadrant. Again, the first four sons are all related to senses. The first quadrant is sensation and perception. The next quadrant is the second quadrant. The second quadrant is always connected to relationships. The second quadrant is belief, faith, behavior, and belonging. Notice how the first quadrant does not belong. Leah wants to belong. Leah wants to be loved by Jacob but she is

not loved. Rachel wants to have children but she cannot. A new quadrant is now demarcated because now Rachel gives Jacob her servant Bilhah so that she too can have a family along with her sister. Studies do show that sisters find men attractive that their sisters have sex with, and sisters wan to have sex with men tha their sisters have sex with. The reason for this is explained by evolutionary psychologists. If a woman finds a man attractive, then other women are likely to find him attractive. Moreover, women tend to be attracted to men who remind them of their Dad's, and because sisters share the same Dad, then they are likely to be attracted to the same men. Also, if two sisters have genes from the same men, then their children will be very genetically related, and this may increase the connectivity of their families. The children of Bilhah are

Square 1: Dan. Dan means vindication. Rachel says, "God has vindicated me; he has listened to my plea and given me a son". This has a connection with belief, which is the first square of the second quadrant. If you ask for something and you believe in it then you get it.

Square 2: Naphtali. Naphtali means struggle." I have had a great struggle with my sister, and I have won." The second square of the second quadrant is faith. Faith is the most relational. This square is about relationships. What Rachel says is in regards to her relationship with her sister. Faith is a struggle.

Then Leah gives her servant Zilpah to Jacob. It is interesting that the second quadrant is the two wives servants. The second quadrant is related to servitude. Belief, faith, behavior, and belonging has a quality of servitude. If you have faith and behave then you follow orders. If you belong you fit into a group, but also belonging connotes property. If you belong to somebody you are the property of somebody. There is a distinction between the first two squares and the second two squares. The first two squares are more conservative. The second two squares are more destructive. The names of Zilpah's sons are

Square 3: Gad. Gad means good fortune. Leah says, "what good fortune I have" when she has him. Fortune is connected with doing. Also the second quadrant itself is positive and related to harmony. The second quadrant is conservative. Good fortune is something that is good and conservative.

Square 4: Asher. Asher means happy. Leah says "How happy I am! The women will call me happy." Happiness is associated with belonging. Belonging is the 8th square, which is the fourth square of the second quadrant. Leah is relating herself with other women, and she is making herself appear to belong with other women. Evolutionay psychologists point out that women and groups see children as a symbol of success. If you have more children then you belong more. This square is associated with belonging. As you can see, a paterrn is being revelaed through the order of the names of the sons of Jacob. And a new quadrant, the third quadrant emerges with the next four children.

Quadrant 3: There is another demarcation. A scene occurs where Reuben gives his Mom Leah mandrakes, but Rachel wants some of Reubens mandrakes. Leah sells the mandrakes to Rachel in exchange for having sex with Jacob. So now we have moved from the second quadrant, which is the servants' children, back to Leah.

Square 1: Issachar. Issachar means reward. Leah says "God has rewarded me for giving my servant to my husband". Reward is associated with action. The third quadrant is the action quadrant. This is the thinking, emotion, doing, and dreaming quadrant. The documentary the

secret says that thoughts manifest reality and thoughts give you things. Things that you get are rewards.

Square 2: Zebulun. Zebulun means presened me with a precious gif. Leah says, "God has presented me with a precious gift. This time my husband will treat me with honor, because I have borne him six sons". The third quadrant is about honor. Artisans are the third quadrant. They want honor and respect. Here God presents Leah with something. And this gives her honor.

Square 3: Joseph. Rachel has this son. Again the fist two squares are conservative. The second two squares are different. Leah has the first two sons of the second quadrant. Rachel finally has a son here and says "God has taken away my disgrace." 24 and said, "May the Lord add to me another son." The third square is action. Taking away disgrace is an action. Also, remember the third quadrant is about respect. Disgrace is disrespect. But Rachel now has respect.

Square 4: Benjamin. After having Benjamin rachel dies. The fourth square of the third quadrant is dreaming. Dreaming leads to the fourth quadrant which is death. The pattern of the quadrant model is fulfilled in the naming and ordering and structure of the story of the sons of Jacob. There is a good story regarding Jacobs sons in regards to their sister Dina, that relates to converting your enemy in order to destroy him. Schechem is the som of a ruler named Hamor, and Schechem rapes Dina, the sister of the 12 brothers of Israel. Jacob's sons then tell Schechem that they will marry in with his people and they will allow him to have Dina as his wife. They tell them just to get circumcized first. Schechem agrees. Schechem and his people get circumcized. This represents their conversion. But then the sons of Jacob, while Shechem and his people are still sore from their circumcisions, attack them and kill them all. This relates to the story of Jesus. The Roman empire adopted Christianity, a Jewish religion, and as a result the Roman empire crumbles. The Roman empire was founded upon decadence and hedonism and carnality, and the torah pretty much obliterated it. It is interesting that Jacobs sons kill the members of Schechems city three days after the circumcision. This is similar to Jesus ressurecting after three days, and Jonah ressurecting after three days in the fish. After the three days jesus comes back and he orders that the torah be taught to all of the nations. After three days Jonah preaches to the Ninevites. This is what destroys Rome and destroyed the Ninevites and Babylon- the torah. Schechem and his people were once a threat to the Israelites, but by converting them to their side the Israelites destroyed the threat. Schechem and his people are depicted as very carnal and gredy. Schechem says that he wans to join withJacobs sons so he can take their riches and resources. There is an interesting myth that I heard about from a tribe. In the myth there is a jaguar that pretends to be dead. All of the animals in the forest come to mourn its death. Then the jaguar gets up and he eats all of the animals. This is kind of like a death and ressurection of the jaguar. The similar theme goes with Jonahs death and ressurection and Jesus death and ressurection. They die and resurrect. Then the enemies of the Israelites are converted to the torah. Then they are destroyed. The same theme is right here. The enemy of Israel is converted, as represented by their circumcisions, but then they are destroyed and no longer an enemy to the Israel. Keep in mind that the death and resurrection of Jesus not only lead to Christianity, but it lead to Islam and all of the derivations of these Abrahamic religions. A common theme of all of the Christian and Muslim sects is they mostly have taken care of the Jews throughout the centuries during the exile of the Jews. Another

common theme of the Abrahamic religious sects is they have not been extremely positive for the people that adopted them. They have not been not positive but Christian sects and muslim sects have constantly warred. The history of Christianity and Islam has been a history of a ton of death and destruction. But they did both protect and take care of the Jews through history. So one theory that I have proposed in regards to religion is that it is genetic Darwinian in nature. It is possible that the purpose of Christianity and its derivatives was to save the Jewish people. Historians tend to think the members of the llost tibes of Israel were all killed, and if they weren't all killed they just mixed with other people and they say it would be impossible to find them today if they even still exist. I can go on and on with this genetic Darwinian model of religion. I described that Elijah heals an assyrian commander then the Israelites start beating the Assyrians. Also Elijah helps non Israelites and convets them to the torah and this helps to destroy Assyria. Elijah has a death and ressuerection scene where he becomes Elisha. Daniel does the same thing in Babylon. I can go on and on about this. But this book is about the quadrant model of reality. I may make another book solely on the bible that supplements this book later. But let me just give more examples of the quadrant model of reality in the Bible. We are discussing Christianity and Christianity uses both the torah, which is the five books of Moses, the Tanakh, which is the writing of the prophets, and the New Testament.

Let me give an example in regards to the prophet Elijah. Jezebel and Ahab rule Israel. Jezebel is a non Israelite and she is probably a hamite, and she has turned Israel against the torah and completely toward the carnal. As a result Elijah has to flee for his life. Elijah is a prophet of God who is trying to get the Israelies to return to the law of God because they have assimilated with the Assyrian agriculturalists and are oppressing the power and the weak and being evil. Elijah has already killed many many Israelites who have rebelled against the word of God. Jezebel orders Elijah, a prophet of God, to be executed. Recall that Jezebel is blamed or leading Israel into sin and thus Israel's dispersion. Elijah runs to a mountain and on the mountain he experiences the quadrant model pattern. He experiences four things and the fourth is the voice of God. Recall the fourth is always transcendent and always kind of points to God.

Square 1: "a great and powerful wind tore the mountains apart and shattered the rocks before the Lord, but the Lord was not in the wind." The first square is the wind. The firs square is always the most ephemeral and the least solid.

Square 2: "After the wind there was an earthquake, but the Lord was not in the earthquake". The second always builds on the first. The second is not yet the third. The third is always the most related to doing.

Square 3: "After the earthquake came a fire, but the Lord was not in the fire." The fire is related to doing. Fires seem solid and they act. Fire builds upon the first two.

Square 4: "And after the fire came a gentle whisper". The fourth is different from the previous three. The fourth builds upon he previous three. The fourth is the most related to God. Elijah recognizes the voice of God in this gentle whisper. The fourh never seems to belong. The first three are very a lot different from the fourth.

Let's discuss the story of Elijah and Elisha and how it fits the quadrant model pattern. Let's start at 2 kings 1. In 2 Kings 1 King Ahab of Israel has died and Ahaziah has taken over. Ahaziah has fallen through a lattice and injured himself and he seeks the guidance of the God Baal to know if he is better or not. Elijah says, "Go up and meet the messengers of the king of Samaria and ask

them, 'Is it because there is no God in Israel that you are going off to consult Baal-Zebub, the god of Ekron?' 'You will not leave the bed you are lying on. You will certainly die!'" The prophets in the Bible are not bearers of good news. The prophets in the Bible often make people very upset with them. That is why about every prophet in the Bible has people wanting to assassinate them. Jesus describes that the Israelites killed all of their prophets, and Jesus warns about false prophets who speak to tell people what they want to hear, and not what is the Truth. Baal is a carnal God. Baal is the reason why Ahaziah was hurt in the first place. Ahaziah should return to the law of God, but he does not want to, because he prefers Baal. Then Ahaziah sends guards to get Elijah. Elijah is on a mountain top. The guards ask Elijah to come with them, and they call him a man of God. Elijah says "If I am a man of God,may fire come down from heaven and consume you and your fifty men!" Then fire comes down from heaven and consumes them in the story. This happens two more times. As you can see Elijah is not out to make friends. Elijah is bringing down punishment from God on people who have fallen away from the law of God. King Ahaziah dies and he is replaced by Jehrom.

Then Elijah is going to be sent to heaven on a chariot. This happens through a CROSSING. Elijah takes his cloak, rolls it up, and strikes the Jordan river with it. This is significant. Recall that the Jordan river is the river that stopped up and that the Israelites miraculously passed into the land of Canaan. It is described, like with the Israelites that Elijah and Elisha cross on dry ground. It is no coincidence that Elijah takes off his cloak before he does this. Before Jesus is put on the cross his cloak is taken off and divided. Also when Joseph is killed by his brothers his cloak is taken off and dipped in blood. Here Elijah is about to cross the Jordan and this is going to lead to his death and this is preceded by Elijah taking off his cloak. Then Elijah tells Elisha that if Elisha sees him while he is taken to heaven then Elisha will get a double portion of his soul. This kind of represents Elijah living on through Elisha. This represents a death and resurrection, like with Jesus on the cross, and like with Joseph when he seems to be dead, but he is really brought to Egypt. Also Moses dies before the Israelites cross the Jordan river, but he is continued by Joseph, who is kind of like his ressurection. it is described that as Elijah leaves Elisha shouts" My father! My father! The chariots and horsemen of Israel!". it is interesting that when Jesus is on the cross Jesus yells "Father Father" calling out to God. When Abraham is about to sacrifice his son Isaac God yells "Jacob Jacob". It is interesting that there are these repetitions of pronouns during these events. It is described that Elisha grabs Elijah's garment and tears it in two pieces. After Jesus dies his garment is divided. Also after Joseph dies his garment is divided. we see parallels in the different stories. This happens after Jesus is put on a cross. This happens after Elijah crosses a river. So these events coincide with c crossings. It also happens when Joseph crosses into Egypt. Moses dies at the crossing of the Jordan river as well. In Jude it is described that Moses may not have died. Again we see the diea of a ressurection. Then it is fascinating that 50 men who followed Elijah then look to search for Elijah because they think that he may have been put on a mountain or in a valley. In other words, they do not think that Elijah is gone. The same is true with the story of Jesus, where people don't think Jesus is dead but has ressurected. Then it is described that they search for three days and on the third day they come back to Elisha and Elisha says "see didn't I tell you not to look". This three days parallels the three days that Jonah is in the fishes mouth before he ressurects. This three days parallels the three days that Jesus is dead before his ressurection. These men come

back to Elisha. Elisha represents the ressurection. What is significant is that this occurs during a crossing. The cross and death are related in the Bible. Hebrew means to cross over. I thought of something interesting. During sex there is often repetitions of names. For instance, it is said that women say "daddy daddy" when they are having sex. Men may also repeat the womans name. Also it is sometimes said that when people die they repeat names like "mommy I want my mommy", or "Joe Joe". When King David is being chased by enemy Israelites and tey want to kill him David in desperation yells "Father Father why have you forsaken me". It seems in these very stressful situations people repeat names.It is interesting that during these crossings and during these sacrifices we see names being repeated.

Then Elijah multiplies olive oil for an Israelite woman. He allows a non Israelite Shunamite woman to become pregnant, and her son dies, but he raises a Shunamite woman's son back to life. I described that in the bible it is the law of God and the teachings of God that bring prosperity. When olive oil is multipplied it is due to the law of God being followed. A woman becoming pregnant and a boy coming back to life is due to the womans humility in the face of Elisha and his message, and her submission to God and His Law. This is interesting because Jesus in the stories of the gospels also raises a dead man to life. This is symbolic. I described that death is due to not following the law of God in the bible. Raising a deead man to life is symbolic of bringing a man who is far from the law of God back to the torah. The pahrisees do not like to see this because they, in the stories, are described as caranal and full of Greed and they are gaining in wealth and power for themselves by hiding the law of God from the people and not following it themselves. The same thing is happening at the time of Elisha. The Israelite rulers are not following the law of God but are following the ways of Baal. As a result, people are suffering. But Elisha is bringing people back to the God and His Law, which are inseparable. Elisha then feeds 100 people with 20 loaves of bread. In other words, like Jesus, Elisha multiplies bread, and it is described, like in the stories of Jesus, that there is leftovers. Naaman is a commander of the Assyrian army. He has leprosy. His wife has an Israelite servant. the Israelite servant reccomends he go to Israel to seek somebody to cure him. The King of Israel is upset because he knows that he cannot cure him, and he thinks that because he cannot help the Assyrian army will pick a fight with Israel. But Elisha says that he can help. Elisha tells Naaman to go into the Jordan river seven times to cleanse himself. But Naaman is not humble. Naaaman wants Elisha to have an elaborate ritual where he calls upon his God. He also wants Elisha to have him was in the Damascus river or an Assyrian river and not a river of Israel, which he sees as inferior. But Naaman submits to Elisha and humbles himself. He follows Elishas orders and he is healed of his leprosy. This is significant because Jesus in the gospel stories says to the Jews that he will do what was done with Naaman. This makes Jews try to stone him because they know that Jesus is saying that he will help the Roman commanders. The Jews see the Romans as their enemies. Jesus does heal a Roman commanders servant. Elisha heals an Aramean commander. The Assyrians are enemies of Israel. But this works out to help Israel. After this healing, the Israelites start to defeat the Aramean army. I don't think this is a coincidence. I suggest that the Aramean commander deflected to help Israel. After he is healed, the Assyrian Commander tells Elisha that he will give Elisha all of his riches. Elisha is a man of God. Men of God are not obsessed with fleshly carnal things, so Elisha doe not accept all of Naamans riches. But I would argue, Naaman still helped Elisha. He helped Elisha by

helping Elishas people, the Israelites. Similalry, after Jesus helps the Roman commander, I described that there is the story of Jesus healing Legion of demons, and having the demons go into pigs and be swollowed by water. I described that this is allegorical of JEsus destroying the roman army. The demons in Legion represent the Roman legions. Demons according to Grace Ministries Church means riches. The Roman army was a plunderous army that sought riches and carnal things. Also Jews called Romans and non Jews pigs. There is another example of this phenomenon in the New Testament. Peter in the Book of Acts is captured by the Roman army and he is in jail with 16 soldiers guarding him. It is importantto emphsize that there is 16 soldiers. There is four groups of four. This is the quadrant model. The reason why Peter has so many soldiers guarding him is because he is such a threat to Rome and Rome wants to execute him. Remember that Peter is teaching the torah and the torah is antithetical to the multicultural Roman Empire. But Peter escapes. There is a rational reason behind this that I discovered. Directly before this Peter converts the Roman Commander Cornelius to the torah. I think that it is safe to say that Cornelius helped Peter to escape, being that he is a Roman commander and Peter is being held by Roman soldiers. It is described in the stories that an angel helped Peter to escape by taking off his chains. But the bible never describes what an angel is. The angel can be a man who is doing God's will. God's will is that Peter be set free and continue to teach the torah. So I am pointing out that these conversions of the enemy end up helping ISrael and helping the survival of the torah, and hurting the enemy. King Herod ends up having the 16 guards who watched over Peter executed because Herod, after cross examining them, probably knew that they were complicit in Peter's escape. The roman soldiers were treated like dogs. They had enough of Rome and they probably liked Peter, who taught agianst Rome. So they were willing to sacrifice themselves and face the consequences of helping Peter, a man of God. It is clear that the healing of Naaman has to do with his accepting the law of the God of Israel. When Naaman is healed he tells Elisha that he is going to be forced to bow to the Aramean God, who is a carnal God, but he asks Elisha to ask the God of Israel to forgive him for this. Elisha tells Naaman to "go in peace". Right after this event, The Israelites miraculsously defeat a stronger Aramean army. Here is something that gives it away that the Arameans knew something fishy was going on. The King of Aram asks, "Tell me! Which of us is on the side of the king of Israel?" I think this gives it away that the Aramean commander Naaman had deflected to the side of Israel, because the King of Aram knows something is up, and that they should not be losing to the Israelites, an inferior army. The Arameans do not have the law of God, and thus, even though they may have superior weaponry, materials, and more soldiers, they do not want to fight for their people as much. The law of God makes people happy and strong. The law of God ensures that wealth is not too stratified and there is not hedonism and that people are not degraded by being made into prostitutes and things like this. Naaman turned to the God of Israel. And he helps Israel to defeat the Arameans. This is not explicitly said. Of course it is described that a miracle saved the Israelites from the Arameans. But I think that it is not a stretch to say that there is a connection between Naamans healing by Elisha and the Israelites defeating the Arameans. I also think that it is not a stretch to say that there is a connection between Jesus helping the Roman commander and then Jesus metaphorically destroying the Roman army, or Peter converting the Roman commander, and then Peter being broken out of prison. It is especially important to note that Jesus references Naaman. Jesus

knew about this story and it is possible that he was aware of this interpretation that I discovered. Jesus does the same thing. When Jesus is on the cross the Roman soldier claims that he believes he is the son of God. This represents the Roman soldier accepting the God of Israel and the torah. The Roman army is at first against Israel, but after they are converted they begin to help the Jews and be on the side of the Jews and the torah. I do not say this to be arrogant, but these interpretations that I am putting fourth have never been said before to my knowledge. This is new stuff. I discovered this. This is the fascinating thing. This is how the Israelites beat the Arameans. The Arameans are fighting the Israelites and then they end up in the Israelite camp. The Israelites are going to kill them. Elisha asks the Lord if the Israelites should kill them. But the Lord says not to kill them but to eat with them. Eating with the enemy represents convverting the enemy to your side. The same thing happens with Peter and the disciples of Jesus when they eat with non Jews in the Roman Empire.

This is very interesting. The Israelites after eating with the Arameans are under siege of the Arameans. The King of Israel is mad at Elisha and wants Elisha killed. The King of Israel probably is upset that Elisha helped to heal the Assyrian commander and that Elisha had the Israelites eat with their enemies. The Israelites are starving and two Israelite women make a deal. One Israelite woman says that they will kill and eat her son one day and they will kill and eat the other son the other day. They kill and eat her son but the next day the other woman hides her son. The Israelites are starving. Elisha though says that the next day they will have a lot of food. There will have to be a miracle. The next day there are four men with leprosy at the city gate. They say that if they stay they will die, so they agree that they should go to the Aramean camp and surrender, and maybe their lives will be spared. I don't think it is a coincidence that these are four men. They represent the quadrant. They find the Aramean camp abandoned. I don't think this is a coincidence. I think that it is not a stretch to say that the Aramean leader is complicit in this. A lot of food is in the camp and supplies. The Israelites take it and as a result survive. I don't think that this story is random. I think that the fact that the Israelites had food with the Arameans, and now the Arameans have left their camp so that the Israelites can eat their food, is not a coincidence. And it is due to Elisha, who had the wisdom of God to convert his enemy in order to defeat them.

Now this is a fascinating story. Elisha had brought a Shunamite womans son bakc to life. SHunamites are not Israelites. the Shunamite woman goes to King of Aram and she tells him about the miracles of Elisha. This is significant. Look at how this story is shaped. Elisha has saved the Shunamite woman's son due to her belief and submitting to the torah. Elisha also heals people by having them turn to the law of God. The Shunamite woman represents a convert. She is the enemy that has been converted. Now this is the fascinating thing. She tells the King of Aram about Elisha. The King of Aram becomes sick and he sends a messenger to Elisha to heal him. The King of Aram represents an enemy to Israel. Elisha is represented as a very astute man. Elisha begins to cry and tells the man, Hazael, who the Ben Hadad, the King of Aram sent, that the Arameans will destroy the ISraelites. They will destroy the Israelites due to their sins. But this is the brilliant thing that Elisha does. Elisha tells Hazael that Hazael will take the Kings place as ruler. Hazael then goes back to the King of Aram, the enemy of the Israelites, and he kills the King. This is brilliant. By converting the Shunamite woman, Elisha vicariously made it so he could ultimately kill the enemy of the Israelites, the King of Aram. The

same thing happens in the New Testament. After converting many members of the Roman army, these members, it is described that King herod, who is a Roman that is ruling over the Jews, is killed for blaspheming god. I don't think it is a coincidence that he is illed in the midst of a group of Christians. I think it is not a stretch to say that the Christians killed him. And his death would have been good for the Jews, being that King Herod is an enemy to the Jews in the stories. In other words Elisha is depicted as a trickster. Elisha triccked Hazael into killing the King of Aram, the enemy of the Israelites. I submit that the stories of the New Testament have the same form as the stories of Elisha and the other stories that I ave depicted so far. The death and ressurection of Jesus coincides with the converting of the Jews enemies, which saves the Jews from their enemis. The death and ressurection of Elisha coincides also with the conversion of the Jews enemies, which saves the Jews from their enemies. In other words, these sacrifices forgive the Israelites of their sins. The Isralites should have been killed by their enemies, but by converting them after the sacrifices, the Israelites are saved from death. This interpretation I have never seen proposed before, but it seems extremely obvious to me. Remember, the Shunamite woman represents the oppressed in the Assyrian empire. Elisha converts the oppressed, and she helps him to destroy the enemies of the Israelites. The King of Aram is against the alw of God and the Israelites. Remember that the Israelites converted Rahab and she helped the Israelites to destroy Cannan, as well as the kenite woman who helped the Israelites to kill the Cannanite commander. This is a common theme in the bible.. The torah speaks to the oppressed and downtrodden in society. These people see the law of God and it touches them. The prostitue Rahab sees the law of God which is against prostiution and this speak to her. That is why it is these people that end up helping the Israelites. After Elishas death the Assyrian empire ends up exiling the Northern Kingdom of Israel due to its sin. But the bible describes that many Israelites are resettled there in what is known as Samaria. Jesus in the stories talks to a Samaritan woman at the well and describes that she is aa descendant of Jacob. In other words, Jesus sees her as a member of the Northern Kingdom of Israel. Recall that JEsus refuses to preach to anybody other than Israelites in the stories. It's amazing that not many people know that, but it's true. Just read the new testament. I think so many people don't know anything about the bible because they haven't read it. I was lucky because my Grandpa on my Dad's side was a minister and he is extremely brilliant, and for about the course of two years every night I called him on the telephone and read the bible and talk about it with him. I think that's what helped me to get the knowledge I have of the bible. My Grandpa did not see the connections that I have made, but it was thanks to all of the time that I spent reading the bible that I made all of these connections. My Grandpa was actually the one who introduced me to Ken Wilber's book the theory of everything in which Ken Wilber discusses his own quadrant model. My Grandpa gave me this book when I was in the 9th grade and he discussed it with me. Also my Grandpa was the one who told me about the thinking, emotion, doing, dreaming personality model and he was the one who first told me that he thought that thoughts are shaped by the ego. If it was not for my Grandpa, there is no way I could have come up with the quadrant model I don't think. This might sound crazy, but I do think reality is an illusion, and I can go into great detail, but I think that reality had guided me to the theory of everything. If I told people what I have experienced they will say that I am schizophrenic, and right now I'm not going to, but I think that reality is an illusion. The thing about real schizophrenics though is they

cannot pretend not to be schizophrenic. Real schizophrenics, if a doctor asks if they have experienced things that suggest to them reality is an illusion, describe really bizarre things, more bizarre than I have experienced. I mean they talk about aliens and this and that. If a doctor asks me if I have experienced bizarre things I am not like a schizophrenic.I just tell the doctor no so he leaves me alone. But my experience in life has suggested to me that reality is an illusion. Jung talked about the concept of synchronicity. Jung described the phenomenon of people saying something and at the same time reading a sign that says it, and things like this. Jung talked about these strange coincidences and things that seem supernatural and Jung said that this is the mind coming to the realization that reality is an illusion. I have definitely experienced a lot of synchronicity. A lot of skeptic philosophers say that these types of experiences can be explained by probablity and statistics. People are bound to experience things like synchronicites , adn when they do, they attribute it to the supernatural. It is interesting that people have these types of experiences often when they are high. I described that that people think that people like the oracle of delphi were high when they made their propheices, and this is why their propheices were accurate. Others say that people like the oracle of delphi just make really broad statements, and events happen that people attribute to being prophecied, but the stameetns are so general that it is inevitable that the oracle will make some statements that appear to be hits. But people describe while being high experiencign thigns like synchronicieis. I think that I have experienced things that are beyond probability explaining. But ten again a lot of people do. But it is interetesting that people who have "diseases" like schitzophrenia often claim to have supernatural experiences that reveal different types of qualities of reality. These types of people were made shamans in ancient cultures. It is interesting to note that doctors think that these types of people have chemical iimblances in their brains. Drugs that make people high produce chemcial imbalances in peoples brains and that is why they get high. The idea is people like schitzophrenics and people like this have these chemical abnormalities naturally. So they are high without taking drugs. It is interesting that these types of people claim to hear voices and have visual hallucinations. Hearing voices and visual hallucinations is a common quality in the prophets of the bible, and is a quality that the spiritual leaders in all cultures shared. I described that these voices and hallucinations are often attributed to be from the divine, and that they give knowledge of God. I described that drugs often lead to knowledge and are associated with knowledge. People who take drugs claim to have visual and auditory hallucinations. But shamans and these types of people gain knowledge from God apparently without the need of drugs. People say that these types of people need to be medicated. I described that in ancient cultures a person who would be termed schitzophrenic today would be highly revered. Moreover, evidence shows that by medicating these people and hospitalizing them, it does not help them too much. In fact, evidence shows that in cultures where schitzophernics and people with these "mental diseases" are just treated like other people, the people do a lot better and don't have as serious of problems as in a culture like the United States, where a big deal is made out of these people and they are called "mentally ill". There is a scientific phenomenon known as synestheisa. People with synestheisa claim that they can see the color of peoples names, or numbers, or sense the taste of a word, and things like this. Scientists now know that this is a real phenomenon that they attribute to wirings in the brian associated with senses being intertwined with areas of te brain associated with things like the

shapes of numbers and stuff like that. But these people used to be considered crazy. People who have synesthesia tend to be better at metaphorical thinking. I have synesthesia in that I see the color of numbers and peoples names seasons and stuff like that. It is rare that somebody has synesthesia

King David is another example of a person in the bible who converts his enemies in order to destroy them. There is a civil war among the Jews. David is trying to take the kingship from Saul and Saul wants to kill David. David lives with the king of the Philistines. The King of the Philistines likes David and trusts David. This represents David converting his enemy the Philistines. David tells the King of the Philistines that every night he will go out and kill Israelites. The King of the Philistines really likes David because of this. But every night David really goes out with his army and kills Philistines. Later Philistines tell the King that David has been killing their men. The King loves David so much that he refuses to believe this. This is like the stories of Jesus. The Roman empire is converted to Christiantiy and this destroys the Roman empire. By converting the Roman Empire to the torah, the Roman empire is destroyed. This is like David sort of converting the Philistines. This ended up hurting the Philistines, who were really against the torah. Another example of converting the enemy is seen in 1 Chronicles. David is with Uzziah and Uzziah touches the arc of God and dies. Recall that knowledge and death are associated and knowledge and close proximity with God are associated. Touching the divine kills you, and Uzziah, an Israelite touches it. As a result David gives the arc to an Edomite to take care of it. The Edomite becomes a gatekeeper for the Israeltites and his sons are in charge of food storage. Giving the edomite the arc represents converting him. As a result the Edomite helps the Israelites with food and protection. The same thing happens when Joseph converts the Egyptians by interpreting the Phyaroahs dream. After this Joseph becomes second and command to the Pharoah and thus becomes a sort of God King to the Egyptians. It is interesting that the same thing happens in the book of Esther. I already described this book. In this book Mordecai becomes second and command to the Persian king and thus becomes a sort of God King in the Persian Empire. As a result Mordecai can kill the enemies of the Jews in the empire. By converting the Persian Empire, this saved the Jews. The same thing happens in the story of Jonah I explained. God tells Jonah to convert the Ninevites and after Jonah converts them then God says that they have a lot of cattle and there is a lot of them. In other words the Ninevites can offer them food and protection. The same thing happens when the disciples of Jesus after his resurrection convert the Roman empire to Christianity. There is a famine in the Roman Empire like there was a famine in Egypt. The Jews are therefore saved. It is interesting that after Uzziah's death David defeats the Philistines in battle. Uzziah represents the sort of sacrifice. The Israelites were sinning, but there is a sacrifice, and after the sacrifice the ISraelites defeat the enemy that was going to kill them. I described this with the story of Moses. The Egyptians are supposed to kill the ISraelites. But then Moses sacrifices the lamb. AFter this the Israelites defeat the Egyptians. Jesus becomes a sort of God King to the Roman Empire as Joseph becomes a sort of God King to the Egyptian Empire as Mordecai becomes a sort of God King to the Persian Empire. And all of these figures are depicted as saving Israel. The Egyptians are even sort of converted, and they give the Israelites their gold and resources. Another example of God forgiving sins and thus not killing all of the Israelites due to a sacrifice occurs in 1 Chronicles 21. David takes a census of Israel in a way that is against the law of God. Therefore,

due to David's sin, God punishes all of Israel with a plague that kills over 70 thousand men. David asks God not to punish Israel but to punish him and his family and then David makes burnt offerings and sacrifices. As a result, this forgives Israel of David's sin, and God stops killing them. This is like te sin offering of Jesus that also forgives the Israelites of their sins and prevents the Jews from having to be killed by the Roman empire. I can even go so far as to argue that the book of Job represents this phenomenon of converting your enemy to the torah to destroy them. Job is an Edomite, an enemy to the Israelites. yet he has faith in the God of Israel and this destroys him. Similarly the Roman Empire had faith in the God of Israel and it this faith destroyed it. The torah is anti empire. The Pharoah even claimed to believe in the God of ISrael. No wonder why Egypt is destroyed in the stories. Similalry Job has fait in the God of Israel and the God of Israel destroys his family and all of his possessions. But Job maintians his faith in the torah and in the end is blessed. He actually ends up interestingly with more in the end than he had in the beginning. But still before this he is destroyed.

The book of Job interestingly, fulfills the quadrant model pattern. Job has four comforters. In the book of Job, Job is a rich man who has a lot of faith in God. But Satan tells God that he does not think that Jobs faith would last if Job lost all that he had. God thinks that Job's faith will remain firm, but God tests Job by killing his family and destroying everything that Job has. Job is saying that he has done no sin and nothing wrong to deserve this. Jobs comforters disagree. The comforters are

Square 1: Eliphaz

Square 2: Bildad

Square 3: Zophar

Square 4: Elihu. Elihu comes at the end. He is different from the previous three. The quadrant model is fulfilled in Job's four comforters. The book of Job is these four comforters trying to tell Job that e did commit sin that made it so his punishment is deserved. The first three men continue to try to tell Job that his punishment is just but Job will not listen. Elihu comes in once the first three have given up, and Elihu kind of elaborates on what the first three have said. The fourth is always different from the previous three, yet encompasses them. Finally at the end God tells Job that He does what he wishes, and what he does is just, because He is great. Then for maintaining his faith, which means that Job continued to follow the torah, God blesses Job with more than he had before. Job fits the quadrant model pattern.

The book of Daniel is about Daniel in the Babylonian empire after the Babylonian dispersion. Daniel loves the God of Israel and His law. Daniel is not carnal or fleshly, and his character is sort of antithetical to the ways of the Babylonian empire which are fleshly and carnal. Daniel is under King Nebuchadnezzar of Babylonia. This is the only time before the Roman dispersion that the Jews are outside of the land of Israel. Daniel, Hananiah, Mishael and Azariah, descendants of nobility, and young handsome men without physical defect, are chosen to serve in the King of Babylon's court. These four characters represent the quadrant. It is described that the chief official gave them new names: to Daniel, the name Belteshazzar; to Hananiah, Shadrach; to Mishael, Meshach; and to Azariah, Abednego. Daniel is a righteous man and decides not to "defile" himself with the royal food and wine. The royal food probably is not kosher and it is probably extravagant. Recall that the God of Israel is against carnality, and royal food is usually for the purpose of pleasure. King David talks against gluttony. Recall that the law

of the Bible is antithetical to the hedonistic law of multicultural empires that encourage hedonism. Because the court does not offer kosher food Daniel just eats vegetables and water, but Daniel and his friends, who eat in this manner, become stronger and more healthy than the members of the court who gorge themselves. The King of Babylon has a dream and he wants his astrologers and magicians to interpret it but he does not tell them what the dream is. Because they cannot interpret it the God of Nebuchadnezzar ordered them executed. Then Daniel interprets the dream with the help of the God of Israel. The dream fits the quadrant model pattern. In the dream there is a statue. The statue has five part that fit the quadrant model pattern. They are

Square 1: a head of gold. The first square is the head. The first square is mental. Gold is also good. The first square is good. Gold is also kind of soft and malleable. That is the nature of the first square.

Square 2: a chest and arms of silver. The second square is structure and homeostasis. A chest and arms are structure.

Square 3: a belly and thights of bronze. The third square is the most solid. Bronze is solid and hard. The tird square is also the doer. The thighs are responsible for the bodies movement and ar powerful.

Square 4: legs of iron. The fourth part is iron. Iron is different from gold silver and bronze.

Square 5: feet of partly clay and partly iron. Recall that the fourth always points to the fifth. The fourth always indicates the fifth. The fifth part has elements of the fourt in it. The fourth is the true word and the fifth is the true light.

Remember I described that the nature of dreams in the Bible is that they predict the future and create the future. Daniel says that these four parts of the statue represent five kingdoms. Daniel does not say speccifically what these kingdoms are, but scholars have teir theories. Scholars think that Daniel was written late in Jewish history, and pretended like it was written before, so it has these predictions about these four kingdoms, but really these are just descriptions of the past posing as predictions. Daniel tells Nebukunezzar that the head is the Babylonian Kingdom that the Jews are currently under. Seventh day adventists tend to think these kingdoms are

Square 1: the Babylonian Empire
Square 2: the Mede/Persian Empire
Square 3: the Greek Empire
Square 4: the Roman Empire
Square 5: This is debatable.

Peter has a dream of unclean animals and God says to eat them. But this is just a dream. And remember, dreams are not literal but metaphorical, and there is an interpretation of the dream immediately following it. Immediately following this dream the Roman commander Cornelius goes to meet Peter. Peter is told by God to convert eat with them and convert them. I already described the reasoning behind this. By converting the Roman commander, a man with a lot of power, this would be good for the torah and for Israel. Romans to the Israelites were called pigs. Romans were seen as unclean animals and thus Jews did not associate with them or eat with them. But in this case God says to associate with this Roman Commander and eat with him. Messianic Jews think that this Roman commander was probably a member of a lost tribe of Israel. But whether or not he is does not matter. What matters is that by converting the Roman

commander to the side of the torah, the Jews are going to help to destroy Rome, After Daniel interprets the dream of Nebukenezzar nebukunezzar makes Daniel second and command in the Babylonian Empire. This is similar to Joseph who is made second and command in the Egyptian Empire. Daniel essentially is made into a God King for the Babylonians, because being second and command to Nebukenezzar would deify you. This is like Jesus who is deified by the Romans. This is good for the Jews that Daniel, a Jew, has gained so much power in the Babylonian empire, like when it was good for the Jews in Egypt in the stories, when Joseph becomes second and command. Daniel is made into a ruler. Moreover, Daniel makes his Jewish friends Shadrach, Meshach and Abednego administrators. Nebuchadnezzar sets up a golden statue for the people of his empire to worship but Shadrach Meshach and Abednego will not worship it. The gold represents carnality and empire. The gold represents greed and this statue is thus antithetical to the god of Israel. The law of the God of Israel separates man from the fleshly and the carnal. Shadrach, Mesach and Abednego are warned that if they do not worship the golden idol they will be thrown into a fire. They are thrown into a fire but they survive. Babylonian guards look in and they see a fourth figure with them that they say looks like "a son of the Gods." This fits the quadrant model pattern

square 1: Shadrach

square 2: Mesach

square 3: Abednego

square 4: a son of the Gods.

The fire kills the Babylonian soldiers that threw them in. Nebukenezzar also praises the God of Israel for this miracle. This is a common theme. The enemy of the Jews is being converted away from paganism to the God of Israel.

Then Nebukunezzar has a dream. Remember that dreams in the bible tell the future and they also influence the future. They influence the future because the interpretation f them will influence the future. The King of Babylon tells Daniel that in his dream there was a tree. It is a magnificent tree. In the Dream a messenger comes down from heaven and tells Nebuchadnezzar to cut it down. The animals under it flee and the fruit is stripped off. Nebuchadnezzar asks Daniel to interpret the dream. Daniel says that King Nebuchadnezzar will be driven away from his people and live with the wild animals. Recall that the Nebuchadnezzar was once an enemy to the Jews and an enemy to the torah. Now Daniel is saying that he will leave his kingdom and go with the wild animals. Nebuchadnezzar is going to go from being a lavish king to putting on sackcloth and separating himself from the carnal world. In other words, he has moved from an enemy to the torah and Israel, to a friend to the torah and the Jewish people. This is like when Jonah converts the Ninevites. The Ninevites go from being an enemy to Israel and dangerou and sinful and carnal, to wearing sackcloth and on the side of Israel and the torah. Daniel tells the King to be kind to the oppressed and renounce his sins. In a sense Daniel is destroying the Babylonian Empire. Daniel is doing the same thing Joseph did. Daniel is advising the King and the King is listening to an Israelite. In Daniel's interpretation of the dream., Daniel destroys the Babylonian Empire, because the King follows what Daniel says will happen, he renounces the world, and he comes back to his kingdom now following the ways of the God of ISrael. The torah is a book for the oppressed and it is antithetical to empires. Daniel is teaching the King to follow the torah. This is a death blow to the Babylonian Empire.

Nebuchadnezzar's son though is Belshazzar. Belshazzar stops following the torah, and he lives carnal and fleshly. He is having a lavish banquet where he drinks off of the golden cups that the Babylonians had taken from the Jewish temple of God. This is when there is the famous writing on the wall. There is a disembodied hand and it writes on the wall. The writing fits the quadrant model. It is interesting that the King is drinking wine when the writing occurs. Remember that wine is associated with death. Daniel tells Belthezzar how his Dad had humbled himself. Nebukenezzar had turned to the torah according to Daniel. But Daniel says that Belthezzar hasn't. This is evidenced by the fact that Belthezzar is having this lavish hedonistic banquet. The writing on the wall fits the quadrant model pattern. It is

Square 1: Mene. God has numbered the days of your reign and brought it to an end

Square 2: Mene. The first two are the duality

Square 3: Tekel. You have been weighed on the scales and found wanting. This is an action. Weighing is an action. The action is the third square

Square 4: Your Kingdom is divided and given to the Medes and the Persians. The fourth square is death. The fourth square is also division. When somebody flows he loses his self/ he loses his ego. It is like he is separating from his body. It is interesting because I have been studying the nature of rape and murder with a man recently who is an expert on the subjects. He describes that there are books on the subject. His analysis fits my writings. I described how knowledge is related to sex and death and drugs and sports. He describes that people who go on murderous rampages in a sense do lose themselves. He says sometimes they don't even remember doing it. He says it is like they are on a drug like salvia. Salvia is a drug that kind of makes people experience death. I described how drugs induce flow experiences. He says that when people go on murderous rampages, or even when they rape, there is a sort of disassociation with themselves. He says that the people who are disassociated with themselves often do things like eat the person that they kill. He says it is almost like it is not them though that is doing it. He describes that it is like they have two selves. This is the way that he describes it. He describes there is the normal human self. And he describes this primordial self that can rape and murder and this self that comes out when you take drugs as the chimp self. He says the chimp self has no inhibitions. He says the regular self, if it saw somebody in a room with a hatchet swigning and striking everybody, would freeze and be scared for at least ten seconds. He says the chimp self would just react and jump into action and stop the guy from swinging or join in. There is the term of people who are drunk with blood. These people are in a sense actually drunk. He showed me the picture of a man who recently killed his wife and ate her. I told him how what this man did is cannibalistic and murderous, and I described how Freud says that humans are subconsciously cannibilsitic and murderous. The man told me that the guy who ate his wife was in touch with that inner chimp. He said that if you look into the mans eyes when he killed his wife and when he ate her, he said that it would not be that man. He said it would be the chimp. He described that te man has to be sort of dissaciated with himself. He says some people become that chimp permanently. He said that torturing people, like in Guantanomo, can turn people into that chimp. He said a lot of people have a higher propensity to become that chimp due to childhood trauma. He told me that chimp is connected with when you take drugs like salvia, and that is why people like to take them. I told the man how I have never taken drugs in my life. I described how drugs and sex and death are related. They are in a different state. The man who

I talked to who studies this and is an expert on this also told me an interesting thing. I told him how sex itself is like an act of murder where the man is murdering the woman. He told me that the woman does literally in a sense die when she is fornicated with. He said that when a woman orgasms, pet scans show, she sort of passes out. It is like you are killing her. This is fascinating to me and proves my idea that knowing, sex, and death are related. I described to the man my situation in basketball. When I was young I was one of the best in the nation. I was the best shooter and I was very good at everything. Then my Dad bought me a shootaway machine. It is a net that goes around the hoop. When you shoot the ball goes through the net and rolls down a rail back to you. I said before I was so good because I moved into shots naturally and didn't think about it. I said once I got the shootaway, looking back at it, I started to shoot mechanicall. I would pick the ball off of the rail and shoot. My shot was so good because when I moved into it naturally I was aligned with perfect form automatically. My approach was perfect because I wasn't thinking about it. I said that I shot all the time on this shootaway and I said that I looked back on a few videos that I have of when I was younger. I said that I noticed that my shot got horrible, and it was the time I started shooting on the shootaway, and it was clearly because of the shootaway. I said that my shot was so good because it was automatic so I didn't know how to fix it. I said this was when my relationship with my Dad fell apart. Before my Dad and I always shot together every day. My Dad went to every game I ever played. My Dad also would help me with my shot. He would tell me things so I never had to thought about what I was doing. That was a part of the reason I was so good. I had a game where I made 12 three pointers in a championship and brought my team back to win. I was pure and perfect with what I did and I wasn't aware of what I was doing. I said that when my shot started getting horrible I stopped wanting to shoot. I got the shootaway in the seventh/eight grade and my shot started getting bad, but I was still the best because I was still very good at dribbling and stuff. But I said my shot got extremely horrible. I started my freshman year on varsity and my team won the CIF campionship. But my shot was awful. The reason I started was because I was good at dribbling and stuff. Then my sophomore year I lost my starting spot and my Dad stopped coming to my games and stopped helping me with my shot. I didn't care that much, it was just that I felt that I needed him for my shot. My shot was always automatic so I didn't know how to fix it. I needed him. So then we started to fight a lot because I wanted him to help me. I had to see a psychologist and I tried to make the psychologist make my Dad and I have a contract where my Dad would at least come to a few games. I did this because I wanted him to help me with my shot. Like I said he used to go to all of my games; every single one, but once my shot got horrible my Dad stopped going all togehter. I never made the connection that the shootaway was making my shot horrible and I shot more and more on the shootaway. Finally my relationship with my Dad and Mom and whole family was destroyed because of the situation. My Dad would not help me and he didn't even know how and he stopped going to any of my games. He used to shoot with me every night when I was young and he never shot with me. Even in the ninth grade when my shot was bad he shot with me every night. But once I lost my spot he stopped shooting with me. I felt I needed his help with my shot and I was desperate. I told the man that I was talking to that is an expert on what he calls killology this story and he told me that I needed to get back to the inner chimp in me that was there before I got the shootaway machine and my shot became mechanical. i told him that I studied some video of when I played

when I was younger. I said it was what he was calling my inner chimp. I told him I was flowing. I told him that all of the women were extremely attracted to me all through high school even and up to college because I was not aware of my body when I moved. I said that I was always flowing. I said that I studied my shot and I said that I studied how it looked before I got the shootaway how I moved into it naturally and I said that I think I now can shoot again. But I said I feel like I can never get back to when I was completely flowing. I was playing college basketball at UCSD but my shot was so bad that I ended up quitting. Before quitting I studied some videos of when I was younger and recognized that I was so good when I was young because I was flowing. But I said that is the most importnat thing to me. That is all that I really want. I don't care about money or anything. I just hopefully want to get back to that level- what he calls the chimp- I call it the flow. I said I don't care about money or any of that stuff. That to me is the most important thing. I told him that I hopefully want to study video sof when I was younger but I hopefully need to get them from people that have them. I want to hopefully study the flow. But anyways, after reading this writing on the wall, Daniel is made by Belthezzar into the third highest ruler in Babylon. Again, like Joseph, Daniel is given a position in power that makes him at the status of God King for the enemy empire. This is good for the Jews. Converting your enemy helps you, and that is a common theme in the Bible. It is no coincidence that after Belthezzar is converted to belief in the God of Israel, which means he is converted to the torah, it is described that he is slained and the Kingdom of Babylon falls. Recall that the God of Israel destroys empires in the Bible. It is like the fact that Egypt ends up falling due to Joseph and Moses. And the Cannanite Empire system falls due to Joshua and so on so fourth. By converting these empires to the God of Israel and the torah, Israelites destroy these empires. King Darius of Persia makes Daniel an administrator in his empire of Persia, which destroys the Babylonian empire. The administrators do not like Daniel and they try to get Daniel in trouble through the "law of His God". Daniel prays three times a day to the God of Israel, but a decree is set up that only Darius can be prayed to. In these empire systems men are deified. For instance, in the Roman Empire Caesar was a God, in the Egyptian Empire, Pharoah was a God, in the empires of China the Emporer was a God, and in the Greek Empire Alexander the Great was seen as a God. These Empires are against the law of God in that they worship man, the flesh, and the carnal. For instance, in the Roman Empire people worshipped gladiator fighters. Similalry today people worship professional athletes. In the Roman Empire people attended plays that were full of sex and violence ritualistically. Similarly today people attend movies full of sex and violence ritualistically. The torah is antithetical to fleshly empire systems, and this is why the administrators of the Persian Empire, who represent the elite of the empire, and thus their statuses depend on the empire, hate Daniel, who follows the torah. The King's edict was that for 30 days only he could be prayed to. This represents worship of the ego. Daniel does not worship man so he is thrown into a lions den. But Daniel survives. This represents a sort of death and ressurection of Daniel and Darius is amazed. Lions are beasts, and lions are associatd with enemies of the Jews/ enemy empires. An angel of God shuts the mouths of the lions. This is metaphroical of the torah converting the enemies of the Israelites. Enemies of the Israelites are under systems withotu the torah and thus they suffer. When they accept the torah then their systems fall. This is like when Rahab accepts the torah and is converted by the Israelites, and the Cannanite city of Jericho falls after this. The lions mouths being shut

represents the destruction of the enemies of Israel. This is similar to the story of Jesus. In the story of Jesus the lions are the Roman Empire system. This system is antithetical to the torah. But Christiantiy spreads and spreads the torah. The Jews are going to be destroyed by the Roman Empire system, but the mouths of the lions are shut. The torah destroys the Roman Empire system and thus the Jews are saved. In this analogy, the lions are the Roman Empire and the Jews are Daniel. The angel of God is the torah and he stops the enemy. It is described ta tthe King is happy that Daniel is not dead. The King does have respect for Daniel, like the Pharoah has respect for Moses, like The Pharoah has respect for Joseph, like Cyrus has respect for Mordecai, and so on and so fourth. And it is described that Darius converts to the God of Israel. In other words, Darius has adopted the torah. This is good for the Jews, but it is not good for the Persian empire. We already know this. The torah is antithetical to empire. The Persian empire is an enemy to the JEws so this conversion is good.

Before the Persian Empire takes hold though, Daniel has a dream during the reign of Belshazzar. This dream fits the quadrant model pattern. It fits the quadrant model pattern as follows. Daniel sees four winds representing the quadrant, and then he sees four beasts.

Square 1:"The first was like a lion, and it had the wings of an eagle. I watched until its wings were torn off and it was lifted from the ground so that it stood on two feet like a human being, and the mind of a human was given to it." The first square is related to the mind. This beast is described as being like a lion. Daniel is going to describe that this beast is an empire. I already discussed the lion's den with Daniel. So it makes sense that the shutting of the lions mouths represents the destruction fo an empire and the neutralization of the enemy of the Israelites. This lion is described as having a mind of a human. Recall that in Wilber's model the first square is mind. The first square is the light. Idealists are very mental.

Square 2:"And there before me was a second beast, which looked like a bear. It was raised up on one of its sides, and it had three ribs in its mouth between its teeth. It was told, 'Get up and eat your fill of flesh!' The second square is the culture square. Eating is a cultural, social activity that people do together. I also described that the second square is the word. The second square is social. I have another model that describes the four things people need to be healthy. Square 1 is sleep and that is associated with the mind. Square 2 is food and that is associated with culture. People often eat with family and friends. Square 3 is exercise and that is the body. Square 4 is social interaction. Without social interaction people go crazy. Astronauts need social interaction or else they go crazy. If they cannot have social interaction they at least need some sort of life to connect with like a plant. Guardians are very into belonging and culture.

Square 3: After that, I looked, and there before me was another beast, one that looked like a leopard. And on its back it had four wings like those of a bird. This beast had four heads, and it was given authority to rule. The third square is te doer square. The third square is the body. This beast, the leapord is the doer. It has authority to rule. The third quadrant personality, the artisan, likes authority and respect.

Square 4:" After that, in my vision at night I looked, and there before me was a fourth beast—terrifying and frightening and very powerful. It had large iron teeth; it crushed and devoured its victims and trampled underfoot whatever was left. It was different from all the former beasts, and it had ten horns." The fourt beast is different from the previous three. I described that this is the nature of the quadrant model. The fourth is always different from the

previous three. It is described that it is terrifying and powerful. I described that the emotion associated with the fourth quadrant is fear. Fear helps to fascilitate flow. Also it is poweruful. I described that knowledge is power. The beast has iron teeth. This relates this beast to Daniels other dream where the fourth part of the statue is the iron legs. It is described that this beast is different from the other beasts and has 10 horns. The fourth always transcends the previous three, and the previous three are always more similar. I described this in the first chapter of this book when I described thinking, emotion, doing, and dreaming. Thinking and emotion and doing are very connected. Dreaming seems separate, but in fact dreaming also encompasses these. There is sort of a fifth square where a horn rises up from the 10 horns. It is described that all of these beasts are destroyed. These beasts represent empires. I described that seventh day adventists think that the fourth beast is Rome and the horn is the pope, who they say continued the Roman empire. Some say that the fourth beast is the Ottoman Empire which adopted Islam yet maintained paganism. Some say that there is a Roman ottoman alliance and that the Roman Empire and Ottoman Empire are the same thign and the Ottoman Empire was a continuation of the Roman Empire. Seventh Day adventists again describe the first beast as the Babylonian, second as Persian, third as the Greek Empire, and fourth as the Roman Empire. Seventh day adventists point out that these empires expanded the same territory and all encompassed Israel, which is why the JEws, who were in Israel, are under each of these empires. Daniel describes that these four beasts are four kingdoms that will "oppress the saints and God's holy people". This means that they will oppress the Israelites. But Daniel says that once these kingdoms are destroyed God's holy people, which are the Israelites, will be given authority,. Thus the torah will rule. As you can see, this vision of Daniel elucidates the quadrant model pattern. Daniel then mourns for Israel because it has been dispersed.
Hosea mourns in regards to Israel, "Even when their drinks are gone,
they continue their prostitution;
their rulers dearly love shameful ways.
19 A whirlwind will sweep them away,
and their sacrifices will bring them shame."
Remember that alcohol is related to sin. Hosea describes Israel as the wife of God, but states that Israel has committed adultery by disobeying God's law, and thus Israel must be dispersed. Hosea is saying that they are committing so much sin and think that their sacrifices will cover it. But their sin is too great. They will be dispersed and become gentiles and lose the law of God. Their sins are too grievous and they must be punished. Hosea says "Ephraim, you have now turned to prostitution;
Israel is corrupt." Ephraim is the northern Kingdom of Israel that is dispersed in the stories by the Assyrian Empire. Hosea is saying that there disperson is going to be due to their sin. Sin and corruption is related to not following the torah. Once Israel is dispersed they will beocme genitles, meaning they will lose the law of God. Hosea says," When Israel was a child, I loved him,
and out of Egypt I called my son.
2 But the more they were called,
the more they went away from me.[a]
They sacrificed to the Baals

and they burned incense to images.
3 It was I who taught Ephraim to walk,
taking them by the arms;
but they did not realize
it was I who healed them.
4 I led them with cords of human kindness,
with ties of love.
To them I was like one who lifts
a little child to the cheek,
and I bent down to feed them." Again Israel is also called the son of God. The stories of the gospels literally are a metaphorical representation of the history of ISrael, with Jesus reflecting the God of Israel in the stories. Nobody has noticed that before to my knowledge, but to me it is very apparent. As the embodiment of Israel, Jesus too is called the son of God. Israel is supposed to be a light to the nations for it is supposed to follow the torah, which God describes as light. Therefore, if you believe in Israel you believe in God. Similarly if you believe in Jesus you believe in God. Because both are supposed to carry the commandments of God. But here Hosea is describing that Israel is not obeying the law of God but following the hedonistic fleshly practices of man. So they are going to be punished by being dispersed. I described that the parable of the lost son is a parable of Israel. The older son is Israel and the younger son is the Jews and Judah. Israel has been dispersed. But Jesus in te stories wants to bring Israel back to its Father, which is God. Israel is the older son. The older son leaves home and becomes a gentile like the Ephraim, the northern kingdom of Israel, leaves Israel because it is dispersed and becomes gentiles. But Jesus describes int e parable that the older son comes back and is welcomed by the Father. This represents Israel coming back to God and His Law. The theme of the New Testament isthis desire to regather the lost tribes of Israel and bring them back to the law of God as well as bring the Jews back to the Law of God.

The stories of Amos fit the quadrant model pattern. I want to mention that there are 12 minor prophets and four major prophets in the BIble. This fits the quadrant model pattern. The first 12 are the first three quadrants that are very connected. This is like the 12 fermions of the standard model of particle physics. The four major prophets is the fourth quadrant. They are different from the previous 12 quadrants, yet they encompass them. This is like the Bosons in the standard model of particle physics. Let's look at some examples of the quadrant model in Amos. Amos constantly repeats the principal behind the quadrant model pattern. The principal behind the quadrant model pattern is there are three that are very simila, but a fourth that is different, yet encompasses them. Amso says,
"'For three sins of Damascus,
even for four, I will not relent.
Because she threshed Gilead
with sledges having iron teeth,
4 I will send fire on the house of Hazael
that will consume the fortresses of Ben-Hadad.
5 I will break down the gate of Damascus;
I will destroy the king who is in[b] the Valley of Aven[c]

and the one who holds the scepter in Beth Eden.
The people of Aram will go into exile to Kir,"
says the Lord.'
Amos says, for three even for four. This is Amos describing subtly an awareness of the quadrant model pattern. It is interesting that Amos says that God is saying this. Amos is speaking through God. Jesus in the stories also claims to be a mouthpiece of God. Amos is describing enmeis of Israel who are against the torah. Amos is saying that they are going to be destroyed.
Amos then continues, '"For three sins of Gaza,
even for four, I will not relent.
Because she took captive whole communities
and sold them to Edom,
7 I will send fire on the walls of Gaza
that will consume her fortresses.
8 I will destroy the king[d] of Ashdod
and the one who holds the scepter in Ashkelon.
I will turn my hand against Ekron,
till the last of the Philistines are dead,"
says the Sovereign Lord.'
Again Amos is saying, for three sins of Gaza even for four. This is subtly saying the nature of the quadrant. The three are for certain. The fourth is different and sort of questionable. But the fourth is there. He says, "even for four".
Then Amos says again, "For three sins of Tyre,
even for four, I will not relent.
Because she sold whole communities of captives to Edom,
disregarding a treaty of brotherhood,
10 I will send fire on the walls of Tyre
that will consume her fortresses."' and
'"For three sins of Edom,
even for four, I will not relent.
Because he pursued his brother with a sword
and slaughtered the women of the land,
because his anger raged continually
and his fury flamed unchecked,
12 I will send fire on Teman
that will consume the fortresses of Bozrah."' and
'"For three sins of Ammon,
even for four, I will not relent.
Because he ripped open the pregnant women of Gilead
in order to extend his borders,
14 I will set fire to the walls of Rabbah
that will consume her fortresses
amid war cries on the day of battle,
amid violent winds on a stormy day.

15 Her king[e] will go into exile,
he and his officials together,'"
says the Lord."
and
"'For three sins of Moab,
even for four, I will not relent.
Because he burned to ashes
the bones of Edom's king,
2 I will send fire on Moab
that will consume the fortresses of Kerioth.[a]
Moab will go down in great tumult
amid war cries and the blast of the trumpet.
3 I will destroy her ruler
and kill all her officials with him,"
says the Lord.' and
"'For three sins of Judah,
even for four, I will not relent.
Because they have rejected the law of the Lord
and have not kept his decrees,
because they have been led astray by false gods,[b]
the gods[c] their ancestors followed,
5 I will send fire on Judah
that will consume the fortresses of Jerusalem."' As you can see Amos keeps on repeating this statement, for three even four. This statement subtly describes te quadrant model pattern where the three are connected and certain, and the fourth is different, and thus described as, "even four". Most of these lands that Amos reprimands are not Israelite lands and Amos is describing they are going to be punished for their sins. He also mentions Judah and Israel though and says that they are also going to be punished. Judah and Israel are the Israelites.
Micah talks about false prophets.. Jesus also talks about false prophets. Micah says that teh false prophets prophecy for wine and beer and he says that these are the types of prophets Israel wants. He says that Israel wants to sin, and thus they kill the true prophets, but the false prophets that preach it is ok to sin they kill. Israel wants false prophets that dtell them it is ok to sin and live carnally. Jesus in the stories teaches to separate from the carnal world. A consequence of doing this is following the torah. Jesus repeats this idea in the gospels.
'"Do not prophesy," their prophets say.
"Do not prophesy about these things;
disgrace will not overtake us."
7 You descendants of Jacob, should it be said,
"Does the Lord become[a] impatient?
Does he do such things?"

"Do not my words do good
to the one whose ways are upright?

8 Lately my people have risen up
like an enemy.
You strip off the rich robe
from those who pass by without a care,
like men returning from battle.
9 You drive the women of my people
from their pleasant homes.
You take away my blessing
from their children forever.
10 Get up, go away!
For this is not your resting place,
because it is defiled,
it is ruined, beyond all remedy.
11 If a liar and deceiver comes and says,
'I will prophesy for you plenty of wine and beer,'
that would be just the prophet for this people!'" The false prophets accoridng to Micah tell the Israelites that idisaster will not overcome them if they sin. But Micah is a true prophet and he tells them disaster will overcome them. Micah doesn't tell them what they want to hear, but what they don't wnat to hear. And this is why Micah is a true prophet. Jessu warsn agaisnt wolfs in sheeps clothing. These types of people act as though they are good and teaching the message of God, but really they are against the torah and teach that it is right to sin and doesn't matter if you sin or not. Thus they lead the sheep astray and to destruction. Regardless, Micah tells Israel despite their sin and the consequence of it, their dispersion, they will be regathered. Aka the sin of Israel will be forgiven. This is the message of Jesus, who is claiming to represent ISrael and desire to regather Israel. And Micah declares that Israel is going to be established as a focal point in the world and the nations will seek the torah. Micah declares,"In the last days

the mountain of the Lord's temple will be established
as the highest of the mountains;
it will be exalted above the hills,
and peoples will stream to it." Micah says, "The law will go out from Zion,
the word of the Lord from Jerusalem."
Habakkuk, the prophet has a very interesting quote that relates to the garden of Eden. He says, "Woe to him who gives drink to his neighbors,
pouring it from the wineskin till they are drunk,
so that he can gaze on their naked bodies!
16 You will be filled with shame instead of glory.
Now it is your turn! Drink and let your nakedness be exposed[e]!"
Recollect that in the garden of Eden story Adam and Eve according to rabbis ate grapes, which means they drank wine. Then they realized they were naked. In other words they were sinning. They also felt shame. Habakkuk also reprimands Israel for its sins, but he reprimands other peoples for their sins too. Zephaniah, another prophet of Israel, describes that the whole Earth is going to be judged for its sin. Sin in the bible, remember, is living not in accordance with the

torah. THe prophet Zechariah has a vision in which he sees four horns that scattered Israel, Jerusalem, and Judah. These four horns represent the quadrant. But then Zechariah describes four craftsmen that scare away and destroy these four horns that are going to destroy Israel and Judah and Jerusalem. This harkens back to the dreams of the four kingdoms. It is interesting that there is four craftsmen that stop the destruction of Israel. These four craftsmen are like the prophets that stop the destruction of Israel by returning Israelites to the law of God and also destroying the empire's that are against Israel by converting them. Zechariah also has a vision of two lampstands. God says that these are the two who are anointed to serve the Earth. According to Providence Church these two lampstands represent Moses and Elijah. Moses represents the written law and Elijah represents the spiritual law according to Providence Church. It is interesting that Moses is on top of a mountain and Moses and Elijah appear to him as well as God the Father. This fits the quadrant model in that these are four great figures. Jesus in the New Testament is not represented as different from the Old Testament but as doing the same thing that Elijah and Moses did. Elijah and Moses fight for the torah and destroy enemy empires that are against the torah. So does Jesus. Then Zechariah has a vision where he sees four chariots. These four chariots fit the quadrant model pattern. Zechariah goes, "I looked up again, and there before me were four chariots coming out from between two mountains—mountains of bronze. 2 The first chariot had red horses, the second black, 3 the third white, and the fourth dappled—all of them powerful. 4 I asked the angel who was speaking to me, "What are these, my lord?"'

This vision fits the quadrant model pattern.

Square 1: Red horses

Square 2: Black horses

Square 3: White horses

Square 4: Dappled horses. Notice how the first three are solid colors. The first three are similar. This is the nature of the quadrant model. The fourth though is different from the previous three. Yet it also encompasses the previous theree. That is the nature of the quadrant model pattern. The fourth is dappled, meaning that it is red, black, and white. The fourth is always separate, yet encompasses the previous three. It contains elements of the previous three.

Then Zechariah says, "Then the word of the Lord Almighty came to me: 5 "Ask all the people of the land and the priests, 'When you fasted and mourned in the fifth and seventh months for the past seventy years, was it really for me that you fasted? 6 And when you were eating and drinking, were you not just feasting for yourselves? 7 Are these not the words the Lord proclaimed through the earlier prophets when Jerusalem and its surrounding towns were at rest and prosperous, and the Negev and the western foothills were settled?'"

8 And the word of the Lord came again to Zechariah: 9 "This is what the Lord Almighty said: 'Administer true justice; show mercy and compassion to one another. 10 Do not oppress the widow or the fatherless, the foreigner or the poor. Do not plot evil against each other.'' This is simialr to Jesus. Zechariah is saying that the Israelites are fasting just for show and they are feasting not for God but for themselves. He is saying to show mercy and justice. This is done through following the torah. Zechariah states a time in the future when Israel will be reestablished and the temple rebuilt, and through the torah the Jews will be a kingdom of priests

to all the world. He says, "This is what the Lord Almighty says: "In those days ten people from all languages and nations will take firm hold of one Jew by the hem of his robe and say, 'Let us go with you, because we have heard that God is with you.'"" The prophet Malachi depicts Israel as the wife of God, and he says that Israel has been unfaithful by disobeying His commandments. As a result he divorced her. This is represented by Israels dispersion. But Malachi describes that Israel is going to renew her covenant with God. She should have died; she should have been stoned. But she will come back to God. This is represented by the lost tribes of Israel being regathered to Israel. Malachi says that those who remain faithful to the law of God will one day "trample the wicked" and Malachi says "Remember the law of my servant Moses, the decrees and laws I gave him at Horeb for all Israel.". Following God and following His law in the Bible are inseparable.

Before we go to the New Testament, which is the Christian text, let's look a little bit more through the Old Testament. Let's look at the story of Jeremiah. Jeremiah is another character of the old testament who dies and resurrects and saves Israel and tries to bring Israel back to the torah.

God tells Jeremiah that before he was in the womb He "knew him", and that before Jeremiah was born He set him apart as one of the prophets of Israel. This is very interesting. This brings about the idea that everything is predetermined. Before Jeremiah was even born God had established that he would be a prophet. That means that the idea or the form and the being of Jeremiah existed even before Jeremiah was born. Jeremiah existed in a sense in the Mind of God. God knew him before he was even conceived. Like Moses, Jeremiah does not feel ready to be called to be a prophet of God. Jeremiah tells God that he does not "know how to speak" because he is "too young." God tells Jeremiah that the Israelites will not listen to him. That is because the Israelites do not want to follow the torah but have decided to sin and live by the flesh and not by the law of the torah. God tells Jeremiah not to be terrified of them though because God will help Jeremiah. Jeremiah describes Israel as an unfaithful wife that has broken her covenant with God. Jeremiah says ""'How gladly would I treat you like my children
and give you a pleasant land,
the most beautiful inheritance of any nation.'
I thought you would call me 'Father'
and not turn away from following me.
20 But like a woman unfaithful to her husband,
so you, Israel, have been unfaithful to me,"
declares the Lord.'
God describes Israelites as his children. Remember that Jesus describes himself as a son of God. But Jesus also describes all Israelites as sons and daughters of God. So does Jeremiah. God describes that the Israelites should call him Father, like Jesus does, but he describes that Israel does not follow His Law, but follows the laws of man and ways of the flesh. Jeremiah says"Circumcise yourselves to the Lord,
circumcise your hearts".

God says, "My people are fools;
they do not know me.

They are senseless children;
they have no understanding.
They are skilled in doing evil;
they know not how to do good".
God is saying that the Israelites do not follow his ways. God calls the Israelites senseless. If you
have good sense then you are aware and act in responsible ways. Sense is the first square. But
God is saying that the Israelites are senseless. He says that they are skilled in doing evil and do
not know how to do good. In other words they are not follwing the torah, and the punishment for
this is death. This is why Israel is scattered, and why Judah is scattered in the Babylonian
dispersion. Judah is brought back to the land of Israel, but the Northern Kingdom of Israel,
Ephraim, is lost. Ephraim is the lost ten tribes of Israel tha tJesus wants to return to the holy
land. Jeremiah says What are you doing, you devastated one?
'Why dress yourself in scarlet
and put on jewels of gold?
Why highlight your eyes with makeup?
You adorn yourself in vain.
Your lovers despise you;
they want to kill you.

31 I hear a cry as of a woman in labor,
a groan as of one bearing her first child—
the cry of Daughter Zion gasping for breath,
stretching out her hands and saying,
"Alas! I am fainting;
my life is given over to murderers."'
Jeremiah is a lot like Jesus. Jesus makes fun of the pharisees for worrying more about their
fancy clothes and gold than about the law of God. Jeremiah like Jesus is saying to not follow the
greedy ways of the flesh, but to live by the spirit and follow the law of God. Jeremiah says that
the Jews are going to be punished for their sins. He says "my life is given over to murderers."
Jeremiah is afraid that the Jews are going to murder him becaus ethey do not want to here his
chastizzement. Jesus similarly feared tha tthe Jews were going to kill him. The Jews who have
fallen away from the law of God do try to kill Jeremiah, and they also try to kill Jesus.
Like Jesus, Jeremiah rebukes the false prophets. Jeremiah says,
They have lied about the Lord;
they said, "He will do nothing!
No harm will come to us;
we will never see sword or famine.
13 The prophets are but wind
and the word is not in them;
so let what they say be done to them."
God says that he is going to "make [his] mouth a fire" and he says the Israelites he will
"consume". Providence Church points out that in the bible fire is often equated with the Word of
God. Therefore providence Church looks at Revelations allegorically. They describe in

revelations that most people in the world are burned with fire due to punishment from God. Providence teaches that this is not literal fire, but this is the Word of God chastizing people and giving them guilt for their sins. In the torah God burns thousands of Israelites with fire. It is interesting that in the Holocost means burnt offering, and was seen as a punishment from God by many for having disboeyd the law of God during the dispersion from Israel after the Roman empire dispersed the Israelites.

Jeremiah continues,

A horrible and shocking thing

has happened in the land:

31 The prophets prophesy lies,

the priests rule by their own authority,

and my people love it this way.

But what will you do in the end?

Jeremiah is saying that there are false prophets who are teaching against the torah. Jesus describes in the gospels that the priests are not teaching the law of God but are teaching mans laws and by their own authority. Jeremiah is making the same observation, and Jeremiah is saying that the people prefer this. He is saying that the people prefer to be told lies. He is saying that they do not want to hear the Truth, that they are going to be punished for their sins with death. They want to feel nice and comfortable and they deceive themselves, and prefer this to the Truth. A point I am making is that Jeremiah is very similar to Jesus in the stories.

God says through Jeremiah

"I am bringing disaster on this people,

the fruit of their schemes,

because they have not listened to my words

and have rejected my law."

It is clear that what God is so upset about is the Jews sins, and these sins are in accordacne with the Jews not living by the law of God. Jesus in the stories is upset about the same thing. Many Jews do follow the law though and follow Jesus and his disciples, wo try to bring them back to the law of God in the stories, according to Messianic Jews.

God says through Jeremiah,

"the carcasses of this people will become food for the birds and the wild animals, and there will be no one to frighten them away".

Jeremiah is saying the same thing Jesus says in the stories. In the gospel stories Jesus tells the people that the birds are going to eat on their flesh. Jesus is right in a historical perspective. The Roman Empire did destroy the temple and kill many Jews and scatter them. jeremiah is saying the same thing. But Jeremiah is not saying that the Romans are going to destry them, but he is saying that the punishment is going to be the Babylonians.

God continues through Jeremiah,

"How can you say, '"We are wise,

for we have the law of the Lord,"'

when actually the lying pen of the scribes

has handled it falsely?

9 The wise will be put to shame;

they will be dismayed and trapped.
Since they have rejected the word of the Lord,
what kind of wisdom do they have?"
Jeremiah is saying that there are a lot of Jews who claim to have the law of God, but they are
still living in accordacne with the flesh. God says 17 "See, I will send venomous snakes among
you,
vipers that cannot be charmed,
and they will bite you," This is reminiscent of the Garden of Eden. The snakes represent death
and death due to sin/disobedience to the Word of God. God continues through Jeremiah "I will
make Jerusalem a heap of ruins,
a haunt of jackals;
and I will lay waste the towns of Judah
so no one can live there.'" Jesus says the same thing during the time of the Roman Empire.
During Jeremiahs time it is the Babylonian empire that destroys Judah, but during Jesus's time it
is the Roman empire that destroys Judah. The Jews try to kill Jeremiah like they tried to kill
Jesus, because they do not want to be reprimanded, but prefer false prophets who tell them
things that make them fell good. God continues through the prophet Jeremiah, 25 "The days are
coming," declares the Lord, "when I will punish all who are circumcised only in the flesh— 26
Egypt, Judah, Edom, Ammon, Moab and all who live in the wilderness in distant places.[e] For
all these nations are really uncircumcised, and even the whole house of Israel is uncircumcised
in heart." God is not just reprimanding Judah, who are the Jews, and Israel. God is
reprimanding all of the people in the Middle East and the world who are acting not in
accordance with the spirit but in accordance with the flesh and sin. He is saying that they are all
going to receive punishment for their sins. Like Jesus and his disciples, Jeremiah says that
Israel and Judah are circumcized in the flesh but not in the heeart. In other words he is saying
that they give the outward apparence of follwoing the law of God, but inside they are full of
greed and ffleshly pursuits that take them away from the law of God, so their hearts are not
circumcized. But as you can see, the stories of Jeremiah and Jesus parallel each toher a lot.
Bot are prophets who are reprimanding Israelites and the Jews.
Jeremiah, like Jesus, is depicted as a sacrifical lamb. Jeremiah says" I had been like a gentle
lamb led to the slaughter; I did not realize that they had plotted against me". Recall that Jesus is
depicted as a lamb that dies for the sin of Israel. Here Jeremiah is also being depicted as a
sacrificial lamb. A city of Jews who have fallen away from the torah want to kill Jeremiah.
Jeremiah says that this city will be punished and destroyed. The same thing happens with
Jesus. Jesus and his disciples go to Jewish cities and what they teach them is the torah. The
cities that do not repent, which means return to the torah, Jesus says are going to be punished
by fire. Jesus says that it will be like Sodom and Gamorrah for them.The is what God says to
Jeremiah. he says, "Say to them: ''This is what the Lord, the God of Israel, says: Every wineskin
should be filled with wine.' And if they say to you, 'Don't we know that every wineskin should be
filled with wine?' 13 then tell them, 'This is what the Lord says: I am going to fill with
drunkenness all who live in this land, including the kings who sit on David's throne, the priests,
the prophets and all those living in Jerusalem. 14 I will smash them one against the other,
parents and children alike, declares the Lord. I will allow no pity or mercy or compassion to keep

me from destroying them.'"' Jesus also has a parable where he talks about wine and wineskins. Recall that I described how drunkennes is associated with sin and disobedience. Jeremiah is saying that the Jews are going to be full of sin, and thus they are going to be destroyed. That is the nautre of sin in the bible. Sin destroys. Then God, through Jeremiah, says something that fits the quadrant model. He says.

Square 1: Those destined for death, to death;

Square 2: those for the sword, to the sword;

Square 3: those for starvation, to starvation;

Square 4: those for captivity, to captivity

God then says something else that fits tthe quadrant model. He says, I will send four kinds of destroyers against them," declares the Lord, "the sword to kill and the dogs to drag away and the birds and the wild animals to devour and destroy."

Square 1: the sword to kill

Square 2: dogs to drag away

Square 3: birds to devour

S:quare 4: wild animals to destroy

But Jeremiah says that he hopes that if the Jews repent and turn back to the law of God that God will spare them. Jesus also tries very hard to get the Jews to return to the law of God. Then God says through Jeremiah, "'You must not marry and have sons or daughters in this place." 3 For this is what the Lord says about the sons and daughters born in this land and about the women who are their mothers and the men who are their fathers: 4 "They will die of deadly diseases. They will not be mourned or buried but will be like dung lying on the ground. They will perish by sword and famine, and their dead bodies will become food for the birds and the wild animals.'" Jesus says a similar thing int he gospels. Jesus says woe to women who are pregnant, because he says that when the punishment comes it is going to be hard for them. the punihsment thtJeuss is referring to is the Roman army that is going to massacre the Jews. Jeremiah is saying the same thing. Jeremiah forsees the Babylonian empires arrmy massacring the land of Judeah, and he is saying that mothers and fathers are going to be devestated as they watch their kids die due to sword and famine. Then Jeremiah tells the Jews to start obeying the sabbaths again. Recall that Jesus in the stories also obeys the sabbath, and he undoubtebly taught to obey the sabbath. It is the pharisees that accuse Jesus of not obeying the sabbath but hey accuase Jesus of a lot of things that he is not. The Pharisees also accuse Jesus of being a drunkard but Jesus is not in the stories. then Jeremiah further describes that the Jews are plotting to kill him. They are because he is telling them what they don't want to hear. They don't want to obey the sabbaths. They don't want to obey the law of God. They don't want to submit their hearts to God. They are stuck in the fleshly.They prefer the laws of man; of the pagans, and of the multiculturalist empires. The Jewish priest Passhur then has Jeremiah beaten and put in the stocks at the Upper Gate of Benjamin at the Lord's temple. The next day Jeremiah is let go though and God, through Jeremiah, tells Passhur that he will be killed and so will his whole family due to his sins. Similalry Jesus is peresecuted by Jewish priests who have fallen away from the law of God and thus want him killed because he is trying to bring the Jews back to the law of God. Jeremiah being put in stocks but then being let free is kind of like a death and ressurection. Remember that Jesus is beaten and then put on the cross but then he dies and

comes back in the stories. Here Jeremiah is beaten up, put in stocks, but he comes out alive. Jeremiah seems like he is against the Jewish people. That is what an ignorant person will sya. But he is not. Jeremiah is a prophet of God and Jeremiah is reprimanding the Jews wo are not following the law of God for their sins. Jeremiah then tells Zedekiah the King of the Jews that the weapons that they use against the Babylonians are not going to work and the Babylonians are going to destroy the Jewish people. Similarly, Jesus foretells the destruction of the Jews by the roman Empire. Jeremiah says that Nebukenezzar is going to destroy the Jews with fire. Then God says that He is going to bring fire against the Jewish people for disobeying His Laws. But Jeremiah says that there is hope. He says that after this destruction a king is going to rise that is a righetous king and the "God's sheep", who are the Israelites, will return to the law of God. Jeremiah also calls Israelites bad figs. It is ineteresing that the gospels have many references to fig trees, and the fig tree represents Israel. Jremiah tells Josiah King of Judah in his fourth year of reign that he is not following the law of God and is leading the Jews astray. Then Jeremiah describes the cup of God's wrath. He says that the peoples that fight the Jews will drunk it and destroy te Jews. The cup again is wine. Recall that I described when people get drunk their inhibitions are lowered and they are more likely to kill and have sex. God is saying through Jeremiah that the Jews are going to be raped and killed by their enemies. Then Jeremiah continues to reprimand the Jews and the Jewish priests and officials get together. They say "This man should be sentenced to death because he has prophesied against this city. You have heard it with your own ears!'". The Jewish priests want to kill Jeremiah for rebuking the Jews for their sins. This is exactly analogous to the story of Jesus where the Jewish priests, who have fallen away from the law of God get together to try to kill Jesus for doing the same thing. Jesus speaks against Jerusalem, saying that it would be destroyed. Jeremiah does the same exact thing that Jesus did. Both of them face the death penalty. Jeremiah, like Jesus, recall is represented as the sacrificial lamb. Jeremiah tells the Jewish leaders that if they kill him they are going to shed innocent blood. The Jewish leaders say "This man should not be sentenced to death! He has spoken to us in the name of the Lord our God." Jeremiah is sentenced for blasphemy and so is Jesus. But some elders of the Jews come fourth and they point out that Micah reprimanded the Jews as well saying that Israel would be destroyed, and he says that Micah was not put to death. Similarly with Jesus, there are elders that say that Jesus should not be put to death because they say "he may be a prophet". It is described next in Jeremiah that Uriah was another prophet who was killed by the Jews for speaking against their sins and saying that their cities would be destroyed and they would be punished for their sins. So this is a common theme in the bible. Jesus in the stories does tell the Jews that were not following the torah that they "kill the prophets". It is described that some powerful Jewish leaders liked and supported Jeremiah so Jeremiah is not killed.

Then the event happens that completely parallels the story of Jesus. God tells Jeremiah to make a yoke out of a strap and crossbars on put it on his neck so he does. Similarly God tells Jesus to be crucified and he does. These crossbarss and this yoke symbolizes a cross. This is during the reign of Zedekiah, Josiah's son. Then Jeremiah says that the Jews will be taken over by the King of Babylon. This parallels the story of Jesus exactly who is crucified and predicts that the Roman Empire would scatter the Jewish people. But later Jeremiah says that Judah and Israel will be brought back from captivity. The Jews are brought back and Jesus is among

the Jews in Israel during the New Testament. But Jesus talks about wanting to also bring the lost tribes of Israel back. The Jews arrest Jeremiah and he is confined to the courtyard. But Jeremiah continues to prophesy against the Jews, saying that the Babylonian Empire will bring upon them calamity. Jeremiah offers a family called the Rekabites wine but the Rekabites describe how they swore to God not to drink wine, and Jeremiah uses the Rekabites as an example of a people who have decided to remain faithful to God, and God says that Rekab will never fail to have a descendant that serves Him. Remember that wine is associated with sin, and the Rekabits do not drink it, thus they do not sin. Later Jeremiah is thought to be deserting to the side of the Babylonians and he is imprisoned. Jeremiah is then thrown into a cistern. This represents another sort of death and resurrection. Recall that Jeremiah,like Jesus, is depicted as the sacrificial lamb. They wanted Jeremiah to starve to death, but the King commanded Ebed Melek the Cushite to lift him out of the cistern. Jeremiah is pulled out of the cistern and this represents a sort of death and resurrection, like Joseph's death and resurrection. The King then seeks Jeremiah's guidance. Jeremiah tells the King to surrender to the Babylonians. Remember this is a common theme n thebible. Jeremiah is trying to tell the King to make friends with their enemies. As a result they won't all be killed. It is no coinciden tis happens after the sort of death and ressurection. Similalry after Jesus's death and ressurection there is the conversion fo the Romans, which sort of rperesents the Jews making allies with their enemies. The Jews are sinning, but they do not all have to be killed, due to the sort of death and ressurection sacrifices that are made. In this case it is Jeremiah. In the gospels the sacrifice is Jesus.

The King of Babylon spares Jeremiah's life. He probably likes Jeremiah because he is a prophet. Jeremiah recommends Jews to stay in the land, and as a result the Jews are not killed. So Jeremiah saves the Jews from death. The idea is his sacrifice, or his death and resurrection, saved the Jews from not all being killed. Jesus in the stories does the same thing.

So I just described how the story of Jeremiah parallels exactly the story of Jesus. Let me go through the stories of the prophet Ezekiel and how they relate to the quadrant model of reality. Ezekiel sees a chariot from God. This is known as the Merkaba. This chariot is the embodiment of the quadrant model pattern. it is described as a vision from God. It is described "out of the midst thereof came the likeness of four living creatures. And this was their appearance; they had the likeness of a man. 6 And every one had four faces, and every one had four wings." So there are four creatures each with four faces. This makes 16 creatures. This is the quadrant model. It is described, "And they had the hands of a man under their wings on their four sides; and they four had their faces and their wings." These repetitions of four bring to mind quadrants. It is described "As for the likeness of their faces, they four had the face of a man, and the face of a lion, on the right side: and they four had the face of an ox on the left side; they four also had the face of an eagle." The four faces are

Square 1: Eagle
Square 2:Ox
Square 4:Lion
Square 5:Man

It is described that this is the likeness of the glory of the Lord. What is described is the quadrant model.Ezekiel then eats a scroll from God and it is said to taste like honey and he then goes onto rebuke Israel and Judah for their sins, and like Jesus, Ezequiel describes how the land will

be laid waiste and they will be slaughtered. Jesus is just like the prophets who came before him. Israelite elders come to Ezekiel and God says to Ezekiel, "Son of man, these men have set up their idols in their heart, and put the stumblingblock of their iniquity before their face: should I be enquired of at all by them?

4 Therefore speak unto them, and say unto them, Thus saith the Lord God; Every man of the house of Israel that setteth up his idols in his heart, and putteth the stumblingblock of his iniquity before his face, and cometh to the prophet; I the Lord will answer him that cometh according to the multitude of his idols;

5 That I may take the house of Israel in their own heart, because they are all estranged from me through their idols.

6 Therefore say unto the house of Israel, Thus saith the Lord God; Repent, and turn yourselves from your idols; and turn away your faces from all your abominations.' This is just like Jesus. Ezekiel like Jesus is talking down agaisnt the elders who he thinks have gone astray from the word of God and are leading people into sin. In the torah it describes that one abomination is homosexuality. Ezekiel is commanding the Israelites to turn away from their abominations. In the New Testament as well homosexuality is called an abominaiton. In fact all of the laws of the old testament are upheld in the New Testament. It is interesting that Ezekiel is called Son of Man. In the New Testament Jesus is also called Son of Man. The Old Testament is an exact continuation of the New Testament, and there actually is sort of not really anything new about the New Testament. Ezekiel also laments about how Israel has profaned the sabbats of God by not following them.

Then Ezekiel describes, "and when the man that had the line in his hand went forth eastward, he measured a thousand cubits, and he brought me through the waters; the waters were to the ankles. 4 Again he measured a thousand, and brought me through the waters; the waters were to the knees. Again he measured a thousand, and brought me through; the waters were to the loins. 5 Afterward he measured a thousand; and it was a river that I could not pass over: for the waters were risen, waters to swim in, a river that could not be passed over". This fits the quadrant model pattern

Square 1: the water is at his feet

Square 2: the water is at his knees.

Square 3: the water is at his loins.

Square 4: He is swimming in the water. The fourth is always different from the previous three. Ok. We talked enough about the Old Testament. The quadrant model permeates the old testament. Recall that it is claimed that the Old Testament was written under the inspiration of God. Now let's talk about the New Testament. First off the New Testament is divided into four groups according to genre, fitting the quadrant model pattern.

Square 1: The Gospels. This is about the life of Jesus.

Square 2: an account of the Christian Church. The second square is always about a family and most related to family. It is culture

Square 3: Epistles. These are letters written by Paul and the apostles of Jesus, and they tell people how to live. The third square is doing.

Square 4: Revelations. The fourth never seems to belong with the other three. Acts is metaphorical and philosophical. Really it is an allegory of the Roman Empire trying to destroy the Church but the Word of God and prophets fighting against this beast.

During the time of the Roman Empire there were four major sects of Judaism. This fits the quadrant model pattern. They were the

Square 1: Sadducees. Sadducees were made up of mostly the upper aristocracy of the Jews. Many served as priests in the Jewish temple and they worked with the Roman authorities. They stressed the temple and were very into the idea of sacrifices to God.

Square 2: Pharisees. The Pharisees followed the torah and oral torah and stressed the law. Jesus is not against the Pharisees in that they stressed the law. Jesus says to do everything that the pharisees. The second square is faith and family and is the most concerned with the law.

Square 3: Essenes. Essenes thought the rest of Israel had become impure due to sin and they often left the rest of Israel and formed their own monastic communities. The third square is the individual and the doer. The essenes were very apocalyptic in their views, believing that the world would come to an apocalyptic end, and most of the world, including most of the Jews who had gone astray, would be destroyed.

Square 4: 4th Philosophy. This group believed that Israel should only be for Jews and Israelites. The fourth philosophy is different from the previous three. This is always the nature of the quadrant model.

In Genesis there is a formless void, and God says let their be light and creation begins. I discussed how science and religion have always been connected. Science informs religion and religion informs science. I described that it was a priest who came up with the hypothesis of the Big Bang Theory. Einstein at first thought that the universe should be eternal, but scientists later came to the conclusion that evidence indicates that there was a beginning to this Universe. The

days of Genesis in the bible fit the quadrant model. Recall earlier I described the five elements of Aristotle and how they relate to the quadrant model pattern. I'm going to use that model to demonstrate the days of Genesis fit the same pattern. Remember, it does not matter that there is seven days, or not. Many people may get confused about the quadrant model and think that if something does not have four components then it deviates from the quadrant model. What matters is not the number of things, but the pattern out of which things emerge. In terms of the days of the Genesis story, the pattern works like such

Square 1: Day 1- God says let there be light. Remember that the first element in Aristotle's model is air. Air is hot and wet and that corresponds to the idealist that is abstract and cooperative. The first square is Ken Wilber's mind square. The mind is often associated with light. Also light has a quality of being like air. Light is not solid and it is not grounded, like air. On the first day, it is described that God separated the light from the darkness.

Square 2: Day 2: on the second day God makes water and separates the water from the sky. Recall that in Aristotle's model of elements the second element is water. Water is cold and wet. I described earlier how this corresponds with the guardian personality type which is concrete and cooperative. It is no coincidence that on the second day of Genesis water is produced and water is separated from the sky. The second square is water.

Square 3: Day 3: on the third day God makes land to produce vegetation. Recall that the third square is always the most solid. The second square is the doing square. This land is producing vegetation. This land is doing things. This corresponds to Aristotle's third element, earth. Earth is cold and dry. This relates to the artisan personality type, which is concrete and utilitarian. I described this when I was describing Aristotle's elements when I discussed science. In the third day God creates land by separating it from the sea. Land is the third square. The third square is the solid square.

Square 4: Day 4: on the fourth God creates the sun. This is pretty funny because this is what a lot of people use to discount the account of Genesis. People say that if the sun was made on the fourth day, then how were the first three days distinguished. They say that without a sun, there is no days, because a day is measured by the Earth's rotation around the sun. But in terms of the quadrant model, the fact that the sun is the fourth day is very intriguing. The fourth, remember, encompasses the previous three. Without a sun, the previous three don't exist. So, in that sense, the fourth day encompasses the previous three days, in that, during the fourth day the sun is made, and without a sun there is no such thing as a day. But that is a bit abstract. In terms of the quadrant model too though, the fact that the fourth square is the sun makes sense. The fourth element in Aristotle's model was fire. The sun is made of fire. The fourth square always seems to transcend the previous three squares. The first three squaes are a bit more terrestrial, but the sun is more heavenly and transcends the Earth. It is an interesting fact that many ancient cultures worshipped the sun, but the book of Genesis tries to make sure that the sun is not depicted as a God or divine, but a product of God's creation.

Square 5: Day 5. on the fifth day God creates light. Recall that I described that some cultures saw the fifth element as life. The fifth realy transcends the previous four. Also the fourth always points to the fifth. Without sun there cannot be life, because sun light gives energy for life to live. The sun light gives energy to plants through photosynthesis, and animals gain energy from these plants by eating them. God tells these animals to be fruitful. Remember fruit and

knowledge are related and knowledge and sex are related. God is telling the animals to have sex and have offspring. Square 5 is the first square of the second quadrant. The second quadrant is relational. This square is the belief square. The first four squares were sensation, perception, response, and awareness, and this square is belief.

Square 6: Day 6. On the sixth day God says"Let the land produce living creatures according to their kinds: the livestock, the creatures that move along the ground, and the wild animals, each according to its kind." This is the second square of the second quadrant. The second quadrant is always relational. The second square of the second quadrant is the most relational. This is the faith square. God says to let the living creatures reproduce according to their kinds. Reproduction has to do with relationships. But also God says to do this accoridng to their kinds. The second square is homeostasis and order. God here is creating order, by separating things according to kinds, and telling them to stay with their kinds. God also creates man to rule. Man is supposed to have authority over the animals. Man is the ultimate symbol of order, which is the nature of the second square. God tells man to subdue the Earth. In other words, God is calling man to create order. This is the nature of the second square. The second square is homeostasis.

Square 7: Day 7. On the seventh day God rested. This day is the third square of the second quadrant. This is the behavior square. Resting is an action and the third square is always an action.

It is clear that the days of Genesis reveal a pattern and this pattern is the quadrant model pattern. Most theologians say that Genesis is poetry and it is not meant to be taken literally. Some rabbis and priests do take it literally. Whether i is taken literally or not does not matter so much as the fact that this myth, that seems to just be random in its structure, is in fact not random, but underlying it is the quadrant model pattern, which is the pattern out of which existence manifests.

Rabbis note that a very important aspect of the garden of Eden is the four rivers of Eden. The names of these reivers fascinatingly fit the quadrant model pattern. Even more incredible, their geographic locations, according to historians fit the nature of the quadrant model pattern. The four rivers of Eden are

square 1: Pishon. Pishon means to increase. The first square is the idealist. The idealist is optimistic. Something has to increase before it can do anything. The first square is not yet doing anything. The first square is conservative. This is the thinking square of the quadrant model. Recall the first square of the third square is thinking.

square 2: Gihon. It is interesting that Pishon and Gihon sound similar. They are the duality. The bible describes that this river is associated with riches. Riches are always associated with the second square. The second square is the belonging square, and riches are belongings. The guardians tend to be more wealthy. The second square is associated with order, and order is associated with riches. Caucasians are the ethnic group associated with the second square, and caucasians are related with being rich. Gihon means bursting fourth. This is the emotion square. The second square of the third quadrant is emotion. Emotion has an association of bursting fourth. Emotion means, to cause to move. When something bursts fourth it is about to move. But it has not moved yet. The second square is not yet action. The third square is doing. Pihon and Gihon are leading up to the third square, which is the doing square.

square 3: Hiddekel. Hiddekel is the third river. What is amazing is that the Hiddekel river, in relationship to geography, separated from the Pishon and the Gihon rivers. The third square is the individual. The first two squares are always more conservative. The third is always the most action. The third square is about doing its own thing. Also Hiddekel means rapid. The third square is associated with doing. Rapidity is associated with action. The first two squares were building up to the action. I think of it as something was increasing, then it was bursting fourth, and now it is moving rapidly.

Square 4: Euphrates. Euphrates means frutiful. Fruit recall, in the bible, is related to sex. In the bible, to be fruitful is to have sex and have many offspring. Sex is related to knowledge. The fourth quadrant is the knowledge quadrant. This would be the dreaming square. The dreaming square is the fourth square of the third quadrant.

The names of these squares fit the qualities of the first, second, third, and fourth squares of the quadrant model. Rabbis take these four rivers very seriously and derive a lot of meaning from them and their names. It is important to see tha tthey fulfill the quadrant model pattern, which is the pattern out of which reality manifests. Existence eveals that it is an illusion and derives from a pattern. An essential way that it does this is through religions myths and legends.

Let's look a the story of Noahs arc. In the story of Noahs arc Noah let's go of four birds. Recollect that in the story of Noah God is mad because the people of the Earth had all become sinful. But God likes Noah a lot so he gives Noah an arc to save him and his family and also Noah puts two of every living creature on the arc, so that not all life will be destroyed, and humanity can continue. Providence Church teaches that the story of Noah describes that a flood destroyed the whole world. But Providence Church says that the flood did not destroy the whole world, but the people who wrote the story thought the flood destroyed the whole world, because it destroyed what was the known world to them. Providence Church teaches that there was a literal great flood, but they say that this flood destroyed many places in the Middle East, where he story of the flood was generated. Because the people in the middle east thought the middle east was the whole world, Providence Church teaches that the flood did not destroy the whole world but the known world to the people who wrote the story. They teach that the bible even demonstrates this to be true. Providence Church describes that when the bible describes the world it does not always mean the whole world. It is interesting that historians do think that there was a great flood in the middle east, and they point out that there are other cultures in the middle east, but also throughout the world fascinatingly, that have flood stories.

Square 1: Noah sends a raven that keeps flying back and fourth until the water on the Earth dried up. The first square is the air. The raven stays in the air it says until the water dried up on the Earth. So this raven is associated with the air. The first element of Aristotle is the air.

Square 2: Noah sent out a dove to see if the water had receded from the surface of the ground. But it says that the dove could not find a place to perch because there was water all over the Earth, so it went back to Noah. This time it is emphasized that water is still all over the face of the Earth. This is significant. The second square is associated with water, as the first square is associated with air. Aristotle's second element is water.

Square 3: Noah sends out another dove and it comes back with a freshly plucked olive leaf in its beak. This means that there is land again. There is Earth. The third square is always associated with land. The third square is always associated with Earth, and what is physical and solid.

Aristotles third element is Earth. Also this is the doing quadrant. The dove brings back a fig leaf. The dove is doing. This is an action.

Square 4: Noah sends out anoher dove and it does not return. The fourth square is different from the previous three. This square just says that the dove does not return. The fourth square often has a quality like it shouldn't be there; like it doesn' belong.

These are the four doves that Noah sends out. As you can see, the quadrant model pattern is fulfilled by the four doves.

Abraham is depicted as making a covenant with the God of Israel. Abraham's covenant is marked by his circumcision. Abraham moves from the Chaldeans, where people follow Gods that are associated with hedonism and carnal pursuits, to Cannan, and he makes his covenant with the God of Israel, who teaches one to not be held down by the carnal and the fleshly. The separation from the carnal, hedonistic world is marked by Abrahams circumcision. The foreskin of the penis is a part of the penis which is associated with a lot of pleasure. Abraham cuts this part of his penis off, signalling that he has separated from a mere earthly pursuit of pleasure, but now lives more by God's laws, which are antithetical to the carnal world, and free people from it. Abrahams brother is Lot, and Lot is the man who escaped Sodom and Gamorrah

The four Muslim imams, Imam Abu Hanifa, Imam Malik, Imam Shafi and Imam Ahmad ibn Hanbal were all great Muslims and very important figures in the history of Islam. Their teachings laid the foundations of Islamic jurisprudence (fiqh).

Hinduism Chapter

Dura was rebuilt as a Hellenistic city in the second century BC with rectangular streets (fig. 590). Dura-Europos later became a frontier fortress of the Parthian Empire until the Romans captured it in 165 AD. The Romans were familiar with the grid layout, which they found in the conquered city. The grid was also the very end product of their art of *castrametation* or the layout of military camps. It was under their subsequent occupation that the famous house church and synagogue were built in Dura-Europos. The presence of a Temple of Bel, Temple of Adonis and a Mithraeum subscribed the multi-cultural setting of the town before it was destructed in a Sassanian attack in 256-257 AD and went into oblivion.

DURA-EUROPOS

A1 — Military Temple
B1 — Private Houses
B3 — Temple of Zeus Theos
B8 — Private Houses
C3 — Private Houses. Roman Bath
C4 — Temple of Zeus Megistos
C5 — Private Houses
C7 — Private Houses
C8 — Private Houses
C9 — Redoubt Palace
D1 — House of Lysias

D2 — Private Houses
D5 — Private Houses
D7 — Private Houses
E3 — Roman Bath
E4 — Private Houses Barracks
E7 — Temple of Azzanathkona
Praetorium
E8 — Private Houses Barracks
F3 — Parthian Bath
Amphitheatre
G1 — Private Houses. shops
G2 — Private Houses. shops
G3 — Private Houses. shops
G4 — Private Houses. shops
G5 — Private Houses. shops
G6 — Private Houses. shops
G8 — Private Houses. shops
H1 — Temple of the Gadda
H2 — Temple of Atargatis
H4 — Temple of Artemis

I3 — Private Houses
I4 — Private Houses
J1 — House of Tribune
J3 5 — Temple
of the Palmyrene Gods
J7 — Mithraeum Barracks
K8 — Private Houses
L4 — Caravanserai
L5 — Temple of Adonis
L7 — Synagogue
Private Houses
L8 — Tycharum
Private Houses
M7 — Roman Bath
Private Houses
M8 — Christian Building
Private Houses
N8 N7 — Temple of Zeus Kyrios
N8 — Temple of Aphlad
Private Houses
X3 5 — Headquarters of Dux
X7 — Dolicheneum

Fig. 590 – The city of Dura-Europos was founded around 300 BC as a stronghold at the Euphrates River on the road between Antioch and Seleucia. The grid pattern, with block

sizes of 70 x 35 meters and a street width of 7-8 meters, dated from the second century BC, when Dura was rebuilt as a Hellenistic city.

The Greek cities are made of quadrants

Wang Yangming is regarded one of the four greatest masters of Confucianism in history along with Confucius, Mencius and Zhu Xi

Shankara travelled across the Indian subcontinent to propagate his philosophy through discourses and debates with other thinkers. He established the importance of monastic life as sanctioned in the Upanishads and Brahma Sutra, in a time when the Mīmāṃsā school established strict ritualism and ridiculed monasticism. He is reputed to have founded four mathas ("monasteries"), which helped in the historical development, revival and spread of Advaita Vedanta of which he is known as the greatest revivalist.[14] Adi Shankara is believed to be the organiser of the Dashanami monastic order and the founder of the Shanmata tradition of worship. He is also known as Adi Shankaracharya, Shankara Bhagavatpada, sometimes spelled as Sankaracharya, (Ādi) Śaṅkarācārya, Śaṅkara Bhagavatpāda and Śaṅkara Bhagavatpādācārya.

Hindus traditionally hold that Vyasa categorised the primordial single Veda into three canonical collections, and that the fourth one, known as Atharvaveda, was recognized as Veda only very much later. Hence he was called Veda Vyasa, or "Splitter of the Vedas," the splitting being a feat that allowed people to understand the divine knowledge of the Veda. The word vyasa means split, differentiate, or describe.

The Vishnu Purana has a theory about Vyasa.[10] The Hindu view of the universe is that of a cyclic phenomenon that comes into existence and dissolves repeatedly. Each cycle is presided over by a number of Manus, one for each Manvantara, that has four ages, Yugas of declining virtues. The Dvapara Yuga is the third Yuga. The Vishnu Purana (Book 3, Ch 3) says:

In every third world age (Dvapara), Vishnu, in the person of Vyasa, in order to promote the good of mankind, divides the Veda, which is properly but one, into many portions. Observing the limited perseverance, energy, and application of mortals, he makes the Veda fourfold, to adapt it to their capacities; and the bodily form which he assumes, in order to effect that classification, is known by the name of Veda-vyasa. Of the different Vyasas in the present Manvantara and the branches which they have taught, you shall have an account. Twenty-eight times have the Vedas been arranged by the great Rishis in the Vaivasvata Manvantara... and consequently eight and twenty Vyasas have passed

away; by whom, in the respective periods, the Veda has been divided into four. The first...
distribution was made by Svayambhu (Brahma) himself; in the second, the arranger of the
Veda (Vyasa) was Prajapati... (and so on up to twenty-eight).[11]

As per Vishnu Purana, Guru Drona's son rishi Aswatthama will become the next sage
Vyasa (title), who in turn divide the Veda in 29th Mahayuga of 7th Manvantara.[12]

The fourth square is always different

Shruti (Sanskrit, IAST: śruti) means "that which is heard" and refers to the body of most
authoritative, ancient religious texts comprising the central canon of Hinduism.[1] It
includes the four Vedas including its four types of embedded texts - the Samhitas, the
Brahmanas, the Aranyakas and the early Upanishads.[2]

The śruti literature include the four Vedas:[19][20]

Rigveda
Yajurveda
Samaveda
Atharvaveda
Each of these Vedas include the following texts, and these belong to the śruti canon:[21]

Samhitas
Brahmanas
Aranyakas
Upanishads
The literature of the shakhas, or schools, further amplified the material associated with
each of the four core traditions.[22]

Of the above śrutis, the Upanishads are most widely known, and the central ideas of them
are the spiritual foundation of Hinduism.[12] Patrick Olivelle writes,

Even though theoretically the whole of Vedic corpus is accepted as revealed truth [śruti], in
reality it is the Upanishads that have continued to influence the life and thought of the
various religious traditions that we have come to call Hindu. Upanishads are the scriptures
par excellence of Hinduism.

— Patrick Olivelle[13]

Shrutis have been considered the authority in Hinduism.[note 1] Smritis, including the
Manusmṛti, the Nāradasmṛti and the Parāśarasmṛti, are considered less authoritative than
śrutis.[23]

वेदोऽखिलो धर्ममूलं स्मृतिशीले च तद्विदाम् ।

आचारश्चैव साधूनामात्मनस्तुष्टिरेव च ॥

Translation 1: The whole Veda is the (first) source of the sacred law, next the tradition and the virtuous conduct of those who know the (Veda further), also the customs of holy men, and (finally) self-satisfaction (Atmanastushti).[24]

Translation 2: The root of the religion is the entire Veda, and (then) the tradition and customs of those who know (the Veda), and the conduct of virtuous people, and what is satisfactory to oneself.[25]

वेदः स्मृतिः सदाचारः स्वस्य च प्रियमात्मनः ।
एतच्चतुर्विधं प्राहुः साक्षाद् धर्मस्य लक्षणम् ॥

Translation 1: The Veda, the sacred tradition, the customs of virtuous men, and one's own pleasure, they declare to be the fourfold means of defining the sacred law.[24]

Translation 2: The Veda, tradition, the conduct of good people, and what is pleasing to oneself – they say that is four fold mark of religion.[25]

Only three of the four types of texts in the Vedas have behavioral precepts:

For the Hindu all belief takes its source and its justification in the Vedas [Śruti]. Consequently every rule of dharma must find its foundation in the Veda. Strictly speaking, the Samhitas do not even include a single precept which could be used directly as a rule of conduct. One can find there only references to usage which falls within the scope of dharma. By contrast, the Brahmanas, the Aranyakas and the Upanishads contain numerous precepts which propound rules governing behavior.

— Robert Lingat[26]

Bilimoria states the role of śruti in Hinduism has been inspired by "the belief in a higher natural cosmic order (Rta succeeded later by the concept Dharma) that regulates the universe and provides the basis for its growth, flourishing and sustenance – be that of the gods, human beings, animals and eco-formations".[27]

Levinson states that the role of śruti and smṛti in Hindu law is as a source of guidance, and its tradition cultivates the principle that "the facts and circumstances of any particular case determine what is good or bad".[28] The later Hindu texts include fourfold sources of dharma, states Levinson, which include atmanastushti (satisfaction of one's conscience), sadacara (local norms of virtuous individuals), smṛti and shruti.

The Vedas have been divided into four styles of texts – the Samhitas (mantras and benedictions), the Aranyakas (text on rituals, ceremonies, sacrifices and symbolic-sacrifices), the Brahmanas (commentaries on rituals, ceremonies and sacrifices), and the Upanishads (text discussing meditation, philosophy and spiritual knowledge).[4][5][6] The Samhitas are sometimes identified as karma-kanda (कर्म खण्ड, action/ritual-related section), while the Upanishads are identified as jnana-kanda (ज्ञान खण्ड, knowledge/spirituality-related section).[7][8] The Aranyakas and Brahmanas are variously classified, sometimes as the ceremonial karma-kanda, other times (or parts of them) as the jnana-kanda.

The Vedic Samhitas were chanted during ceremonies and rituals, and parts of it remain the oldest living part of Hindu tradition.[3]

A collective study of Vedas and later text suggests that the compendium of Samhitas and associated Vedic texts were far larger than currently available. However, most have been lost at some point or over a period of Indian history.[9]

Each Brahmana is associated with one of the four Vedas, and within the tradition of that Veda with a particular shakha or school:

Rigveda[edit]
Shakala shakha
Aitareya Brahmana, rarely also known as Ashvalayana Brahmana (AB).[18] It consists of 40 adhyayas (lessons, chapters), dealing with Soma sacrifice, and in particular the fire sacrifice ritual.[19] Parts of the Aitareya Brahmana reads like an Aranyaka.[20]
Bashkala or Iksvakus shakha (unclear)[21][22]
Kaushitaki Brahmana (also called Śāṅkhāyana Brahmana) (KB, ŚānkhB).[23] It consistes of 30 chapters, the first six of which are dedicated to food sacrifice, and the remaining to Soma sacrifice in a manner matching the Aitareya Brahmana.[19]
Keith has published his translation of Aitereya Brahmana,[24] and the Kaushitaki Brahmana.[25]

Samaveda[edit]
Kauthuma and Ranayaniya shakhas
Tandya Mahabrahmana or Panchavimsha Brahmana (Pañcaviṃśa Brāhmaṇa) (PB) is the principal Brahmana of both the Kauthuma and Ranayaniya shakhas. This is one of the oldest Brahmanas and includes twenty five books. It is notable for its important ancient legends and Vratyastomas.[19]
Sadvimsha Brahmana (Ṣaḍviṃśa Brāhmaṇa) (ṢadvB) is considered as an appendix to the Panchavimsha Brahmana and its twenty-sixth prapathaka.[19]
Samavidhana Brahmana, and the following Samaveda "Brahmanas" are in Sutra style; it comprises 3 prapathakas.
Arsheya Brahmana is an index to the hymns of Samaveda.
Devatadhyaya or Daivata Brahmana comprises 3 khandas, having 26, 11 and 25 kandikas respectively.
Chandogya Brahmana is divided into ten prapathakas (chapters). Its first two prapathakas (chapters) form the Mantra Brahmana (MB) and each of them is divided into eight khandas (sections). Prapathakas 3–10 form the Chandogya Upanishad.
Samhitopanishad Brahmana has a single prapathaka (chapter) divided into five khandas (sections).
Vamsa Brahmana consists of one short chapter, detailing successions of teachers and disciples.[26]
Jaiminiya shakha

Jaiminiya Brahmana (JB) is the principal Brahmana of the Jaiminiya shakha, divided into three kandas (sections). One of the oldest Brahmanas, older than Tandya Mahabrahmana, but only fragments of manuscript have survived.[4]

Jaiminiya Arsheya Brahmana is also an index to the hymns of Samaveda, belonging to the Jaiminiya shakha.

Jaiminiya Upanishad Brahmana (JUB) also known as Talavakara Upanishad Brahmana, is to some extent parallel to the Chandogya Upanisad, but older.

Yajurveda[edit]

Krishna Yajurveda[edit]

In the Krishna Yajurveda, Brahmana style texts are integrated in the Samhitas; they are older than the Brahmanas proper.

Maitrayani Samhita (MS) and an Aranyaka _smile emoticon_ accented Maitrayaniya Upanishad)

(Caraka) Katha Samhita (KS); the Katha school has an additional fragmentary Brahmana (KathB) and Aranyaka (KathA)

Kapisthalakatha Samhita (KpS), and a few small fragments of its Brahmana

Taittiriya Samhita (TS). In addition to the Brahmana style portions of the Samhita,the Taittiriya school has an additional Taittiriya Brahmana (TB) and Aranyaka (TA) as well as the late Vedic Vadhula Anvakhyana (Br.).[citation needed] It includes a description

Shukla Yajurveda[edit]

Madhyandina Shakha

Shatapatha Brahmana, Madhyandina recension (SBM)

Kanva Shakha

Shatapatha Brahmana, Kanva recension (SBK)

The Satapatha Brahmana consists of a hundred adhyayas (chapters), and is the most cited and famous among the Brahmanas canon of texts.[4] Much of the text is commentaries on Vedic rituals, such as the preparation of the fire altar. It also includes Upanayana, a ceremony that marked the start of Brahmacharya (student) stage of life, as well as the Vedic era recitation practice of Svadhyaya.[4] The text describes procedures for other important Hindu rituals such as a funeral ceremony. The old and famous Brhadaranyaka Upanishad form the closing chapters of Śatapatha Brahmana.[4]

Atharvaveda[edit]

Shaunaka and Paippalada Shakhas

The very late Gopatha Brahmana probably was the Aranyaka of the Paippaladins whose Brahmana is lost.

Levinson states that the role of Shruti and Smriti in Hindu law is as a source of guidance, and its tradition cultivates the principle that "the facts and circumstances of any particular case determine what is good or bad".[42] The later Hindu texts include fourfold sources of Dharma, states Levinson, which include Atmanastushti (satisfaction of one's conscience), Sadachara (local norms of virtuous individuals), Smriti and Sruti.

Atalanta Fugiens (Atalanta in flight) is an emblem book by Michael Maier (1568–1622), published by Johann Theodor de Bry in Oppenheim in 1617 (2nd edition 1618). It consists of 50 discourses with illustrations by Matthias Merian, each of which is accompanied by an epigrammatic verse, prose and a musical fugue. It may therefore be considered an early example of multimedia.

The title page depicts various scenes from Greek mythology related to golden apples:

Top: Garden of the Hesperides.
Left: Hercules stretching out his arm to seize one of the golden apples.
Right: Aphrodite handing the golden apples to Hippomenes.
Bottom: Race between Atalanta and Hippomenes, with Atalanta picking up an apple. Behind them is a temple with lovers embracing each other, while in the background they appear as a lion and lioness.

In the famous ancient Chinese text Cantong qi, there is described the five agents/elements. The five agents (wuxing) are Wood, Fire, Soil, Metal, and Water. They are generated in the first place by the division of original Unity into Yin and Yang, and by the further subdivision of Yin and Yang into four states. In the Cantong qi, Water and Fire are the Yin and Yang of the postcelestial state, and Wood and Metal are True Yin and True Yang of the precelestial state. Soil, the fifth agent, has both a Yang and a Yin aspect. Being at the center, it stands for the source from which the other four agents derive. The fifth is always ultra transcendent.

Hindu mathematics is based on 16 sutras, which reflect the 16 squares of the quadrant model.

Cyclical time finds its roots, not surprisingly, in the heartland of oppositional thinking, Persia and more specific in the spiritual world of Zoroastrian Mazdaism. Here the fourfold confession of faith (in the old religion) was, according to ZAEHNER (1956/1975; 1961/1975):

I confess myself a worshipper of Mazda, a Zoroastrian, a renouncer of the Daevas (bad), and an upholder of the Ahuras (good).

The Mazdean cosmogony distinguished two aspects of time: a time without shore, without origin, eternal time and a limited time or 'the time of long domination' (BRANDON, 1965; CORBIN, 1983). The cyclical time of Mazdaism was punctuated by three great acts, resulting in a four-division (of twelve millennia), making up the 'Great Year':

Act Time Years

_____

1. The time before the primordial creation 0 – 3000

Act 1 : The primordial creation (Bundahishn) in celestial state (menok)

2. The time towards the earthly state (gelik) 3000 – 6000

Act 2 : The catastrophe

3. The time of the mixture (gumecishn) (incl. the present) 6000 – 9000

Act 2 : The catastrophe

3. The time of the mixture (gumecishn) (incl. the present) 6000 – 9000

Act 3: The final separation (vicarishn)

4. The time towards the transfiguration of the world (frashokart) 9000 – 12000

The roots and fascination of the numerological aspects of the tetrad were traced back to the first centuries AD. in the cultural melting pot of Alexandria (Egypt). The gnostic Logos, as the possible remains of the original Egyptian tetradic way of thinking, specified God with a secret name: the Tetragrammaton. In this approach, the division-thinking was seen as a holy process and God was equal to the principle of division.

KEYSERLING (1965, p. 396) talked of 'dem vierfältigen Gott der Gnosis, der Selbst-erlösung: der tiefste menschliche Abgrund wird zu ihrem Ausgangspunt' (the

tetradic God of the Gnosis, the self-redemption: the deepest human void becomes its point of departure). Furthermore, BAYLEY (1912/1968) gave – in his standard work on the 'Lost Language of Symbolism' – a summary of the name of God as a four-letter word and noted that 'almost all peoples of antiquity possessed a name for the Deity composed of four letters' (Tetragrammaton).

Four is in numerology the number of material order and associated with the earth (ENDRES & SCHIMMEL, 1984). Man travels through a chaotic world and invents divisions to assist in the orientation in time and place

The Ojibway believed that there were four worlds.There is displayed the eternal things for the Ojibway on an Ojibway medicine lodge parchment. This parchment of the medicine man, collected in the early twentieth century and described as ' very old', displayed the tour of the bear Mugwa through the four worlds.

The Obijway have a drink called "The Tea of Life" made of four herbs

Division is of prime importance in the evocation of a cosmological picture, as given by the shamans of the people living in the Northern hemisphere. The position of the observer, as a micro cosmos within the universe, is a central theme. Many of the rock carvings and paintings, for instance on drums, of the shamans depict the shaman in the center of the cosmos with his arms outstretched making him resemble explicitly a quadrant

The central part of an Aztec calender-stone has a dominant four-fold division. The inner circle contains Tonatiuh, the Sun God, with a mask of fire, his attribute as King of the Planets. The sign 'ome acatl' on his forehand points to the beginning of the year-count of 'xiuhmolpilli'. The tongue hanging from the mouth, in the shape of an obsidian knife, urges his need for human blood and hearts. In the second circle contains the so-called 'Ollin' symbol (of an earthquake or movement).

The four cardinal points are of primary importance. In the squares are depicted: 1. The jaguar (top right); 2. The crocodile head, god of the air (top left); 3. The rain and celestial fire (left below) and 4. The head of the water goddess Chalchiuhtlicue (right below). The squares depict the four world ages, which were earlier terminated with a catastrophe. Left from the upper triangle (pyramid): 1. The headdress of a fighter signifying a northern direction; to the right: 2. A knife of obsidian (tecpatl) indicates the east and the emergence of the sun. Below left: 3. The house of the rain god Tlalocan symboli-zing the west and right below: 4. A monkey represents the south.

The (Middle) American Indians envisaged the origin of (linear) time to lay in an event whereby the four Tetzcatlipocas strove to become a sun. The fifteenth century 'Codex Borgia', consisting of seventy-six pages on thirty-nine sheets of buckskin, showed a picture with Omoteotl (or Tonacatecutli) in the middle – as the Father and Mother, Lord of Time – surrounded by the four Tetzcatlipocas. They represented, together with Omoteotl, the five periods of the world history (Von FRANZ, 1978). The Aztecs pictured themselves as living in a fifth and final age.

The Incan sacred text the Popol Vuh gives a sequence of four efforts at creation: First were animals, then wet clay, wood, then last, the creation of the first ancestors from maize dough. To this, the Lacandons add the creation of the main kind groupings and their 'totemic' animals.[3] The creation of humankind is concluded by the Mesoamerican tale of the opening of the Maize (or Sustenance) Mountain by the Lightning deities.[4]

Page 11 reverse from Codex Magliabechiano, showing four day-symbols of the tonalpohualli: (Ce = one) Flint/Knife tecpatl, (Ome = two) Rain quiahuitl, (Yei = three) Flower xochitl, and (Nahui = four) Caiman/Crocodile (cipactli), with Spanish descriptions.

The four directions, colors and symbolic representations were given by SELER (1906) – in an older edition of the manuscript – as follows:

east – black – cipactli – crocodile

north – yellow – miquiztli – death

west – blue – ocomatli – monkey

south – red – cozcaquauhtli – vulture

The four-fold theme was further elaborated in plate 43 of the facsimile edition of the 'Codex Borgia' by Karl Anton NOWOTNY (1976). It depicts the 'Underworld of the West' as the final part of a series (Plates 29 – 46). SELER (1906) called this series 'Die Höllenfahrt

der Venus' (Venus' ride to hell). The godhead is pictured in a 'mamacouhticac'-setting, which means a position with arms and legs spread out.

The 'Road to Hell' in the 'Codex Borgia' (Cholula-Tlaxcala area). In: ENDRES (1984).

RAYNAUD (1901) described – in an article on the sacred numbers and cruciform features of the Precolombian culture in Middle America – the 'mamacouhticac' as 'un dieu place dans un carrefour et de ses quatre membres indiquant les quatre chemins' (a god placed on a crossroad with its four members indicating the four roads). The symbolism is reminiscent of the cross and crucifixion in the Christian tradition.

QMRThe capital city of the Aztec empire was Tenochtitlan, now the site of modern-day Mexico City. Built on a series of islets in Lake Texcoco, the city plan was based on a symmetrical layout that was divided into four city sections called campans. The city was interlaced with canals which were useful for transportation.

A tetradic-cosmographical representation of the Aztecs from the 'Codex Ferjervery-Mayer'. The manuscript is kept in the Merseyside County Museum, Liverpool. In: NICHOLSON (1967/1983).

The 'Codex Ferjervery-Mayer' gave another graphical expression of the four Tezcatlipocas standing at the four corners of creation (fig. 203). In the center is the god Tepeyollotl, the 'Heart of the Mountain', one of the Lords of the Night. He is depicted as a warrior. Rivers of blood flow towards the center-square and four holy trees grow from it towards the holy Tezcatlipocas, the four children of god with their own colors: black in north, red in the east, blue in the south and white towards the west. These colors differ, in this case, from the normally accepted compass colors: white (N), red (E), yellow (S) and black (W) and also from the above-given interpretation of the Tlaloc figures of SELER (1906). The difference may be due to a 'night-time' vision, rather than a 'day-time' vision.

The topmost cardinal point is identified as east, where the sun rises. A quetzal bird sits in a flowering tree, identifying the 'Holy Land' whence Quetzalcoatl arose. Two gods, one of the sharp cutting stone (Itzli) and another of the rising Sun, are in opposition, symbolizing dualistic powers.

On the right-hand side is the 'Tree of the North' with Cinteotl, the maize god, and Mictlantecuhtli, Lord of the Dead, facing each other. The theme of Life and Dead is obvious in the black land of the north.

Below is the 'Tree of the West' showing Xochiquetzal, the good goddess of flowers, in opposition with the bad goddess of drunkenness and witchcraft Tlazotlteotl. A hummingbird perched in the tree.

Finally, the tree of the South (to the left) is split. The southern area could be a place of redemption, and the crack might point to a place of escape (NICOLSON, 1967/1983). The rain god Tlatoc faces an unknown god, probably the underworld. Van ZANTWIJK (1977, p. 63) drew attention to the resemblance of this scheme with the geographical lay-out of the capital Tenochtitlan at the time of foundation in four quarters, with four dams as boundaries.

The spatial (four-fold) division of the Aztec people, symbolized in the four Tezcatlipocas, had its parallel in the (later) Mayan culture. Now they were called the four Bacabs and had a similar relation to the points of the compass. The Nahuas enlarged the idea of a quadruple 'compass-god' to such an extend that it came close to the medieval conception of the 'four humors'. In both cases, a 'philosophy' – or rather a deliberate use of an 'a priori' conceptual system based on a tetradic division – could have provided the analogy of ideas.

There were two Aztec calendars, the so-called Tzolkin-cycle of 260 days (or 'tonalpoalli', counting the days, resulting in the 'tonalamatl'-calender) and the 'haäb'-cycle of 360 + 5 days. Each day had therefore two names, one for every cycle.

The combination of Tzolkin– and Haäb-cycles produced a cyclic period of fifty-two (short) years (or 73 tzolkins): 52 x 365 = 18.980 = 73 x 260 (GILBERT & COTTERELL, 1996; p. 28). The fifty-two years (combination) cycle is divided in four parts of each thirteen-year (fig. 204). The four parts are associated with the directions of the wind, joining time and place together. The north-direction is to the left. A similar 'calendario' in the work of Juan de Tovar has the 'rabbit' cycle orientated to the north (Afb. X.2 in VAN ZANTWIJK, 1977, p. 204).

Some post-conquest sources report that at the re-consecration of Great Pyramid of Tenochtitlan in 1487, the Aztecs sacrificed about 80,400 prisoners over the course of four days. This number is considered an exaggeration. According to Ross Hassig, author of Aztec Warfare, "between 10,000 and 80,400 persons" were sacrificed in the ceremony.[39] The higher estimate would average 14 sacrifices per minute during the four-day consecration. Four tables were arranged at the top so that the victims could be jettisoned down the sides of the temple.[40] Nonetheless, according to Codex Telleriano-Remensis, old Aztecs who talked with the missionaries told about a much lower figure for the reconsecration of the temple, approximately 4,000 victims in total.

The sacrificed people would walk to the four tables in four lines

Mixcoatl was one of four children of Tonacatecutli, meaning "Lord of Sustenance," an aged creator god, and Cihuacoatl, a fertility goddess and the patroness of midwives

Tezcatlipoca (/ˌtɛzˌkætliˈpoʊkə/; Classical Nahuatl: Tezcatlipōca pronounced [teskatɬiˈpoːka][1]) was a central deity in Aztec religion, and his main festival was the Toxcatl ceremony celebrated in the month of May. One of the four sons of Ometeotl,

In later myths, the four gods who created the world, Tezcatlipoca, Quetzalcoatl, Huitzilopochtli and Xipe Totec were referred to respectively as the Black, the White, the Blue and the Red Tezcatlipoca. The four Tezcatlipocas were the sons of Ometecuhtli and Omecihuatl, lady and lord of the duality, and were the creators of all the other gods, as well as the world and all humanity.

Tezcatlipoca was also worshipped in many other Nahua cities such as Texcoco, Tlaxcala and Chalco. Each temple had a statue of the god for which copal incense was burned four times a day.

Chālco [ˈt͡ʃaːɬko] was a complex pre-Columbian Nahua altepetl or confederacy in central Mexico. It was divided into the four sub-altepetl of Tlalmanalco/Tlacochcalco, Amaquemecan, Tenanco Texopalco Tepopolla and Chimalhuacan-Chalco, which were themselves further subdivided into altepetl tlayacatl, each with its own tlatoani (king). Its inhabitants were known as the Chālcatl [ˈt͡ʃaːɬkat͡ɬ] (singular) or Chālcah [ˈt͡ʃaːɬkaʔ] (plural).

Tlaxcala (Classical Nahuatl: Tlaxcallān [tɬaʃˈkáˑlˑaːn̥] "place of maize tortillas") was a pre-Columbian city and state in central Mexico.

Ancient Tlaxcala was a republic ruled by a council of between 50 and 200 chief political officials (teuctli [sg.], teteuctin [pl.]) (Fargher et al. 2010). These officials gained their positions through service to the state, usually in warfare, and as a result came from both the noble (pilli) and commoner (macehualli) classes. Following the Spanish Conquest, Tlaxcala was divided into four fiefdoms (señoríos) by the Spanish corregidor Gómez de Santillán in 1545 (26 years after the Conquest). These fiefdoms were Ocotelolco, Quiahuiztlan, Tepeticpac, and Tizatlan. At this time, four great houses or lineages emerged and claimed hereditary rights to each fiefdom and created fictitious genealogies extending back into the pre-Columbian era to justify their claims (Gibson 1952).

In Aztec mythology, the Centzonmimixcoa (Nahuatl pronunciation: [sentsonmiːmiʃˈkoːaʔ] or Centzon Mimixcoa, the "Four Hundred alike Mixcoatl") are the gods of the northern stars.

The Aztec gods of the southern stars are the Centzonuitznaua.

According to the Manuscript of 1558, section 6, these 400 'Cloud-Serpents' were divinely slain [= transformed into stars] in this wise :- of their protagonists 4,

Quauhtli-icohuauh ('Eagle's Twin') "hid inside a tree";
Mix-coatl ('Cloud Serpent') "hid within the earth";
Tlo-tepetl ('Hawk Mountain') "hid within a hill";
Apan-teuctli ('River Lord') "hid in the water";
their sister, Cuetlach-cihuatl, "hid in the ball court."
From this ambuscade these 4 slew the 400.[1]

Notice the repetitions of fours

The combination of the two Aztec calendars – the tzolkin– and haäb-cycle – resulted in a cyclic period of fifty-two years. The subdivision in four series (of thirteen years) was composed of the four primary day-signs: Canas (acatl, reed), Pe Dernales (tecpatl, flint knife), Casas (calli, house) and Conejos (tochtli, rabbit). In: DURAN (1971).

The cyclic movement of time started in the east with the series of the 'Canas' (reed) and turned anti-clockwise to the north of the 'Pe Dernales' (the flint knife). The second series (of the knife) made the same movement to the 'Casas' (house) in the west. The third series (of the houses) rotated anti-clockwise to the 'Conejos' (rabbit) in the south. And this last series (of thirteen years) jointed again with the 'Canas' to complete the cycle (of fifty-two years). When this happened the feast of Nexiuhilpiliztli (the Completion or Connection of the Perfect Circle of Years) took place (DURAN, 1971).

In Aztec mythology, the Centzonuitznahua Nahuatl pronunciation: [sen͡tsonwiːtsˈnaːwa] (or, in plural, Centzon Huitznauhtin Nahuatl pronunciation: [sen͡tsonwiːtsˈnaːwtin]) were the gods of the southern stars. They are the evil elder sons of Coatlicue, and their sister is Coyolxauhqui. They and their sister tried to murder their mother upon learning of her pregnancy with Huitzilopochtli; their plan was thwarted when their brother sprang from the womb—fully grown and garbed for battle—and killed them all.

The Centzonhuitznaua are known as the "Four Hundred Southerners"; the gods of the northern stars are the Centzonmimixcoa.

Whether it is four or four hundred Amerindian myths are filled with fours. But so are mythologies throughout the world but it is kind of accentuated in Amerindian myths

In Aztec mythology, Coyolxauhqui (Classical Nahuatl: Coyolxāuhqui [kojoɬˈʃaːʍki], "Face painted with Bells") was a daughter of Coatlicue and Mixcoatl and is the leader of the

Centzon Huitznahuas, the southern star gods. Coyolxauhqui ruled over her brothers, the Four Hundred Southerners, she led them in attack against their mother, Coatlicue, when they learned she was pregnant, convinced she dishonored them all.[1]

The miraculous pregnancy of Coatlicue, the maternal Earth deity, made her other children embarrassed, including her oldest daughter Coyolxauhqui. As Coatlicue swept the temple, a few hummingbird feathers fell into her chest. Coatlicue's child Huitzilopochtli sprang from her womb in full war armor and killed Coyolxauhqui and her other 400 brothers, who had been attacking their mother. He cut off her limbs, then tossed her head into the sky where it became the moon, so that his mother would be comforted in seeing her daughter in the sky every night.

There are a handful of origin mythologies describing the deity's beginnings. One story tells of the cosmic creation and Huitzilopochtli's role. According to this legend, he was the smallest son of four—his parents being the creator couple Tonacateuctli and Tonacacihuatl while his brothers were Quetzalcoatl and the two Tezcatlipocas. His mother and father instructed both him and Quetzalcoatl to bring order to the world. And so, together they made fire, the first male and female humans, created the Earth, and manufactured a sun.[6]

Another origin story tells of a fierce goddess, Coatlicue, being impregnated as she was sweeping by a ball of feathers on Coatepec ("Serpent Hill").[7] Her other children, who were already fully grown, were the four hundred male Centzonuitznaua and the female deity Coyolxauhqui. These children, angered by the manner by which their mother became impregnated, conspired to kill her.[8] Huitzilopochtli burst forth from his mother's womb in full armor and fully grown. He attacked his older brothers and sister, defending his mother by beheading his sister and casting her body from the mountain top. He also chased after his brothers, who fled from him and became scattered all over the sky. [9]

In Aztec cosmology, the four corners of the universe are marked by "the four Tlalocs" (Classical Nahuatl: Tlālōquê [tɬaːˈloːkeʔ]) which both hold up the sky and function as the frame for the passing of time. Tlaloc was the patron of the Calendar day Mazātl. In Aztec mythology, Tlaloc was the lord of the third sun which was destroyed by fire.

Tlaloc (Classical Nahuatl: Tlāloc [ˈtɬaːlok])[1] was an important deity in Aztec religion; as supreme god of the rains, he was also by extension a god of fertility and of water. He was widely worshiped as a beneficent giver of life and sustenance, but he was also feared for his ability to send hail, thunder, and lightning, and for being the lord of the powerful element of water.

The Annals of the Kingdom of Ireland (Irish: Annála Ríoghachta Éireann) or the Annals of the Four Masters (Annála na gCeithre Máistrí) are chronicles of medieval Irish history. The

entries span from the Deluge, dated as 2,242 years after creation to AD 1616.The chief compiler of the annals was Brother Mícheál Ó Cléirigh from Ballyshannon, who was assisted by, among others, Cú Choigcríche Ó Cléirigh, Fearfeasa Ó Maol Chonaire and Peregrine Ó Duibhgeannain. Although only one of the authors, Mícheál Ó Cléirigh, was a Franciscan friar, they became known as 'The Four Friars' or in the original Irish, Na Ceithre Máistrí. The Anglicized version of this was "The Four Masters", the name that became associated with the annals themselves.

Art Chapter

Tetradic imagery in the work of Hildegard of Bingen (1098 – 1179), a German Benedictine abbot and mystic. Left: The world egg, represented as a four-fold entity with a central earth, water, air and fire in a square frame. Right: A human being as the centre of a cosmos, which is ruled by Christ and God, embracing the outer sphere of fire. From the 'Liber Divinorum Operum' in the Biblioteca Governativa, Lucca (Italy).

It is not surprising, that the illustrations of tetradic features in the work of Hildegard of Bingen mainly occur, if she turns her attention to the position of the man in the cosmos (fig. 145). This element – of the meeting point of the holy and the human – was highlighted in the square shape of the Holy City within a circle (of perfection), encadred in another square (of rightness) (fig. 146). The conquest of Jerusalem in the First Crusade (1099) had sparked an interest in the city, and its representation was placed in the conceptual (division) system of the day (twelfth century).

The main stages in THE LIFE OF RAMON LULL, based on the prominence of division-thinking, according to BONNER (1985):

_____-

1. PRE-ART PHASE (1272 – 1274) – Book of Contemplation

'Liber Contemplationis in Deum', around 1272, encyclopaedic work dealing with the creation. 1274 – Reclusion and 'illumination' on Mount Randa, Mallorca. He was then forty-two years old.

2. QUATERNARY PHASE (1274 – 1289) – Arts (groups of sixteen).

Ars generalis; Ars magna; Libre del Ordre de Cavalleria (around 1274); Doctrina pueril (educational book for his son); Liber chaos (1275); Felix or Libre de Meravelles (c. 1284, encyclopaedic work), Blanquerna(1283-85); over virtues and vices.

3. TERNARY PHASE (1290 – 1308) – Algebraic notation (cyclic groups of nine);

Logica nova (1303); Liber de ascensu et descensu intellectus (1304); Ars generalis ultima (1308); Ars brevis (1308).

4. POST-ART PHASE (1308 – 1315) Departure of mechanical/ numerological thoughts.

Further visits to Paris followed between 1297 and 1299 and in 1306. In the meantime, he traveled extensively: 1301 found him in Cyprus, 1302 in Armenia (and maybe Jerusalem), 1303 – 1305 return to Genoa and Montpellier. After his fourth visit to Paris (1309 – 1311) he started an Anti-Averroist campaign, aiming at the followers of the Arab scholar Averrois. This is a curious target, which only could have been chosen in a spirit of close recognition.

Statues of the Maitreya Buddha often depict him with his legs crossed. The crossing of legs brings to mind the quadrant. Even when sitting on a chair his legs are put in an x position.

The Four Wangs (Chinese: 四王; pinyin: Sì Wáng; Wade–Giles: Szu Wang) were four Chinese landscape painters in the 17th century, all called Wang (surname Wang). They are best known for their accomplishments in shan shui painting.

The Four Masters of the Yuan dynasty is a name used to collectively describe the four Chinese painters Huang Gongwang, Wu Zhen, Ni Zan, and Wang Meng, who were active during the Yuan dynasty (1271–1368). They were revered during the Ming dynasty and later periods as major exponents of the tradition of "literati painting"

The Four Masters of the Ming dynasty (Chinese: 明四家; pinyin: Míng Sì Jiā) are a traditional grouping in Chinese art history of four famous Chinese painters of the Ming dynasty.[1] The group are Shen Zhou (1427-1509), Wen Zhengming (1470-1559), both of the Wu School, Tang Yin (1470-1523), and Qiu Ying (c.1494-c.1552)

The four arts (四藝, siyi), or the four arts of the Chinese scholar, were the four main accomplishments required of the Chinese scholar-gentleman. They are qin (the guqin, a stringed instrument. 琴), qi (the strategy game of Go, 棋), shu (Chinese calligraphy 書) and hua (Chinese painting 畫).

Painting chapter

Page 46 of the pre-Columbian Codex Borgia depicts four smoking Xiuhcoatl serpents arranged around a burning turquoise mirror. A turquoise-rimmed mirror has been found at the Maya city of Chichen Itza, with four fire serpents circling the rim. The archaeological site of Tula has warrior columns on Mound B that bear mirrors on their backs, also surrounded by four Xiuhcoatl fire serpents.[

The Codex Borgia or Codex Yoalli Ehēcatl is a Mesoamerican ritual and divinatory manuscript. It is generally believed to have been written before the Spanish conquest of Mexico, somewhere within what is now southern or western Puebla. The Codex Borgia is a member of, and gives its name to, the Borgia Group of manuscripts.

14[edit]

Pages 9 to 13 are divided into four quarters. Each quarter contains one of the twenty day signs, its patron deity, and associated symbols.

Page 14 is divided into nine sections for each of the nine Lords of the Night. They are accompanied by a day sign and symbols indicating positive or negative associations.

Pages 15 to 17 depict deities associated with childbirth. Each of the twenty sections contains four day signs.

The bottom section of page 17 contains a large depiction of Tezcatlipoca, with day signs associated with different parts of his body.

Page 71 depicts Tonatiuh, the sun god, receiving blood from a decapitated bird. Surrounding the scene are the thirteen Birds of the Day, corresponding to each of the thirteen days of a trecena. Page 72 depicts four deities with day signs connected to parts of their bodies. Each deity is surrounded by a serpent. Page 73 depicts the gods Mictlantecuhtli and Quetzalcoatl seated back to back, similar to page 56. They likewise have day signs attached to various parts of their bodies, and the entire scene is encircled by day signs.

The symbolic expression of the parts of the world is pioneered by Cesare Ripa, in his 'Iconologia' (1603). This book, with a wide field of influence, gave a review of a great number of abstract notions, that circulated in Europe at the time. The four parts of the world are shown as female figures in a distinct symbolic setting.
This symbolic representation depicts the continent Africa as a woman with a scorpio in her hand and a lion and snakes at her feet. It is part of a series of the four continents in the 'Iconologia', an influential book by Cesare Ripa, printed in 1603.

HYDE (1924/1927) made a specialized study of the pictures of the four continents in theater- and ballet form. One of the publications opens with the appeal: 'The author would be grateful for any information about symbolical representations of the Four Quarters of the World in the Fine and Applied Arts'.

The heydays for the representations of the continents are in the early seventeenth century. The symbolic forms of Europe, Asia, Africa and America are depicted on wall-paintings, ceilings, tapestry, folding screens, etchings and paintings.

The notion of four parts of the world dates back to Antiquity and was based on 'a priori' ideas closely related to the four-fold way of thinking. When the first outlines of a European cultural identity took shape, these impressions were still in existence. On the earliest known, oval-shaped oekumene-map of Isidore of Seville – dated in 775 A.D. – a great island is drawn to complement the four-division with the antipode-continent. The written text says: 'Insula incognita enim sunt IIII partes mundi' (VERRYKEN, 1990). Reality is forced here into a conceptual scheme, because nothing was known of the 'insula incognita'

The Vatican world map of Isidore of Seville, dated 775 A.D. The elongated island in the left-hand corner carries the inscription: 'Insula incognita enim sunt IIII partes mundi', referring to a conceptual world view based on four parts. The city of Jerusalem is schematically drawn near the centre. The rivers of Paradise are clearly visible to the right. After the discovery of America by Christopher Columbus in 1492, the conceptual four-part world turned out to be true. Because of the structural and metaphorical background, the four parts of the world (Europe, Africa, Asia and America) caught on very fast. The expression was popular by the Jesuits in the Contra-Reformation of the sixteenth century to indicate the long-known truth of a christian unity on the earth and a reference to a 'holy' fourfold-division thereof.

The four parts of the world was used as designs of four tapestries by G. Maes, executed by J. van der Beurght in Bruxelles. End of the seventeenth century. Top left: Europe as a queen with the horn of plenty (cornucopia). This horn was the symbol of Fortune, the Roman goddess, shaped after Tyche. The Greek mythical roots lay by Amaltheia, the goat which fed Zeus and became a 'cornu copiae'. Top right: Asia with a pagoda; Bottom left: Africa, with a pyramid; Bottom right: America with exotica. Collection J.H. Hyde, Paris. This tapestry took the form of a quadrant.

The symbolism of the continents is often supported by the following characteristics.
1. Europe – Queen of the world, with crown and sceptre; temple (relation to religion); arms-array – horse or bull; horn of plenty (cornucopia), reference to art and science.

2. Asia – Flowers, jewels; odours – perfumes from the East; palm and camel.

3. Africa – Person with black skin, coral beats; scorpio; lion/ snake; head of an elephant.

4. America – Native inhabitant with feather headdress; bow and arrow; caiman/ crocodile.

The four parts of the world and its animal symbolism: Europe with a horse, Africa with an elephant, a camel for Asia and a panther-like animal for America. End of the seventeenth century was depicted in another quadrant painting by Panneaux d'Aubusson royal. Collection J.H. Hyde, Paris.

The theme is elaborated in books and plays. CHEW mentioned, in an interesting commentary of that period, the 'tedious allegorical drama' of Barten Holyday, titled 'Technogamia, or the Marriages of the Arts' (1618). The tetradic thoughts are reduced in

this period of the European cultural history to mythological paraphernalia. On the 'fêtes galantes' only the exterior remains of the tetradic world are used. The symbols are known, but the world in which they originate, seems to be forgotten.

La Guerra d'Amore. A symbolic parade in the seventeenth century representing the continents. Etching of Jacques Callot (Florence, 1616), working at the court of the Medici. The seventeenth century was for many countries in Europe, despite the continuing struggles in the first half of it, a 'Golden Age', with hitherto unknown material wealth and a feeling of power and command. A fourfold division was often demonstrated, but in a far more symbolic way than in the twelfth century. It was not felt as a basic starting-point for a communication, for which the two-fold way seemed much more appropriate and practical, but as a relict of bygone times, a living memory, used in plays.

Some ten years after the enacting of the 'la Guerra d'Amore' a ballet was performed in Paris under the title 'The Dowager of Billebahaut' (The widow of Bilbao) for the carnaval of 1626. Daniel Rabel made several drawings of the (lost) costumes of the personifications of the continents, who played in the ballet

Costumes used by the 'Ballet of the Dowager of Billebahaut', performed at the carnaval of Paris in 1626 represented the four parts of the world. Pen drawings were by Daniel Rabel, Louvre Museum, Paris.

Michael Maier described in his book 'Symbola aureae mensae' (1617) a symbolic 'peregrinatio' to the four corners of the earth: the journey begins in Europe to America and Asia and finally the quest for Mercure and the phoenix ends in Africa.

Around 1800, as the fourfold way of thinking is revitalized, the symbolism of the four continents is strongly represented. Schlegel complained in his 'Cours d'histoire universelle' (1805 – 1806)

'It should be noted that in our time the division in the four parts of the world is overemphasized and used to compare different kind of nations; it has gone so far as to apply the division in South, North, East and West not only to physical but also moralistic entities.'

And time and division find their identity in a division-model. So, for instance, the period between the sunrise and sunset is called a 'day', with a certain duration, which can be divided in hours, minutes, seconds. In classical times the day was divided in twelve hours (and twelve hours night). If the sun reached the highest point in the daytime it was six o'clock (rather than twelve o'clock nowadays)

The fourfold division of a (twenty-four hours) day results in the time-units of morning, afternoon, evening and night. Michelangelo has sculptured this division at the tomb of Giuliano de Medici in the Medici Chapel in Florence

(PANOFSKY, 1939/67). ELSEN (1985) suggested that the representation of the 'Morning' might have been a model for Rodin's 'Thinker'.

The new day, as a fresh beginning, has been a source of inspiration. In poetry the image is used in connection with light and a renewed visibility. The morning holds the promise of a new start. The motif has also been used in a literally sense as a source or spring. The four rivers of the Garden of Eden play a symbolic role here.

The theme of the 'Tageszeiten', as an expression of 'Werden und Vergehen', was central in his thoughts. In 1803 he made sketches and completed in 1805 a copper-etching of the 'Morning' (fig. 43 right). The fountains are shaped into flowers and a new day burgeoning from the earth. In 1808, just before his premature dead on the age of thirty-three due to tuberculosis, he painted an oil-painting of the same motif: 'Der Morgen', kleine Fassung (109 x 85,5 cm)). The full cycle could not be completed due to his death in 1810.

The fourfold division of the day is moralized in a seventeenth century etching of Abraham Bach 'Die Vier Zeiten dess Tages' . Morning, afternoon, evening and night are depicted in four illustrations of the Holy family, with Josef, Maria and the child Jesus as leading figures in a rural and homely setting.

All that stuff about the four parts of the world was from Marten Kuilman who spent his life studying the quadrant in architecture and art because he noticed like I did that it was central to it and almost he felt art centered around the quadrant little does he know reality does.

Several portrayals of the four periods in world history are known from the Haarlem School of Hendrick Goltzius. In the 'aurea Saturno' (as equivalent to the 'aetas aurea') are groups of people in a crowded paradise (about twenty five persons are gathered, among them Bacchus (or Dionysus, god of the wine) and Ceres sitting under a tree like Adam and Eve and Saturn as a god in the clouds). In the second period, the silver age, man is laboring on the land with a plow. In the third age of bronze life is getting harder. There is building, fishing and trade, but also a stack of arms is ready for use. In the last period, the war and destruction have started.

The four periods of the world, by an unknown Dutch engraver from the school of painters and engravers around Hendrick Goltzius, based in Haarlem, dimensions 174 x 250 mm. In: BOLTEN, 1984, was set up as a quadrant.

The iconographic elements in the representation of the four periods follow a dual division-line from initial happiness to utter chaos:

1. In the golden age there are happy human pairs in an Arcadian environment. This is the idealist

2. In the second age there are still peaceful circumstances, while people laboring on the land. This is the guardian. People are laboring and performing homeostasis and order, the nature of the second square.

3. In the third age there is a more forceful approach to nature by building activities. The equilibrium is disturbed and quarrels and strife treated to take over. The third square is always bad. This is the artisan.

4. In the fourth age the balance is completely lost and chaos and degeneration sets in. The fourth square is death. This is the rational.

The popularity of the (symbolic) expression of the four world-periods at the beginning of the seventeenth century (1603) was emphasized by Abraham Bloemaert's portrayal of the motif and also by Crispijn van de Passe de Oude

The four periods of the world, based on Ovid's 'Metamorphoses', were copper etchings by Crispijn van de Passe the Elder measure ca. 80 x 125 mm. Every picture is supported by a Latin text describing the inescapable development from great happiness to chaos and destruction. The four-fold framework (of historical units) is used to convey a strong linear message with a downward trend.

The most outstanding and influential representation of the Four Monarchies can be found in Sir Walter Raleigh's 'History of the World' (1614). The frontispiece of this book showed an eye surrounded by flames labeled 'Providentia'. Anne Bradstreet used this work to construct her poem 'Four Monarchies' (STANFORD, 1983; p. 240).

Art historians divide the history of Roman painting into four periods. The first style of Roman painting was practiced from the early 2nd century BC to the early- or mid-1st century BC. It was mainly composed of imitations of marble and masonry, though sometimes including depictions of mythological characters.

The second style of Roman painting began during the early 1st century BC, and attempted to depict realistically three-dimensional architectural features and landscapes. The third style occurred during the reign of Augustus (27 BC – 14 AD), and rejected the realism of the second style in favor of simple ornamentation. A small architectural scene, landscape, or abstract design was placed in the center with a monochrome background. The fourth style, which began in the 1st century AD, depicted scenes from mythology, while retaining architectural details and abstract patterns

The rose window in the cathedral of Lausanne (Switzerland) is the 'iconographical statement of four seasons symbolism' par excellence (HARLEY & WOODWARD, 1987). The windows fitted between 1235 and 1275 and can be seen as the apotheosis of the medieval tetradic thoughts. Ellen Judith BEER (1952; 1956; 1975) studied the imagery of the windows, while previous studies by BACH et al. (1944) covered the changes made by the restorations between 1894 and 1899.

The Lausanne rose window incorporates many numerological aspects of the fourfold division. Circle and square are the basic constituencies. The circle is seen as an abstract entity, while the square is earthly directed. The division in time (eight circles and the complete window) is more prominent than the division in place (two squares).

The year (Annus) is placed in the centre, surrounded by time-indicators like light/darkness, and day/night, followed by seasons and months. The four rivers of Paradise are situated in the corners of the great square

Otho van Veen (Vaenius) gave – in his 'Quinti Horatii Flacci Emblemata' (Antwerpen, 1612) – an illustration of the symbolism of the four seasons. Four persons of increasing age march away from the observer (fig. 55). The landscape is empty and only a butterfly-like angel is holding a sundial, representing the time (CHEW, 1962). Spring is a young child, sowing; summer is a grown-up man returning from the harvest; autumn is represented by an elderly man enjoying the fruits of life and winter is an old man, trying to keep the pace. In the right-hand corner lies a snake biting in his own tail. This is the so-called 'uroborus', representing the cyclicity of time and rebirth (FISHER, 1984). The 'uroborus' finds its origin in the Egyptian classical period and is closely related to the Alexandrian heritage of tetradic thinking.

Sketch for the etching of the 'Summer' by Pietro Testa, part of a series of the four seasons in an allegorical setting. Pierpont Morgan Library, New York. Juno symbolizes, in the final version, the air, Cybele (and the lion) the earth, Vulcanus the fire and the vase/river god the water.

The theme of the seasons and elements was repeated in the 'Allegory of the Elements of Nature' (1644). Four elements descending from the heavens to the earth: 'Like the drawing of the Elements in the Pierpont Morgan Library, this composition is closely related to the series of 'The Seasons', completed in 1644. Here, as in Summer and Winter, the natural world was characterized as a cyclical elemental struggle between fire, air, water, and earth'

An illustration of James Thomson's poem 'The Seasons', published in the first complete version in 1730. All four elements together create an atmosphere of disaster in a once Arcadian landscape.

Antonio Vivaldi's concertos called the 'Four Seasons' (Le quattro stagioni, 1725) expressed the same spirit of the time. They were part of a group of twelve concertos called 'Il Cimento dell'armonia e dell'inventione' (The struggle between Harmony and Invention). The four seasons were again in the centre of interest at the beginning of the nineteenth century. Haydn's 'Die Jahreszeiten' (1801) used the text of James Thomson's 'The Seasons'

The four falling figures of Tantalus, Icarus, Phaeton and Ixion were engravings by Hendrick Goltzius after paintings by Cornelis Cornelisz. of Haarlem, 1588. In: BERGVELT (1993) and FUCHS (1982).

Four Lions were also depicted in a print of Frederick and Elizabeth as King and Queen of Bohemia, issued in Prague at the time of their coronation in 1619 (fig. 175). The lions represented the alliances on which the new king and queen of Bohemia could count: 'The lion was Frederick's own heraldic animal, and the lion on the left is the lion of the Palatinate, holding an electoral crown. Then comes the double-tailed lion of Bohemia, the British lion with his sword, and the lion of the Netherlands' (YATES, 1972/1975).

Frederick and Elizabeth as King and Queen of Bohemia, with Four Lions, symbols of their alliances. National Portrait Gallery, London. In: YATES

The lion with four heads, a reference to the four-parted character of the 'Great Work', started by the Green Lion. From Comenius' 'Lux e Tenebris', 1665. In: KELLER (1912).

The serious character of this matter was demonstrated by Isaac Newton (1642 – 1727), who spend a lot of time and effort in the search for the Green Lion (DOBBS, 1975). He was the last of the four great men – Copernicus, Kepler, Galileo and Newton – who carried the torch of modern scientific thinking and ignited its triumphal success.

Music Chapter

The poems and pieces of the Chu Ci anthology vary, in formal poetic style. Chu Ci includes varying metrics, varying use of exclamatory particles, and the varying presence of the luan (or, envoi). The styles of the Chu Ci compare and contrast with the poems of the Shi Jing anthology Book of Songs, or "Song" style), with the typical Han poetry styles, and with Qu Yuan's innovative Li Sao style.

Song style[edit]
Some Chuci poems use the typical Book of Songs (Shijing) four syllable line, with its four equally stressed syllables:

tum tum tum tum
This is sometimes varied by the use of a pronoun or nonce word in the fourth (or final) place, in alternate lines, thus weakening the stress of the fourth syllable of the even lines:

tum tum tum ti
where "tum" stands for a stressed syllable and "ti" stands for the unstressed nonce syllable of choice[10] Heavenly Questions (Tian wen), Summons of the Soul (Zhao hun), and The Great Summons (Da Zhao) all have metrical characteristics typical of the Shijing. Generally, the Shijing style (both in Shijing and in Chuci) groups these lines into rhymed

quatrains. Thus, the standard building block of the Song style poetry is a quatrain with a heavy, thumping sound quality:

tum tum tum tum
tum tum tum tum
tum tum tum tum
tum tum tum tum

The variant song style verse (one type of "7-plus") used seven stressed (or accented) syllables followed by an unstressed (or weakly accented) final syllable on alternate (even) lines:

tum tum tum tum
tum tum tum ti
tum tum tum tum
tum tum tum ti

Western music inherited the concept of metre from poetry (Scholes 1977; Latham 2002b) where it denotes: the number of lines in a verse; the number of syllables in each line; and the arrangement of those syllables as long or short, accented or unaccented (Scholes 1977; Latham 2002b). The first coherent system of rhythmic notation in modern Western music was based upon rhythmic modes derived from the basic types of metrical unit in the quantitative meter of classical ancient Greek and Latin poetry (Hoppin 1978, 221).

Later music for dances such as the pavane and galliard consisted of musical phrases to accompany a fixed sequence of basic steps with a defined tempo and time signature. The English word "measure", originally an exact or just amount of time, came to denote either a poetic rhythm, a bar of music, or else an entire melodic verse or dance (Merriam-Webster 2015) involving sequences of notes, words and/or movements that may last four, eight or sixteen bars.

Traditional and popular songs may draw heavily upon a limited range of meters, leading to interchangeability of melodies. Early hymnals commonly did not include musical notation but simply texts that could be sung to any tune known by the singers that had a matching meter. For example, The Blind Boys of Alabama rendered the hymn Amazing Grace to the setting of The Animals' version of the folk song The House of the Rising Sun. This is possible because the texts share a popular basic four-line (quatrain) verse-form called ballad meter or, in hymnals, common meter, the four lines having a syllable-count of 8:6:8:6 (Hymns Ancient and Modern Revised), the rhyme-scheme usually following suit: ABAB. There is generally a pause in the melody in a cadence at the end of the shorter lines so that the underlying musical meter is 8:8:8:8 beats, the cadences dividing this musically into two symmetrical "normal" phrases of four measures each (MacPherson 1930, 14).

In some regional music, for example Balkan music (like Bulgarian music, and the Macedonian 3+2+2+3+2 meter), a wealth of irregular or compound meters are used. Other terms for this are "additive meter" (London 2001, §I.8) and "imperfect time" (Read 1964, 147[not in citation given]).

In music of the common practice period (about 1600–1900), there are four different families of time signature in common use:

Simple duple—two or four beats to a bar, each divided by two, the top number being "2" or "4" (2/4, 2/8, 2/2 … 4/4, 4/8, 4/2 …). When there are four beats to a bar, it is alternatively referred to as "quadruple" time.
Simple triple (About this sound 3/4 (help·info))—three beats to a bar, each divided by two, the top number being "3" (3/4, 3/8, 3/2 …)
Compound duple—two beats to a bar, each divided by three, the top number being "6" (6/8, 6/16, 6/4 …)
Compound triple—three beats to a bar, each divided by three, the top number being "9" (9/8, 9/16, 9/4)

Rhythm is marked by the regulated succession of opposite elements, the dynamics of the strong and weak beat, the played beat and the inaudible but implied rest beat, the long and short note. As well as perceiving rhythm we must be able to anticipate it. This depends upon repetition of a pattern that is short enough to memorize.

The alternation of the strong and weak beat is fundamental to the ancient language of poetry, dance and music. The common poetic term "foot" refers, as in dance, to the lifting and tapping of the foot in time. In a similar way musicians speak of an upbeat and a downbeat and of the "on" and "off" beat. These contrasts naturally facilitate a dual hierarchy of rhythm and depend upon repeating patterns of duration, accent and rest forming a "pulse-group" that corresponds to the poetic foot. Normally such pulse-groups are defined by taking the most accented beat as the first and counting the pulses until the next accent (MacPherson 1930, 5; Scholes 1977b). A rhythm that accents another beat and de-emphasises the down beat as established or assumed from the melody or from a preceding rhythm is called syncopated rhythm.

Normally, even the most complex of meters may be broken down into a chain of duple and triple pulses (MacPherson 1930, 5; Scholes 1977b) either by addition or division. According to Pierre Boulez, beat structures beyond four, in western music, are "simply not natural" (Slatkin n.d., at 5:05).

The primary cycle of four beats

File:Polyrhythm6c4.theora.ogv
Polyrhythm 6:4
A great deal of African music is built upon a cycle of four main beats. This basic musical period has a bipartite structure; it is made up of two cells, consisting of two beats each. Ladzekpo states: "The first most useful measure scheme consists of four main beats with each main beat measuring off three equal pulsations [12
8] as its distinctive feature … The next most useful measure scheme consists of four main beats with each main beat flavored by measuring off four equal pulsations [4

4]." (b: "Main Beat Schemes")[5] The four-beat cycle is a shorter period than what is normally heard in European music. This accounts for the stereotype of African music as "repetitive." (Kubik, p. 41)[2] A cycle of only two main beats, as in the case of 3:2, does not constitute a complete primary cycle. (Kubik, Vol. 2, p. 63)[2] Within the primary cycle there are two cells of 3:2, or, a single cycle of six-against-four (6:4). The six cross-beats are represented below as quarter-notes for visual emphasis.

If every other cross-beat is sounded, the three-against-four (3:4) cross-rhythm is generated. The "slow" cycle of three beats is more metrically destabilizing and dynamic than the six beats. The Afro-Cuban rhythm abakuá (Havana-style) is based on the 3:4 cross-rhythm.[9] The three-beat cycle is represented as half-notes in the following example for visual emphasis.

Three-against-four cross-rhythm. About this sound Play (help·info)
"   In contrast to the four main beat scheme, the rhythmic motion of the three beat scheme is slower. A simultaneous interaction of these two beat schemes with contrasting rhythmic motions produces the next most useful cross rhythmic texture in the development of sub-Saharan dance-drumming. The composite texture of the three-against-four cross rhythm produces a motif covering a length of the musical period. The motif begins with the component beat schemes coinciding and continues with the beat schemes in alternate motions thus showing a progression from a "static" beginning to a "dynamic" continuation

File:Polyrhythm-1.5 with 4 o 4 simultaneously.ogv
Polyrhythm 4:1.5
Even more metrically destabilizing and dynamic than 3:4, is the one and a half beat-against-four (1.5:4) cross-rhythm. Another way to think of it is as three "very slow" cross-beats spanning two main beat cycles (of four beats each), or three beats over two periods (measures), a type of macro "hemiola." In terms of the beat scheme comprising the complete 24-pulse cross-rhythm, the ratio is 3:8. The three cross-beats are shown as whole notes below for visual emphasis.

When duple pulses (4
4) are grouped in sets of three, the four-against-three (4:3) cross-rhythm is generated. The four cross-beats cycle every three main beats. In terms of cross-rhythm only, this is the same as having duple cross-beats in a triple beat scheme, such as 3
4 or 6
4. The pulses on the top line are grouped in threes for visual emphasis.

4:3 cross-rhythm in modular form.
However, this 4:3 is within a duple beat scheme, with duple (quadruple) subdivisions of the beats. Since the musical period is a cycle of four main beats, the 4:3 cross-rhythm significantly contradicts the period by cycling every three main beats. The complete

cross-beat cycle is shown below in relation to the key pattern known in Afro-Cuban music as clave. (Rumba, p. xxxi)[11] The subdivisions are grouped (beamed) in sets of four to reflect the proper metric structure. The complete cross-beat cycle is three claves in length. Within the context of the complete cross-rhythm, there is a macro 4:3—four 4:3 modules-against-three claves. Continuous duple-pulse cross-beats are often sounded by the quinto, the lead drum in the Cuban genres rumba and conga. (Rumba, pps. 69–86)[11][b][c]

In sub-Saharan rhythm the four main beats are typically divided into three or four pulses, creating a 12-pulse (12
8), or 16-pulse (4
4) cycle. (Ladzekpo, b: "Main Beat Scheme")[5] Every triple-pulse pattern has its duple-pulse correlative; the two pulse structures are two sides of the same coin. Cross-beats are generated by grouping pulses contrary to their given structure, for example: groups of two or four in 12
8 or groups of three or six in 4
4. (Rumba, p. 180)[11] The duple-pulse correlative of the three cross-beats of the hemiola, is a figure known in Afro-Cuban music as tresillo. Tresillo is a Spanish word meaning 'triplet'—three equal notes within the same time span normally occupied by two notes. As used in Cuban popular music, tresillo refers to the most basic duple-pulse rhythmic cell.[13] The pulse names of tresillo and the three cross-beats of the hemiola are identical: one, one-ah, two-and.

Early ethnomusicological analysis often perceived African music as polymetric. Pioneers such as A.M. Jones and Anthony King identified the prevailing rhythmic emphasis as metrical accents (main beats), instead of the contrametrical accents (cross-beats) they in fact are. Some of their music examples are polymetric, with multiple and conflicting main beat cycles, each requiring its own separate time signature. King shows two Yoruba dundun pressure drum ("talking drum") phrases in relation to the five-stroke standard pattern, or "clave," played on the kagano dundun (top line).[18] The standard pattern is written in a polymetric 7
8 + 5
8 time signature. One dundun phrase is based on a grouping of three pulses written in 3
8, and the other, a grouping of four pulses written in 4
8. Complicating the transcription further, one polymetric measure is offset from the other two.

The most common Hindustani tala, Teental, is a regularly-divisible cycle of four measures of four beats each.

Tintal (or teental, trital; Hindi: तीन ताल) is one of the most famous talas of Hindustani music. It is also the most common tal in North India. The structure of tintal is so

symmetrical that it presents a very simple rhythmic structure against which a performance can be laid.[1]

Arrangement[edit]

Tintal has sixteen (16) beats[2] in four equal divisions (vibhag). The period between every two beats is equal. The first beat out of 16 beats is called sam and the 9th beat is called khali ('empty'). To count the Teental, the audience claps on the first beat, claps on the 5th beat, then waves on the 9th beat and lastly again claps on the 13th beat; these three claps (Hindi tin 'three' + tāl 'clap') give the rhythm its name.

16 is the squares of the quadrant model. Four is the number of quadrants in the quadrant model and the number of squares per quadrant

Bloc party four

The number of strings on a violin, a viola, a cello, double bass, a cuatro and a ukulele, and the number of string pairs on a mandolin.

Brahms four symphonies

In popular or modern music, the most common time signature is also founded on four beats, i.e., 4/4 having four quarter note beats.

Gang of four is a british rock band

Jay Z is known for his rap song 44 fours where he says four forty four times. Jay Z's name Hov, is said to be short of Hova, or the tetragrammaton.

Weigel held, besides his ordinary teachings, an 'Astrognostisch-heraldisches Collegium' in the open air for a wider public. He tried to join classical and modern thought, in a spirit of 'synkretismus' and point the way to a 'Via Nova'. His newly formed 'Societas Pythagorea' aimed at a revival of Pythagorean thoughts. The musical intervals, as a 'natural' division, which can be measured on a string, had strong affinities with the 'tetractys' as the leading division principle: 4 : 3 (the fourth), 3 : 2 (the fifth) and 2 : 1 (the octave). Weigel proposed a counting-system on base four, with inventive German names for the various figures, such as:

——————————— E R F F – 10

—————————————— Z W E R F F – 20

—————————————— D R E F F – 30

—————————————— S E C H T – 100

—————————————— S C H O C K – 1000

Vetrate di chiesa (Church Windows) (1926), four movements of which three are based on Tre Preludi sopra melodie gregoriane for piano
Italian composer Ottorino Respighi composed a piece named St. Gregory the Great (San Gregorio Magno) that features as the fourth and final part of his Church Windows (Vetrate di Chiesa) works, written in 1925.

The fourth moment is different

Catching the impulse from Hilary and confirmed in it by the success of Arian psalmody, Ambrose composed several original hymns as well, four of which still survive, along with music which may not have changed too much from the original melodies. Each of these hymns has eight four-line stanzas and is written in strict iambic dimeter (that is 2 x 2 iambs). Marked by dignified simplicity, they served as a fruitful model for later times.

In music theory, traditionally, a tetrachord (Greek: τετράχορδον, Latin: tetrachordum) is a series of four notes ("chords", from the Greek chordon, "string" or "note") separated by three smaller intervals that span the interval of a perfect fourth, a 4:3 frequency proportion. In modern usage a tetrachord is any four-note segment of a scale or tone row, not necessarily related to a particular system of tuning.

The term tetrachord derives from ancient Greek music theory, where it signified a segment of the Greater and Lesser Perfect Systems bounded by unmovable notes (Greek: ἑστῶτες); the notes between these were movable (Greek: κινούμενοι). It literally means four strings, originally in reference to harp-like instruments such as the lyre or the kithara, with the implicit understanding that the four strings produced adjacent (i.e. conjunct) notes.

Modern music theory makes use of the octave as the basic unit for determining tuning: ancient Greeks used the tetrachord for this purpose. Ancient Greek theorists recognized that the octave is a fundamental interval, but saw it as built from two tetrachords and a whole tone.

Persian music divides the interval of a fourth differently than the Greek. For example, Al-Farabi describes four genres of the division of the fourth:[20]

The first genre, corresponding to the Greek diatonic, is composed of a tone, a tone and a semitone, as G–A–B–C.
The second genre is composed of a tone, three quarter tones and three quarter tones, as G–A–Bhalf flat–C.
The third genre has a tone and a quarter, three quarter tones and a semitone, as G–Ahalf sharp–B–C.
The fourth genre, corresponding to the Greek chromatic, has a tone and a half, a semitone and a semitone, as G–A♯–B–C.
He continues with four other possible genres "dividing the tone in quarters, eighths, thirds, half thirds, quarter thirds, and combining them in diverse manners".[21] Later, he presents possible positions of the frets on the lute, producing ten intervals dividing the interval of a fourth between the strings:[22]

Ratio: 1/1 256/243 18/17 162/149 54/49 9/8 32/27 81/68 27/22 81/64 4/3
Note name: C C♯ C♯ Cthree quarter sharp Cthree quarter sharp D E♭ E♭ Ehalf flat E F
Cents: 0 90 99 145 168 204 294 303 355 408 498
If one considers that the interval of a fourth between the strings of the lute (Oud) corresponds to a tetrachord, and that there are two tetrachords and a major tone in an octave, this would create a 25-tone scale. A more inclusive description (where Ottoman, Persian and Arabic overlap), of the scale divisions is that of 24 quarter tones (see also Arabian maqam). It should be mentioned that Al-Farabi's, among other Islamic treatises, also contained additional division schemes as well as providing a gloss of the Greek system as Aristoxenian doctrines were often included

The tetrachord, a fundamentally incomplete fragment, is the basis of two compositional forms constructed upon repetition of that fragment: the complaint and the litany.

The descending tetrachord from tonic to dominant, typically in minor (e.g. A–G–F–E in A minor), had been used since the Renaissance to denote a lamentation. Well-known cases include the ostinato bass of Dido's aria When I am laid in earth in Henry Purcell's Dido and Aeneas, the Crucifixus in Johann Sebastian Bach's Mass in B minor, BWV 232, or the Qui tollis in Mozart's Mass in C minor, KV 427, etc.[24] This tetrachord, known as lamento ("complaint", "lamentation"), has been used until today. A variant form, the full chromatic descent (e.g. A–G♯–G–F♯–F–E in A minor), has been known as Passus duriusculus in the Baroque Figurenlehre.[full citation needed]

There exists a short, free musical form of the Romantic Era, called complaint or complainte (Fr.) or lament.[25] It is typically a set of harmonic variations in homophonic texture,

wherein the bass descends through some tetrachord, possibly that of the previous paragraph, but usually one suggesting a minor mode. This tetrachord, treated as a very short ground bass, is repeated again and again over the length of the composition.

Another musical form, of the same time period, is the litany or litanie (Fr.), or lytanie (OE spur).[26] It is also a set of harmonic variations in homophonic texture, but in contrast to the lament, here the tetrachordal fragment – ascending or descending and possibly reordered – is set in the upper voice in the manner of a chorale prelude. Because of the extreme brevity of the theme and number of repetitions required, and free of the binding of chord progression to tetrachord in the lament, the breadth of the harmonic excursion in litany is usually notable.

A tetratonic scale is a musical scale or mode with four notes per octave. This is in contrast to a heptatonic (seven-note) scale such as the major scale and minor scale, or a dodecatonic (chromatic 12-note) scale, both common in modern Western music. Tetratonic scales are not common in modern art music, and are generally associated with primitive music

A tetrad is a set of four notes in music theory. When these four notes form a tertian chord they are more specifically called a seventh chord, after the diatonic interval from the root of the chord to its fourth note (in root position close voicing). Four-note chords are often formed of intervals other than thirds in 20th- and 21st-century music, however, where they are more generally referred to as tetrads (see, for example, Hanson 1960,[page needed], Gamer 1967, 37 & 52, and Forte 1985, 48–51, 53). Allen Forte in his The Structure of Atonal Music never uses the term "tetrad", but occasionally employs the word tetrachord to mean any collection of four pitch classes (Forte 1973, 1, 18, 68, 70, 73, 87, 88, 21, 119, 123, 124, 125, 138, 143, 171, 174, and 223). In 20th-century music theory, such sets of four pitch classes are usually called "tetrachords" (Anon. 2001; Roeder 2001).

Dance Chapter

QMRIn parkourhe base technique to quadrupedal movement should have you assuming a position where:

> Your hands are placed shoulder width apart directly underneath your shoulders.

> Your back should be parallel to the ground

> Your shins parallel to the ground.

> Knee's off the ground, toes in contact with the ground.

> Next you should start to move forward!

> When moving you should move alternate arms and legs.

> When the right hand goes forward the left leg should move forward at the same time.

> When the left hand moves forward the right leg should move as well.

> Keep the knees at approximately the same distance from the ground at all times, keep the back parallel with the ground.

Try not to stretch your self out too far, crowd yourself by bringing the knees in too close to the body or stick your backside into the air. Avoid resting the knees on the ground, if you wish to rest then assume a crouched position or stick your backside in the air.
The reason for this particular movement pattern is that it forces the mind to coordinate the body in such a way that it increases your overall body control and awareness; it is also more balanced in a physiological sense.

PROGRESSION
Once you have a firm grounding in the base technique of quadrupedal start to experiment with making it more difficult. Varying the shape and alignment of the body when doing it. Move up and down stairs, on rails, sideways, backwards, get down really low to the ground, do it on your elbows and knees like soldiers under barbed wire, use your imagination. There are many different ways to move on all fours. This is an opportunity to do some of the things that initially should be avoided; sticking the backside in the air, stretching yourself out or crowding yourself. But you only want to do this once you have mastered the base technique.

Association football is the country's most popular and most televised franchised sport. It's important venues in Mexico City include the Azteca Stadium, home to the Mexico national football team and giants América, which can seat 105,000 fans, making it the biggest stadium in Latin America. The Olympic Stadium in Ciudad Universitaria is home to the football club giants Universidad Nacional, with a seating capacity of over 63,000. The

Estadio Azul, which seats 35,000 fans, is near the World Trade Center Mexico City in the Nochebuena neighborhood, and is home to the giants Cruz Azul. The three teams are based in Mexico City and play in the First Division; they are also part, with Guadalajara-based giants Club Deportivo Guadalajara, of Mexico's traditional "Big Four" (though recent years have tended to erode the teams' leading status at least in standings). The country hosted the FIFA World Cup in 1970 and 1986, and Azteca Stadium is the first stadium in World Cup history to host the final twice.

Literature Chapter

Mencius's mother is often held up as an exemplary female figure in Chinese culture. One of the most famous traditional Chinese four-character idioms is 孟母三遷 (mèng mǔ sān qiān; literal translation: "Mencius's mother, three moves")

The Four Beginnings (or Sprouts)[edit]
To show innate goodness, Mencius used the example of a child falling down a well.
Witnesses of this event immediately feel

"   alarm and distress, not to gain friendship with the child's parents, nor to seek the praise of their neighbors and friends, nor because they dislike the reputation [of lack of humanity if they did not rescue the child]...
The feeling of commiseration is the beginning of humanity; the feeling of shame and dislike is the beginning of righteousness; the feeling of deference and compliance is the beginning of propriety; and the feeling of right or wrong is the beginning of wisdom.

Men have these Four Beginnings just as they have their four limbs. Having these Four Beginnings, but saying that they cannot develop them is to destroy themselves.[14]

"

Human nature has an innate tendency towards goodness, but moral rightness cannot be instructed down to the last detail. This is why merely external controls always fail in improving society. True improvement results from educational cultivation in favorable environments. Likewise, bad environments tend to corrupt the human will. This, however, is not proof of innate evil because a clear thinking person would avoid causing harm to others. This position of Mencius puts him between Confucians such as Xunzi who thought people were innately bad, and Taoists who believed humans did not need cultivation, they just needed to accept their innate, natural, and effortless goodness. The four beginnings/sprouts could grow and develop, or they could fail. In this way Mencius synthesized integral parts of Taoism into Confucianism. Individual effort was needed to cultivate oneself, but one's natural tendencies were good to begin with. The object of education is the cultivation of benevolence, otherwise known as Ren.

The concept of original mind was first conceived by Mencius but was further developed by Lu. The original mind means that all human beings are born with innate moral knowledge and virtue. This original mind is fourfold as Mencius called them 'four roots of the heart':

Compassion - The root of humaneness (ren).
Shame - The root of righteousness (yi).
Respect - The root of propriety and ritual observance (li).
Knowledge of right and wrong - The root of wisdom (zhi).
[2]
Like real roots in nature these four roots must be nurtured first before flowers to bloom. So, in other words, these four roots of the heart are nothing but just tendencies of the mind. These four roots of the heart need proper nurturing and care to grow strong and healthy to manifest their true nature, which is moral virtue.

Lu believed that moral virtues are innately present in the human heart/mind and that, endowed by Heaven, humaneness and righteousness form the Original Mind of human beings. The original mind is shared by all human beings, both sages and common people, and its truth is ageless and eternal.[3]

According to Fischer (2012:398-402), Shizi's message is based upon four key ideas: self-cultivation, timeliness, humility, and objectivity. "With the single exception of self-cultivation (修身 or 治身), none of these ideals appear as technical terms in the text. Unlike the more usual advice to be good (仁), proper (義), or virtuous (德), even generalized terms for timeliness, humility, and objectivity are not used; rather, the advice must be inferred from the narrative."

Self-cultivation. The beginning of Chapter 1 recommends self-cultivation through broad learning.

To learn without tiring is that by which one cultivates the self; to teach without becoming bored is that by which one cultivates the people. (If) a cocoon is abandoned and not cultivated, then it will rot away and be discarded. (But if) a female artisan extracts the silk, then this can be used to make beautiful brocade, (fit even for) a great ruler to wear to court. (Your) person is (like) a cocoon: (if) it is abandoned and not cultivated, then (your capacity to) think and act will rot away. (tr. Fischer 2012:1221-1224)

One Shizi fragment (188, tr. Fischer 2012:3103), "Imitate the conch and oyster and close the door", is apparently related to self-cultivation through Daoist meditation

Timeliness. Acting in a timely manner is a recurring textual theme, frequently phrased in terms of shen "spirit; god, deity; spiritual, supernatural" translated as "spiritous". Chapter 2 says:

Misfortunes, at the beginning, are easily dispelled. As for those which cannot be dispelled, avoid them. (Because when) they are fully manifested, (you might) desire to dispel them

(but will) be unable, and (you might) desire to avoid them (but will) be unable. Those who deal with (problems) while (still) spiritous: their activities are few but (their) merit is great. ... (When) a house burns and someone saves it, then (we) know their virtue. (But) the elderly who daub chimney cracks to guard (against fire), thereby living their whole lives without the misfortune of stray flames (causing a fire): (their) virtue (remains) unknown! ... Misfortunes also have "chimneys," and (if) worthies were to travel the world to aid in "daubing" them, then the world would have no military suffering, yet none would know their virtue. Therefore it is said: "Sagely people rectify (things) when (they) are yet spiritous [i.e., inchoate]; stupid people contend with (things) after (they) have become obvious." (tr. Fischer 2012:1376-1390)

The following context clarifies the semantics of "spiritous" (tr. Fischer 2012:1407), "This 'spiritousness' is the beginning of the myriad things, the leading thread of the myriad affairs."

Humility. The Shizi teaches that rulers should have humility when seeking good ministers, as well as have eminence when effectively ruling. For instance, this dialogue between Confucius and his disciple Zixia,

"Kong Zi said: 'Zixia, do you know how rulers function as rulers?' Zixia replied: '(If) fish lose the water (they are in), then (they) will die, (but) if water loses the fish (in it, it) is still water.' Kong Zi said: 'You know it!'." An effective ruler needs both to practice humility and to pursue self-cultivation through study. (tr. Fischer 2012:2149-2151)

Objectivity. The text recommends that rulers objectively hire, fire, promote, and demote officials based upon the verifiable results of performance, rather than upon the traditional criteria of nepotism and hereditary rank.

The stupid and wise (decisions) of the many ministers are daily presented before (you): choose those whom are knowledgeable about affairs and order their plans (to be carried out). Those whom the many ministers promote are daily presented before (you): choose those whom are knowledgeable about people and order their promotions (to be carried out). The orderly and disorderly (effects) of the many ministers are daily presented before (you): choose those whom are competent in undertaking tasks and order their governance (to be carried out). ... (If you) use the worthy and employ the competent, (then you) will govern without exertion. (If you) rectify names and examine reality, (then you) will be revered without (having to) punish. (If you) arrive at the facts and see (them) purely, then truth and fallacy will not be obscured. (tr. Fischer 2012:1596-1618)

While many Masters texts discussed the importance of employing worthies and rectifying names, the Shizi exceptionally argued for detached objectivity through "examining reality" (覈實) and "seeing purely" (見素).

Mohism or Moism (Chinese: 墨家; pinyin: Mòjiā; literally: "School of Mo") was a Chinese philosophy developed by the followers of Mozi (also referred to as Mo Tzu (Master Mo), Latinized as Micius), 470 BC–c.391 BC. It evolved at about the same time as Confucianism, Taoism and Legalism, and was one of the four main philosophic schools during the Spring and Autumn Period (from 770 BC to 480 BC)[1] and the Warring States period (from 479 BC to 221 BC). During that time, Mohism (墨 Mo) was seen as a major rival to Confucianism (儒 Ru). The administrative thought of Mohism was absorbed by Chinese Legalism and its books were later merged into the Taoist canon, all but disappearing as an independent school of thought.

The four tones of Chinese poetry and dialectology (simplified Chinese: 四声; traditional Chinese: 四聲; pinyin: sìshēng) are four traditional tone classes[1] of Chinese words. They play an important role in Chinese poetry and in comparative studies of tonal development in the modern varieties of Chinese, both in traditional Chinese and in Western linguistics. They correspond to the phonology of Middle Chinese, and are named even or level (平 píng), rising (上 shǎng), departing (or going; 去 qù), and entering or checked (入 rù).[2] (The last three are collectively referred to as oblique 仄 (zè), an important concept in poetic tone patterns.) Due to historic splits and mergers, none of the modern varieties of Chinese have the exact four tones of Middle Chinese, but they are noted in rhyming dictionaries.

According to the usual modern analysis, Early Middle Chinese had three phonemic tones in most syllables, but no tonal distinctions in checked syllables ending in the stop consonants /p/, /t/, /k/. In most circumstances, every syllable had its own tone; hence a multisyllabic word typically had a tone assigned to each syllable. (In modern varieties, the situation is sometimes more complicated. Although each syllable typically still has its own underlying tone in most dialects, some syllables in the speech of some varieties may have their tone modified into other tones or neutralized entirely, by a process known as tone sandhi.)

Traditional Chinese dialectology reckons syllables ending in a stop consonant as possessing a fourth tone, known technically as a checked tone. This tone is known in traditional Chinese linguistics as the entering (入 rù) tone, a term commonly used in English as well. The other three tones were termed the level (or even) tone (平 píng), the rising (上 shǎng) tone, and the departing (or going) tone (去 qù).[3] The practice of setting up the entering tone as a separate class reflects the fact that the actual pitch contour of checked syllables was quite distinct from the pitch contour of any of the sonorant-final syllables. Indeed, implicit in the organisation of the classical rime tables is a different, but structurally equally valid, phonemic analysis, which takes all four tones as phonemic and demotes the difference between stop finals [p t k] and nasal finals [m n ŋ] to allophonic, with stops occurring in entering syllables and nasals elsewhere.[4]

From the perspective of modern historical linguistics, there is often value in treating the "entering tone" as a tone regardless of its phonemic status, because syllables possessing this "tone" typically develop differently from syllables possessing any of the other three

"tones". For clarity, these four "tones" are often referred to as tone classes, with each word belonging to one of the four tone classes. This reflects the fact that the lexical division of words into tone classes is based on tone, but not all tone classes necessarily have a distinct phonemic tone associated with them.

The four Early Middle Chinese (EMC) tones are nearly always presented in the order level (平 píng), rising (上 shǎng), departing (去 qù), entering (入 rù), and correspondingly numbered 1 2 3 4 in modern discussions. In Late Middle Chinese (LMC), each of the EMC tone classes split in two, depending on the nature of the initial consonant of the syllable in question. Discussions of LMC and the various modern varieties will often number these split tone classes from 1 through 8, keeping the same ordering as before. For example, LMC/modern tone classes 1 and 2 derive from EMC tone class 1; LMC/modern tone classes 3 and 4 derive from EMC tone class 2; etc. The odd-numbered tone classes 1 3 5 7 are termed dark (陰 yīn), whereas the even-numbered tone classes 2 4 6 8 are termed light (陽 yáng). Hence, for example, LMC/modern tone class 5 is known in Chinese as the yīn qù ("dark departing") tone, indicating that it is the yīn variant of the EMC qù tone (EMC tone 3). In order to clarify the relationship between the EMC and LMC tone classes, some authors notate the LMC tone classes as 1a 1b 2a 2b 3a 3b 4a 4b in place of 1 2 3 4 5 6 7 8, where a and b correspond directly to Chinese yīn and yáng, respectively.

In Middle Chinese, each of the tone names carries the tone it identifies: 平 level ₌biajŋ, 上 rising ᶜdzɨaŋ, 去 departing kʰɨəˀ, and 入 entering ȵipₐ.[5] However, in some modern Chinese varieties, this is no longer true. This loss of correspondence is most notable in the case of the entering tone—that is, syllables checked in a stop consonant [p̄], [t̄], or [k̄] in Middle Chinese—which has been lost from most dialects of Mandarin and redistributed among the other tones.

In modern Chinese varieties, tones that derive from the four Middle Chinese tone classes may be split into two registers, dark (陰 yīn) and light (陽 yáng) depending on the voicing of the onset. When all four tone-classes split, eight tones result: dark level (陰平), light level (陽平), dark rising (陰上), light rising (陽上), dark departing (陰去), light departing (陽去), dark entering (陰入), and light entering (陽入). Sometimes these have been termed upper and lower registers respectively, although this may be a misnomer, as in some dialects the dark registers may have the lower tone, and the light register the higher tone.

Chinese dictionaries mark the tones with diacritical marks at the four corners of a character:[6] ₌平 level, ᶜ上 rising, 去ˀ departing, and 入ₐ entering. When yin and yang tones are distinguished, these are the diacritics for the yin (dark) tones; the yang (light) tones are indicated by underscoring the diacritic: ₌平 light level, ᶜ上 light rising, 去ˀ light departing, 入ₐ light entering. These diacritics are also sometimes used when the phonetic tone is unknown, as in the reconstructions of Middle Chinese at the beginning of this section. However, in this article the circled numbers ①②③④⑤⑥⑦⑧ will be used, as in the table below, with the odd numbers ①③⑤⑦ indicating either 'dark' tones or tones that have not split, and even numbers ②④⑥⑧ indicating 'light' tones. Thus level tones are numbered

①②, the rising tones ③④, the departing tones ⑤⑥, and the entering (checked) tones
⑦⑧.

In Yue (incl. Cantonese) the dark entering tone further splits into high (高陰入) and low (低
陰入) registers, depending on the length of the nucleus, for a total of nine tone-classes.
Some dialects have a complex tone splittings, where the terms dark and light are
insufficient to cover the possibilities.

The number of tone-classes is based on Chinese tradition, and is as much register as it is
actual tone. The entering 'tones', for example, are only distinct because they are checked
by a final stop consonant, not because they have a tone contour that contrasts with
non-entering tones. In dialects such as Shanghainese, tone-classes are numbered even
though they are not phonemically distinct.

Origin[edit]
See also: Tonogenesis
The tonal aspect of Chinese dialects that is so important today is believed by linguists to
have been absent from Old Chinese, but rather came about in Early Middle Chinese after
the loss of various finals.[7] The four tones of Middle Chinese, 平 píng "level", 上 shǎng
"rising", 去 qù "departing", and 入 rù "entering", all evolved from different final losses from
Old Chinese. The 上, or "rising" tone, arose from the loss of glottal stops at the end of
words. Support for this can be seen in Buddhist transcriptions of the Han period, where the
"rising" tone was often used to note Sanskrit short vowels. This kind of evolution of the
missing glottal stop into a rising tone is similar to what happened in Vietnamese, another
tonal language.[8] The 去, or "departing" tone, arose from the loss of [-s] at the end of
words. When we look at Chinese loanwords into neighboring East Asian languages, we
find support for this theory. For example, in Korean, the word for "comb", pis, is a loan of
the Chinese word bì 篦, which means that when the word "comb" was borrowed into
Korean, there was still an [-s] sound at the end of the word that later disappeared from
Chinese and gave rise to a departing 去 tone. The 入, or "entering" tone consisted of
words ending in voiceless stops, [-p], [-t], and [-k]. Finally, the 平, or "level" tone, arose
from the lack of sound at the ends of words, where there was neither [-s], a glottal stop,
nor [-p], [-t], or [-k].[7]

Distribution in modern Chinese[edit]
Sample dialects and their realization of tone are given below.

Note: Different authors typically have different opinions as to the shapes of Chinese tones.
Tones typically have a slight purely phonetic drop at the end in citation form. It is therefore
likely that a tone with a drop of one unit (54, say, or 21) is not distinct from a level tone (a
55 or 22); on the other hand, what one author hears as a significant drop (53 or 31) may
be perceived by another as a smaller drop; therefore it is often ambiguous whether a
transcription like 54 or 21 is a level or contour tone. Similarly, a slight drop before a rise,
such as a 214, may be due to the speaker approaching the target tone, and may therefore
also not be distinctive (from 14).[9]

Zhiyi developed a curriculum of practice which was distilled into the 'Four Samadhis' (Chinese: 四種三昧;[7] pinyin: si zhong sanmei).[8] These Four Samadhi were expounded in Zhiyi's 'Mohe Zhiguan' (Chinese: 摩訶止観, Jpn.: Makashikan).[9] The Mohe Zhiguan is the magnum opus of Zhiyi's maturity and is held to be a "grand summary" of the Buddhist Tradition according to his experience and understanding at that time.[3] The text of the Mohe Zhiguan was refined from lectures Zhiyi gave in 594 in the capital city of Jinling and was the sum of his experience at Mount Tiantai c.585 and inquiry thus far.[10] Parsing the title, 'zhi' refers to "ch'an meditation and the concentrated and quiescent state attained thereby" (p. 4) and 'guan' refers to "contemplation and the wisdom attained thereby" (p. 4).[11] Swanson reports that Zhiyi held that there are two modes of zhi-guan: that of sitting in meditation 坐, and that of "responding to objects in accordance with conditions" 歷緣對境, which is further refined as abiding in the natural state of a calm and insightful mind under any and all activities and conditions.[11]

Swanson states that Zhiyi in the Mohe Zhiguan:

...is critical of an unbalanced emphasis on "meditation alone," portraying it as a possible "extreme" view and practice, and offering instead the binome zhi-guan 止觀 (calming/cessation and insight/contemplation, śamatha-vipaśyanā) as a more comprehensive term for Buddhist practice.[12]

The "Samadhi of One Practice" (Skt. Ekavyūha Samādhi; Ch. 一行三昧) which is also known as the "samadhi of oneness" or the "calmness in which one realizes that all dharmas are the same" (Wing-tsit Chan), is one of the Four Samadhi that both refine, mark the passage to, and qualify the state of perfect enlightenment expounded in the Mohe Zhiguan.[9] The term "Samadhi of Oneness" was subsequently used by Daoxin.[13]

The Four Samadhis:

'Samadhi of Constant Sitting' (Chinese: 常坐三昧) or 'One Round Samadhi' (Chinese: 一行三昧);
'Pratyutpanna-samadhi' (Chinese: 般舟三昧) or 'Prolonged Samadhi' or 'Samadhi of Constant Walking' (Chinese: 常行三昧);
'Samadhi of Half Walking and Half Sitting' (Chinese: 半行半坐三昧)
'Samadhi at Free Will' (Chinese: 隨自意三昧) or 'Samadhi of Non-walking and Non-sitting' (Chinese: 非行非坐三昧)

Applying this to the traditional two levels of discourse inherited from the Madhyamaka tradition (the conventional, regarding everyday thoughts, and the authentic, which transcends this by analyzing the metaphysical assumptions made in the conventional thinking), Jizang developed his sizhong erdi ("four levels of the two kinds of discourse"), which takes that distinction and adds metadistinctions on three more levels:

The assumption of existence is conventional, and the idea of nonexistence is authentic.
The commitment to a distinction between existence and nonexistence is now considered conventional, and the denial of this duality is authentic.
The distinction between committing to a distinction between existence and nonexistence is now conventional, and the denial of the difference between duality and non-duality is authentic.

All of these distinctions are deemed conventional, and the authentic discourse regards that any point of view cannot be said to be ultimately true, and is useful only so far as it is corrective in the above sense.[6]

Thus, the attachment to any viewpoint is considered detrimental, and is a cause of life's suffering. To repudiate the misleading finality of any viewpoint, on any level of discourse, is thus corrective and helps overcome destructive attachment.

Throughout the teaching, the Buddha repeats that successful memorization and elucidation of even a four-line extract of it is of incalculable merit, better than giving an entire world system filled with gifts and can bring about enlightenment. Section 26 also ends with a four-line gatha:

All conditioned phenomena

Are like a dream, an illusion, a bubble, a shadow,
Like dew or a flash of lightning;
Thus we shall perceive them."[22]

Paul Harrison's translation states:[20]

"A shooting star, a clouding of the sight, a lamp, An illusion, a drop of dew, a bubble, A dream, a lightning's flash, a thunder cloud— This is the way one should see the conditioned.

A number of ancient translations of the Laṅkāvatāra Sūtra were made from Sanskrit into the Chinese language beginning in 420 CE with a (now lost) translation by the Indian monk Dharmarakṣa.[12] Of these, only three are now extant. The first extant Chinese translation is Taishō Tripiṭaka 670 (楞伽阿跋多羅寶經). This is the earliest edition which was translated by Guṇabhadra in 443 CE, and divided into four fascicles.[13][14] This edition by Guṇabhadra is said to be the one handed down from the founder of Chan Buddhism, Bodhidharma, to the Second Patriarch, Dazu Huike, saying:

I have here the Laṅkāvatāra in four fascicles which I now pass to you. It contains the essential teaching concerning the mind-ground of the Tathagata, by means of which you lead all sentient beings to the truth of Buddhism.[12]

Zhang Zai (simplified Chinese: 张载; traditional Chinese: 張載; pinyin: Zhāng Zài; Wade–Giles: Chang Tsai) (1020–1077) was a Chinese Neo-Confucian moral philosopher and cosmologist. He is most known for laying out four ontological goals for intellectuals: To

build up the manifestations of Heaven and Earth's spirit, to build up good life for the populace, to develop past sages' endangered scholarship, and to open up eternal peace.

Liang asserted that a newspaper "is the mirror of society," "the sustenance of the present," and "the lamp for the future." He categorized newspapers into four types: the newspaper of an individual, of a party, of a nation, and of the world. Ultimately, his goal was to produce a "newspaper of the world", because as he proclaimed, "a newspaper of the world serves the interests of all humanity."

During the Qing Dynasty rebellion around 1888, Sun was in Hong Kong with a group of revolutionary thinkers who were nicknamed the Four Bandits at the Hong Kong College of Medicine for Chinese.[23] Sun, who had grown increasingly frustrated by the conservative Qing government and its refusal to adopt knowledge from the more technologically advanced Western nations, quit his medical practice in order to devote his time to transforming China.

The Four Bandits, Four Outlaws (四大寇) or the Four Desperados (清末四大寇) was a nickname given to a group of 4 young students in Hong Kong who were keen on discussing the current issues in China, and aspired to overthrow the corrupt Qing dynasty run by the Manchus. The four bandits were Yeung Hok-ling, Sun Yat-sen, Chan Siu-bak and Yau Lit.[1][2] "Yeung Yiu Kee" (楊耀記), Yeung's family shop located at 24 Gough Street in Hong Kong, used to be the meeting place of the bandits.[3] One of the Four Bandits, Sun Yat-sen later became the leader of China Revolutionary Alliance and the first Provisional President of the Republic of China. At the Dr Sun Yat-sen Museum statues were made of the exact picture taken.

The Yellow Court Classic ("Huang Ting Jing", 黄庭经), a Chinese Taoist Internal Alchemy (Neidan, 內丹) text, was received from the unknown source (according to a lore, as a Heavenly Scripture from the Highest Purity Realm) by Lady Wei Huacun, one of the founders of Highest Purity Tradition (Shangqing, 上清), in the 288 CE. The first reference to the text appears in the archives of the famous alchemist and collector of Taoist texts, Ge Hong (葛洪) in the 4th century CE.

The literal meaning of the "'Yellow Court'" refers to the central area of the Emperor's Castle where the Emperor and Ministers gather to try to understand the will of the Heavens and properly regulate the businesses of the Kingdom. The Yellow color indicates Earth element that is central in the Five Element (Wu Xing, 五行) arrangement. The four sides of the Castle Architecture symbolize the other four elements (Metal, Water, Wood and Fire), while the Heaven symbolizes the Spirit. The overall picture presents an allegory to a harmony between human body, spleen (the Earth element of Yellow color, central of the Five Organs) or the energy center of the body (Dantian, 丹田) and the Nature.

QMRLinguist Louis Hjelmslev developed a semiotic model which elaborated Saussure's two part signifier and signified into the double dual of the substance of content, the form of content, the substance of expression, and the form of expression. Contents are "formed matters", and expressions are "functional structures". Both are further separated into a substance and a form. The original signifier can be considered the form of expression, while the original signified can be considered the form of content. The two types of forms are like a net of warp and woof (why else a net?), dividing an undifferentiated unformed matter (Earth, purport) into two types of substances.

Deleuze and Guattari cast this net from Hjelmslev's use in language into universal application by way of examples in geology and biology: sedimentation/folding and molecular genetics. The two planes of content and expression are the First Articulation and Second Articulation, respectively, the first of which "chooses or deducts", and the second of which establishes "functional, compact, stable structures". In their geology example, the First Articulation is the process of sedimentation, and the Second, folding. Generally, the two substances deal with territorialization, deterrritorialization, and reterritorialization, and the two forms are concerned with coding and decoding (and recoding?).

Additionally, there is talk of the molar versus the molecular (as continuous/discrete or unity/multiplicity?) but the molar is not form, nor is the molecular substance, nor vice versa. The First Articulation moves from molecular substances to molar forms; the Second Articulation moves from molecular forms to molar substances. How confusing! What does it all mean? One could spend a lifetime lost in these fun-house reflections!

I propose that the four basic logical operators of Linear Logic are in correspondence to the double articulation of Hjelmslev's Net. Content is Conjunction, Expression is Disjunction, Substance is Additive, and Form is Multiplicative. Content and Expression is Substance or Form; Conjunction and Disjunction is Additive or Multiplicative.

QMRThere are a number of states of movement commonly associated with bipedalism.

Standing. Staying still on both legs. In most bipeds this is an active process, requiring constant adjustment of balance.
Walking. One foot in front of another, with at least one foot on the ground at any time.
Running. One foot in front of another, with periods where both feet are off the ground.
Jumping/hopping. Moving by a series of jumps with both feet moving together.

A selection of Chinese Walled Cities of the square type as given by Ronald G KNAPP *et al* (2000). **1.** The city of Loyang (or Luoyang) is situated in NW Henan Province on the Luo River. It was the capital of several ancient dynasties (Eastern Chou kingdom, 730 –

256 BC and Tang dynasty, 618 – 906 AD); **2.** The walled city of T'Ai-Ku, fifty kilometers south of T'ai-yuan (capital of the Shanxi Province); **3.** Chang-Te (An-yang) in the Henan Province, known from the excavations of the Yin Tombs (see fig. 390); **4.**Chung-Mou in Henan Province; **5.** Kaifeng (Pien), 32 km east of Chung-mou; **6.** Ta-T'ung, northern Shaanxi Province. The outer walls were made in 421 AD, with a length of sixteen kilometers.

A combination of the square and a round layout can be seen in the adjacent cities of Feng-yang-fu and Feng-yang-hsien. They are situated some hundred and five kilometers southeast of the city of Meng-ch'eng (Anhui Province) (fig. 573).

The four troubadours Bernart d'Auriac, Pere Salvatge, Roger Bernard III of Foix, and Peter III of Aragon composed a cycle of four sirventes in the summer of 1285 concerning the Aragonese Crusade.

The Mythological Cycle is a conventional division within Irish mythology, concerning a set of tales about the godlike peoples said to have arrived in five migratory invasions into Ireland and principally recounding the doings of the Tuatha Dé Danann.[1] It is one of the four major cycles of early Irish literary tradition, the others being the Ulster Cycle, the Fenian Cycle and the Cycles of the Kings.

Ceithri cathracha i r-robadar Tuatha De Danand ("[The four jewels of the Tuatha Dé Danann|The Four Jewels of the Tuatha Dé Danann

The Tuatha Dé Danann brought four magical treasures with them to Ireland, one apiece from their Four Cities:

The Dagda's Cauldron

The Spear of Lugh

The Stone of Fal

The Sword of Light of Nuada

The Tuatha Dé Danann were descended from Nemed, leader of a previous wave of inhabitants of Ireland. They came from four cities to the north of Ireland–Falias, Gorias, Murias and Finias–where they acquired their magical skills and attributes. According to Lebor Gabála Érenn, they came to Ireland "in dark clouds" and "landed on the mountains of [the] Conmaicne Rein in Connachta; and they brought a darkness over the sun for three days and three nights". According to a later version of the story, they arrived in ships on the coast of the Conmaicne Mara's territory (modern Connemara). They immediately burnt the ships "so that they should not think of retreating to them; and the smoke and the mist that came from the vessels filled the neighboring land and air. Therefore it was conceived that they had arrived in clouds of mist".

The Fenian Cycle (/ˈfiːniən/) or the Fiannaíocht (Irish: an Fhiannaíocht[1]), also referred to as the Ossianic Cycle /ˌɒʃiˈænɪk/ after its narrator Oisín, is a body of prose and verse centring on the exploits of the mythical hero Fionn mac Cumhaill and his warriors the Fianna. It is one of the four major cycles of Irish mythology along with the Mythological Cycle, the Ulster Cycle, and the Historical Cycle. Put in chronological order, the Fenian cycle is the third cycle, between the Ulster and Historical cycles. The cycle also contains stories about other famous Fianna members, including Diarmuid, Caílte, Oisín's son Oscar, and Fionn's enemy, Goll mac Morna.

The Rainbow (1915) was suppressed after an investigation into its alleged obscenity in 1915. Later, they were accused of spying and signalling to German submarines off the coast of Cornwall where they lived at Zennor. During this period he finished writing Women in Love in which he explored the destructive features of contemporary civilization through the evolving relationships of four major characters as they reflect upon the value of the arts, politics, economics, sexual experience, friendship and marriage. The novel is a bleak, bitter vision of humanity and proved impossible to publish in wartime conditions. Not published until 1920, it is now widely recognised as an English novel of great dramatic force and intellectual subtlety.

The Four Sons of Aymon (French: [Les] Quatre fils Aymon, Dutch: De Vier Heemskinderen, German: Die Vier Haimonskinder), sometimes also referred to as Renaud de Montauban (after its main character) is a medieval tale spun around the four sons of Duke Aymon: the knight Renaud de Montauban (also spelled Renaut, Renault, Italian: Rinaldo di Montalbano, Dutch: Reinout van Montalbaen), his brothers Guichard, Allard and Richardet, their magical horse Bayard (Italian: Bayardo), their adventures and revolt against the emperor Charlemagne. The story had a European success and echoes of the story are still found today in certain folklore traditions.

The four brothers—usually represented all together seated on their horse Bayard—have inspired many sculptures:

The oldest extant statue is found on a tomb in Portugal (dated to the first half of the 12th century).

A bronze statue (Ros Beyaert) depicting the four sons of Aymon (Reinout, Adelaert, Ritsaert and Writsaert) on their horse Beyaert (Bayard), was erected on the central approach avenue to the Exposition universelle et internationale (1913) held in Ghent (Belgium).[12] This statue was created by Aloïs de Beule and Domien Ingels.

One of the most famous representations was created by Olivier Strebelle for the Expo 58. Situated by the Meuse in the city of Namur, the horse appears to want to carry its riders across the river with a leap.

Another statue showing the four brothers standing beside their horse can be found at Bogny-sur-Meuse, created by Albert Poncin.

Dendermonde is home to several statues representing the brothers.

The statue Vier Heemskinderen (1976) by Gerard Adriaan Overeem was placed in the "Torenstraat" of Nijkerk

In Köln, since 1969, a bronze sculpture by Heinz Klein-Arendt depicts them.

Jacques Laudy illustrated a comic book version of the tale for the weekly Franco-Belgian comics magazine Tintin from 1946 to 1947 (including several covers).

Music and performing arts[edit]

Franz Joseph Glæser, a Czech/Danish composer, wrote a work called Die vier Haimonskinder (1809).

Les quatre fils Aymon (1844) is an opera by Michael William Balfe, written for the Opéra-Comique (also popular in German-speaking countries for many years as Die Vier Haimonskinder).

During the German occupation of Belgium during World War II, the story of Les Quatre Fils Aymon was made into a play that was banned by the German authorities, because of the sympathy it displayed for resisting authority; the play was performed underground and became quite popular.[11]

La Légende des fils Aymon, a stage work by Frédéric Kiesel, was created in 1967 in Habay-la-Neuve.

Les Quatre Fils Aymon is a ballet by Maurice Béjart and Janine Charrat from 1961.

The Waiste Land by TS Elliot is written in mostly four line stanzas

Peredur son of Efrawg is one of the three Welsh Romances associated with the Mabinogion. It tells a story roughly analogous to Chrétien de Troyes' unfinished romance Perceval, the Story of the Grail, but it contains many striking differences from that work, most notably the absence of the French poem's central object, the grail.

Versions of the text survive in four manuscripts from the 14th century: (1) the mid-14th century White Book of Rhydderch or Aberystwyth, NLW, MS Peniarth 4; (2) MS Peniarth 7, which dates from the beginning of the century, or earlier, and lacks the beginning of the text; (3) MS Peniarth 14, a fragment from the 2nd quarter of the 14th century, and (4) the Red Book of Hergest, from the end of the same century.[1] The texts found in the White Book of Rhydderch and Red Book of Hergest represent the longest version. They are generally in close agreement and most of their differences are concentrated in the first part of the text, before the love-story of Angharad.[2] MS Peniarth 7, the earliest manuscript, concludes with Peredur's 14-year sojourn with the Empress of Constantinople.[3] This has been taken to indicate that the adventures in the Fortress of Marvels, which follow this episode in the longest version, represent a later addition to the text.[4]

Four Adventures of Reinette and Mirabelle (French: Quatre aventures de Reinette et Mirabelle) is a 1987 French film directed by Éric Rohmer, starring Joëlle Miquel, Jessica Forde and Philippe Laudenbach.

The film consists of four episodes in the relationship of two young women: Reinette, a country girl, and Mirabelle, a Parisian. The first episode is entitled The Blue Hour and recounts their meeting. The second centers on a café and a difficult waiter. In the third, the girls discuss their differing views on society's margins: beggars, thieves and swindlers. In the fourth episode, Reinette and Mirabelle succeed in selling one of Reinette's paintings to an art dealer while Reinette pretends to be mute and Mirabelle, acting as if she does not know Reinette, does all the talking.

The Little Iliad (Greek: Ἰλιὰς μικρά, Ilias mikra; Latin: Ilias parva) is a lost epic of ancient Greek literature. It was one of the Epic Cycle, that is, the "Trojan" cycle, which told the entire history of the Trojan War in epic verse. The story of the Little Iliad comes chronologically after that of the Aethiopis, and is followed by that of the Iliou persis ("Sack of Troy"). The Little Iliad was variously attributed by ancient writers to Lesches of Pyrrha, Cinaethon of Sparta, Diodorus of Erythrae, Thestorides of Phocaea, or Homer himself (see Cyclic poets). The poem comprised four books of verse in dactylic hexameter, the heroic meter.

The Telemachy (from Greek Τηλεμάχεια) is a term traditionally applied to the first four books of Homer's epic poem the Odyssey. They are named so because – just as the Odyssey tells the story of Odysseus – they tell the story of Odysseus' son Telemachus as he journeys from home for the first time in search of news about his missing father.

Telemachus (/təˈlɛməkəs/ tə-lem-ə-kəs; Greek: Τηλέμαχος, Tēlemakhos, literally "far-fighter") is a figure in Greek mythology, the son of Odysseus and Penelope, and a central character in Homer's Odyssey. The first four books of the Odyssey focus on Telemachus' journeys in search of news about his father, who has yet to return home from the Trojan War, and are traditionally given the title the Telemachy.[1]

Telemachus' name in Greek means "far from battle", perhaps reflecting his absence from the Trojan War. Homer also calls Telemachus by the patronymic epithet "Odysseus' son".

In the Odyssey by Homer, under the instructions of Athena, Telemachus spends the first four books trying to gain knowledge of his father, Odysseus, who left for Troy when

Telemachus was still an infant. At the outset of Telemachus' journey, Odysseus has been absent from his home at Ithaca for twenty years due to the Trojan War and the intervention of Poseidon. During his absence, Odysseus' house has been occupied by hordes of suitors seeking the hand of Penelope.[3] Telemachus first visits Nestor and is well received by the old man who regales him with stories of his father's glory. Telemachus then departs with Nestor's son Peisistratus,[4] who accompanies him to the halls of Menelaus and his wife Helen. Whilst there, Telemachus is again treated as an honored guest as Menelaus and Helen tell complementary, yet contradictory stories of his father's exploits at Troy.[5]

The Odyssey returns focus to Telemachus upon his father's return to Ithaca in Book XV. He visits Eumaeus, the swineherd, who happens to be hosting a disguised Odysseus. After Odysseus reveals himself to Telemachus due to Athena's advice, the two men plan the downfall of the suitors. Telemachus then returns to the palace to keep an eye on the suitors and to await his father as the beggar.[6]

When Penelope challenges the suitors to string Odysseus' bow and shoot an arrow through the handle-holes of twelve axeheads, Telemachus is the first to attempt the task. He would have completed the task, nearly stringing the bow on his fourth attempt; however, Odysseus subtly stops him before he can finish his attempt. Following the failure of the suitors at this task, Odysseus reveals himself, and he and Telemachus bring swift and bloody death to the suitors.

David Buckingham has come up with four key concepts that "provide a theoretical framework which can be applied to the whole range of contemporary media and to 'older' media as well: Production, Language, Representation, and Audience."[1] These concepts are defined by David Buckingham as follows:

Production[edit]
Production involves the recognition that media texts are consciously made.[1] Some media texts are made by individuals working alone, just for themselves or their family and friends, but most are produced and distributed by groups of people often for commercial profit. This means recognizing the economic interests that are at stake in media production, and the ways in which profits are generated. More confident students in media education should be able to debate the implications of these developments in terms of national and cultural identities, and in terms of the range of social groups that are able to gain access to media.[1]

Studying media production means looking at:

Technologies: what technologies are used to produce and distribute media texts?
Professional practices: Who makes media texts?
The industry: Who owns the companies that buy and sell media and how do they make a profit?

Connections between media: How do companies sell the same products across different media?

Regulation: Who controls the production and distribution of media, and are there laws about this?

Circulation and distribution: How do texts reach their audiences?

Access and participation: Whose voices are heard in the media and whose are excluded?[1]

Language[edit]

Every medium has its own combination of languages that it uses to communicate meaning. For example, television uses verbal and written language as well as the languages of moving images and sound. Particular kinds of music or camera angles may be used to encourage certain emotions. When it comes to verbal language, making meaningful statements in media languages involves "paradigmatic choices" and "syntagmatic combinations".[1] By analyzing these languages, one can come to a better understanding of how meanings are created.[1]

Studying media languages means looking at:

Meanings: How does media use different forms of language to convey ideas or meanings?

Conventions: How do these uses of languages become familiar and generally accepted?

Codes: How are the grammatical 'rules' of media established and what happens when they are broken?

Genres: How do these conventions and codes operate in different types of media contexts?

Choices: What are the effects of choosing certain forms of language, such as a certain type of camera shot?

Combinations: How is meaning conveyed through the combination or sequencing of images, sounds, or words?

Technologies: How do technologies affect the meanings that can be created?[1]

Representation[edit]

The notion of 'representation' is one of the first established principles of media education. The media offers viewers a facilitated outlook of the world and a re-representation of reality. Media production involves selecting and combining incidents, making events into stories, and creating characters. Media representations allow viewers to see the world in some particular ways and not others. Audiences also compare media with their own experiences and make judgements about how realistic they are. Media representations can be seen as real in some ways but not in others: viewers may understand that what they are seeing is only imaginary and yet they still know it can explain reality.[1]

Studying media representations means looking at:

Realism: Is this text intended to be realistic? Why do some texts seem more realistic than others?

Telling the truth: How do media claim to tell the truth about the world?

Presence and absence: What is included and excluded from the media world?

Bias and objectivity: Do media texts support particular views about the world? Do they use moral or political values?

Stereotyping: How do media represent particular social groups? Are those representations accurate?

Interpretations: Why do audiences accept some media representations as true, or reject others as false?

Influences: Do media representations affect our views of particular social groups or issues?[1]

Audience[edit]

Studying audiences means looking at how demographic audiences are targeted and measured, and how media are circulated and distributed throughout. It means looking at different ways in which individuals use, interpret, and respond to media. The media increasingly have had to compete for people's attention and interest because research has shown that audiences are now much more sophisticated and diverse than has been suggested in the past decades. Debating views about audiences and attempting to understand and reflect on our own and others' use of media is therefore a crucial element of media education.[1]

Studying media audiences means looking at:

Targeting: How are media aimed at particular audiences?

Address: How do the media speak to audiences?

Circulation: How do media reach audiences?

Uses: How do audiences use media in their daily lives? What are their habits and patterns of use?

Making sense: How do audiences interpret media? What meanings do they make?

Pleasures: What pleasures do audiences gain from media?

Social differences: What is the role of gender. social class, age, and ethnic background in audience behavior?[1]

To elaborate on the concepts presented by David Buckingham, Henry Jenkins discusses the emergence of a participatory culture, in which our students are actively engaged.[7] With the emergence of this participatory culture, schools must focus on what Jenkins calls the "new media literacies", that is a set of cultural competencies and social skills that young people need in the new media landscape.[7] In the new media literacies we see a shift in focus from individual expression to community involvement, involving the development of social skills through collaboration and networking.[7] Jenkins lists the following skills, as essential for students in this new media landscape:

Play: The capacity to experiment with the surroundings as a form of problem solving.

Performance: The ability to adopt alternative identities for the purpose of improvisation and discovery.

Simulation: The ability to interpret and construct dynamic models of real world processes.

Appropriation: The ability to meaningfully sample and remix media content.

Multitasking: The ability to scan the environment and shift focus onto salient details.

Distributed Cognition: The ability to interact meaningfully with tools that expand mental capacities.

Collective Intelligence: The ability to pool knowledge and compare notes with others toward a common goal.

Judgement: The ability to evaluate the reliability and credibility of different information sources.

Transmedia Navigation: The ability to follow the flow of stories and information across multiple modalities.

Networking: The ability to search for, synthesize, and disseminate information.

Negotiation: The ability to travel across diverse communities, discerning and respecting multiple perspectives, and grasping and following alternative norms.[7]

Classical Chinese poetics identifies four tones: the level tone, rising tone, departing tone, and entering tone.[41]

The following table shows the four main tones of Standard Chinese, together with the neutral (or fifth) tone.

Tone number	1	2	3	4	5
Description	high	rising	low (dipping)	falling	neutral
Pinyin diacritic	ā	á	ǎ	à	a
Tone letter	˥ (55)	˧˥ (35)	˨˩, ˩˩, ˩˧, ˨˩˦ (21, 11, 13, 214) ˥˩ (51)	-	
IPA diacritic	/á/	/ǎ/ [ā]	/à/[27] [à, ā, ā, ā]	/â/	-
Tone name	yīn píng	yáng píng	shǎng	qù	qīng shēng

The four main tones of Standard Mandarin, pronounced with the syllable ma.
MENU0:00
The Chinese names of the main four tones are respectively 阴平 [陰平] yīn píng ("dark level"), 阳平 [陽平] yáng píng ("light level"), 上 shǎng[28][29] ("rising"), and 去 qù ("departing"). As descriptions, they apply rather to the predecessor Middle Chinese tones than to the modern tones; see below. The modern Standard Chinese tones are produced as follows:

First tone, or high-level tone, is a steady high sound, produced as if it were being sung instead of spoken. (In a few syllables the quality of the vowel is changed when it carries first tone; see the vowel table, above.)

Second tone, or rising tone, or more specifically high-rising, is a sound that rises from middle to high pitch (like in the English "What?!"). In a three-syllable expression, if the first syllable has first or second tone and the final syllable is not weak, then a second tone on the middle syllable may change to first tone.[30]

Third tone, low or dipping tone, descends from mid-low to low; between other tones it may simply be low. This tone is often demonstrated as having a rise in pitch after the low fall; however, when a third-tone syllable is not said in isolation, this rise is normally heard only

if it appears at the end of a sentence or before a pause, and then usually only on stressed monosyllables.[31] The third tone without the rise is sometimes called half third tone. Third tone syllables that include the rise are significantly longer than other syllables. For further variation in syllables carrying this tone, see Third tone sandhi, below. Unlike the other tones, third tone is pronounced with breathiness or murmur.[32]

Fourth tone, falling tone, or high-falling, features a sharp fall from high to low (as is heard in curt commands in English, such as "Stop!"). When followed by another fourth-tone syllable, the fall may be only from high to mid-level.[33]

For the neutral tone or fifth tone, see the following section.

Most romanization systems, including pinyin, represent the tones as diacritics on the vowels (as does zhuyin), although some, like Wade–Giles, use superscript numbers at the end of each syllable. The tone marks and numbers are rarely used outside of language textbooks: in particular, they are usually absent in public signs, company logos, and so forth. Gwoyeu Romatzyh is a rare example of a system where tones are represented using normal letters of the alphabet (although without a one-to-one correspondence).

The first square is always inspring. The second is rising. The second square is still good. The third square is dipping. The third square is destruction. The fourth square is falling. The fourth square is death. The fifth is neutral. the fifth is always ultra transcendent.

Pitch-accented languages may have a more complex accentual system than stress-accented languages. In some cases, they have more than a binary distinction but are less complex than fully tonal languages such as Chinese or Yoruba, which assign a separate tone to each syllable. For example, in Japanese short nouns (1-4 moras) may have a drop in pitch after any one mora but more frequently on none at all so in disyllabic words followed by a particle, there are three-way minimal contrasts such as ka⁺ki wa "oyster" vs. kaki⁺ wa "fence" vs. kaki wa "persimmon". Ancient Greek words had high pitch on one of the last four vocalic morae in a word, and since a vowel may have one or two morae, a syllable can be accented in one of four ways (high pitch, rising pitch, falling pitch, none). Also, the mapping between phonemic and phonetic tone may be more involved than the simple one-to-one mapping between stress and dynamic intensity in stress-accented languages.

Neoštokavian idiom used for the basis of standard Bosnian, Croatian and Serbian distinguishes four types of pitch accents: short falling ⟨ȍ⟩, short rising ⟨ò⟩, long falling ⟨ô⟩ and long rising ⟨ó⟩. The accent is said to be relatively free as it can be manifested in any syllable but the last one. The long accents are realized by pitch change within the long vowel; the short ones are realized by the pitch difference from the subsequent syllable.[13] Accent alternations are very frequent in inflectional paradigms, both by quality and placement in the word (the so-called "mobile paradigms", which were present in the PIE itself but in Proto-Balto-Slavic have become much more widespread). Different inflected forms of the same lexeme can exhibit all four accents: lònac 'pot' (nominative sg.), lónca (genitive sg.), lônci (nominative pl.), lȍnācā (genitive pl.).

Firstly, while the primary indication of accent is pitch (tone), there is only one or a few tonic syllables or morae in a word, or at least in simple words, the position of which determines the tonal pattern of the whole word.[nb 4] Pitch accent may also be restricted in distribution, being found for example only on one of the last two syllables. This is unlike the situation in typical tone languages, where the tone of each syllable is independent of the other syllables in the word. For example, comparing two-syllable words like [aba] in a pitch-accented language and in a tonal language, both of which make only a binary distinction, the tonal language has four possible patterns:

Tone:

low-low [àbà],
high-high [ábá],
high-low [ábà],
low-high [àbá].
The pitch-accent language, on the other hand, has only three possibilities:

Pitch accent:

accented on the first syllable, [ába],
accented on the second syllable, [abá], or
no accent [aba].
The combination *[ábá] does not occur.

With longer words, the distinction becomes more apparent: eight distinct tonal trisyllables [ábábá, ábábà, ábàbá, àbábá, ábàbà, àbábà, àbàbá, àbàbà], vs. four distinct pitch-accented trisyllables [ábaba, abába, ababá, ababa].
In poetry, a tetrameter is a line of four metrical feet. The particular foot can vary, as follows:

Anapestic tetrameter:
"And the sheen of their spears was like stars on the sea" (Lord Byron, "The Destruction of Sennacherib")
"Twas the night before Christmas when all through the house" ("A Visit from St. Nicholas")
Iambic tetrameter:
"Because I could not stop for Death" (Emily Dickinson, eponymous lyric)
Trochaic tetrameter:
"Peter, Peter, pumpkin-eater" (English nursery rhyme)
Dactylic tetrameter:
Picture your self in a boat on a river with [...] (The Beatles, "Lucy in the Sky with Diamonds")
Spondaic tetrameter:
Long sounds move slow
Pyrrhic tetrameter (with spondees ["white breast" and "dim sea"]):
And the white breast of the dim sea
Amphibracic tetrameter:
And, speaking of birds, there's the Russian Palooski, / Whose headski is redski and belly is blueski. (Dr. Seuss)
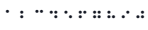 The Arabic letters generally (as six of the primary letters can have only two variants) have
  four forms, according to their place in the word. The same goes with the Mandaic ones,
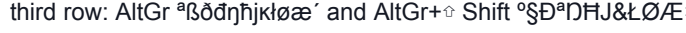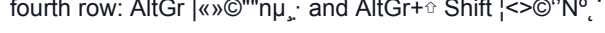 except for three of the 22 letters, which have only one form.

The Arabic alphabet is always cursive and letters vary in shape depending on their position within a word. Letters can exhibit up to four distinct forms corresponding to an initial, medial (middle), final, or isolated position (IMFI). While some letters show considerable variations, others remain almost identical across all four positions. Generally, letters in the same word are linked together on both sides by short horizontal lines, but six letters (و ز ذ د ا) can only be linked to their preceding letter. For example, أرارات (Ararat) has only isolated forms because each letter cannot be connected to its following one. In addition, some letter combinations are written as ligatures (special shapes), notably lām-alif.[3]

Arabic letters have dots, the most four

The first ten letters of the alphabet, a–j, use the upper four dot positions: ˙ ˙ ¨ ˙˙ ⁛ ¨˙ ˙¨ (black dots in the table below). These stand for the ten digits 1–9 and 0 in a system parallel to Hebrew gematria and Greek isopsephy. (Though the dots are assigned in no obvious order, the cells with the fewest dots are assigned to the first three letters (and lowest digits), abc = 123 (˙ ˙ ¨), and to the three vowels in this part of the alphabet, aei (˙ ˙˙), whereas the even digits, 4, 6, 8, 0 (⁛ ⁙ ⁛ ¨), are corners/right angles.)

These dots reflect the quadrant four

QWERTY is the most common modern-day keyboard layout for Latin script. The name comes from reading the first six keys appearing on the top left letter row of the keyboard (Q, W, E, R, T, and Y) from left to right. The QWERTY design is based on a layout created for the Sholes and Glidden typewriter and sold to Remington in 1873. It November 1868 he changed the arrangement of the latter half of the alphabet, O to Z, right-to-left.[9] In April 1870 he arrived at a four-row, upper case keyboard approaching the modern QWERTY standard, moving six vowel letters, A, E, I, O, U, and Y, to the upper row as followsOn Linux systems, the Swedish keyboard may also give access to additional characters as follows:

first row: AltGr ¶¡@£$€¥{[]}\± and AltGr+⇧ Shift ¾¹²³¼¢⅝÷«»°¿¬
second row: AltGr @ł€®þ←↓→œþ"~ and AltGr+⇧ Shift ΩŁ¢®Þ¥↑ıŒÞ°˘
third row: AltGr ªßðđŋħjkłøæ´ and AltGr+⇧ Shift °§ÐªŊĦJ&ŁØÆ×
fourth row: AltGr |«»©""nµ¸· and AltGr+⇧ Shift ¦<>©''N°¸¨
Several of these characters function as dead keys.

QWERTY, the keyboard is based off of four rows

Euphony is used for effects which are pleasant, rhythmical and harmonious.[1][2][3] An example of euphony is the poem Some Sweet Day.

Some day Love shall claim his own
Some day Right ascend his throne,
Some day hidden Truth be known;
Some day—some sweet day.

— Lewis J. Bates, the poem Some Sweet Day
The famous poem has four lines

Classical Chinese poetic metric may be divided into fixed and variable length line types, although the actual scansion of the metre is complicated by various factors, including linguistic changes and variations encountered in dealing with a tradition extending over a geographically extensive regional area for a continuous time period of over some two-and-a-half millennia. Beginning with the earlier recorded forms: the Classic of Poetry tends toward couplets of four-character lines, grouped in rhymed quatrains; and, the Chuci follows this to some extent, but moves toward variations in line length.

Heavenly Questions" shares the prosodic features typical of Shijing: four character lines, a predominant tendency toward rhyming quatrains, and occasional alternation by using weak (unstressed) line final syllables in alternate lines.

The "Great Summons" and the "Summons for the Soul" poetic form (the other kind of "7-plus") varies from this pattern by uniformly using a standard nonce word refrain throughout a given piece, and that alternating stressed and unstressed syllable finals to the lines has become the standard verse form. The nonce word used as a single-syllable refrain in various ancient Chinese classical poems varies: (according to modern pronunciation), "Summons for the Soul" uses xie and the "Great Summons" uses zhi (and the "Nine Pieces" (Jiu Ge) uses xi). Any one of these unstressed nonce words seem to find a similar role in the prosody. This two line combo:

[first line:] tum tum tum tum; [second line:] tum tum tum ti
tends to produce the effect of one, single seven character line with a caesura between the first four syllables and the concluding three stressed syllables, with the addition of a weak nonsense refrain syllable final

tum tum tum tum [caesura] tum tum tum ti.[11]
Han-style lyrics[edit]
Within the individual songs or poems of the "Nine Pieces", lines generally consist of various numbers of syllables, separated by the nonce word. In this case, the nonce word of choice is 兮 (pinyin: xī, Old Chinese: *gˤe).[12] This, as opposed to the four-character verse of the Shi Jing, adds a different rhythmic latitude of expression.

The Four Journeys (Chinese: 四游记; pinyin: Sì Yóujì) is a collection of four shenmo novels consisting of: Journey to the North, Journey to the South, Journey to the East, and Journey to the West.

The Journey to the North (composed during the Ming dynasty) is on the apotheosis of True-Warrior (Chen-wu, Zhen-wu) as Mysterious-Heaven Supreme-Emperor (Hsuan-t'ien Shang-ti, Xuan-tian Shang-di).
The Journey to the South was composed by Yu Xiangdou.
The Journey to the East was composed by Wu Yuan-tai (fl. 1522-1526).
The Journey to the West is composed by Yang Zhihe, and not to confuse it with Wu Cheng'en's epic novel Journey to the West.

Cangjie (Tsang-chieh; Chinese: 倉頡; pinyin: Cāngjié; Wade–Giles: Ts'ang1-chieh2) is a legendary figure in ancient China (c. 2650 BC), claimed to be an official historian of the Yellow Emperor and the inventor of Chinese characters.[1] Legend has it that he had four eyes and four pupils, and that when he invented the characters, the deities and ghosts cried and the sky rained millet. He is considered a legendary rather than historical figure, or at least, not considered to be sole inventor of Chinese characters. The Cangjie input method, a Chinese character input method, is named after him. A rock on Mars, visited by the Mars rover Spirit, was named after him by the rover team.[2]

He had four eyes

The Four Fiends (四凶, Sì xiōng):
Hundun: chaos
Taotie: gluttony
Táowù (梼杌): ignorance; provided confusion and apathy and made mortals free of the curiosity and reason needed to reach enlightenment
Qióngqí (窮奇): deviousness

The number of metrical systems in English is not agreed upon.[4] The four major types[5] are: accentual verse, accentual-syllabic verse, syllabic verse and quantitative verse.[6] The alliterative verse of Old English could also be added to this list, or included as a special type of accentual verse. Accentual verse focuses on the number of stresses in a line, while ignoring the number of offbeats and syllables; accentual-syllabic verse focuses on regulating both the number of stresses and the total number of syllables in a line; syllabic verse only counts the number of syllables in a line; quantitative verse regulates the patterns of long and short syllables (this sort of verse is often considered alien to English).[7] It is to be noted, however, that the use of foreign metres in English is all but exceptional

In the Ottoman Turkish language, the structures of the poetic foot (تفعل tef'ile) and of poetic metre (وزن vezin) were indirectly borrowed from the Arabic poetic tradition through the medium of the Persian language.

Ottoman poetry, also known as Dîvân poetry, was generally written in quantitative, mora-timed metre. The moras, or syllables, are divided into three basic types:

Open, or light, syllables (açık hece) consist of either a short vowel alone, or a consonant followed by a short vowel
Examples: a-dam ("man"); zir-ve ("summit, peak")
Closed, or heavy, syllables (kapalı hece) consist of either a long vowel alone, a consonant followed by a long vowel, or a short vowel followed by a consonant
Examples: Â-dem ("Adam"); kâ-fir ("non-Muslim"); at ("horse")
Lengthened, or superheavy, syllables (meddli hece) count as one closed plus one open syllable and consist of a vowel followed by a consonant cluster, or a long vowel followed by a consonant
Examples: kürk ("fur"); âb ("water")
In writing out a poem's poetic metre, open syllables are symbolized by "." and closed syllables are symbolized by "–". From the different syllable types, a total of sixteen different types of poetic foot—the majority of which are either three or four syllables in length—are constructed, which are named and scanned as follows:

fa' (–)   fe ul (. –)fa' lün (– –)   fe i lün (. . –)
fâ i lün (– . –)   fe û lün (. – –)   mef' û lü (– – .)   fe i lâ tün (. . – –)
fâ i lâ tün (– . – –)fâ i lâ tü (– . – .)   me fâ i lün (. – . –)   me fâ' î lün (. – – –)
me fâ î lü (. – – .) müf te i lün (– . . –)   müs tef i lün (– – . –) mü te fâ i lün (. . – . –)
These individual poetic feet are then combined in a number of different ways, most often with four feet per line, so as to give the poetic metre for a line of verse. Some of the most commonly used metres are the following:

me fâ' î lün / me fâ' î lün / me fâ' î lün / me fâ' î lün
. – – – / . – – – / . – – – / . – – –
Ezelden şāh-ı 'aşḳuñ bende-i fermānıyüz cānā
Maḥabbet mülkinüñ sulṭān-ı 'ālī-şānıyüz cānā   Oh beloved, since the origin we have been the slaves of the shah of love
Oh beloved, we are the famed sultan of the heart's domain[13]
—Bâkî (1526–1600)
me fâ i lün / fe i lâ tün / me fâ i lün / fe i lün
. – . – / . . – – / . – . – / . . –
Ḥaṭâ' o nerkis-i şehlādadır sözümde degil
Egerçi her süḫanim bī-bedel beġendiremem Though I may fail to please with my matchless verse
The fault lies in those languid eyes and not my words
—Şeyh Gâlib (1757–1799)
fâ i lâ tün / fâ i lâ tün / fâ i lâ tün / fâ i lün

‒ . ‒ ‒ / ‒ . ‒ ‒ / ‒ . ‒ ‒ / ‒ . ‒

Bir şeker ḥand ile bezm-i şevḳa cām ettiñ beni

Nīm ṣun peymāneyi sāḳī tamām ettiñ beni   At the gathering of desire you made me a
wine-cup with your sugar smile

Oh saki, give me only half a cup of wine, you've made me drunk enough[14]

—Nedîm (1681?–1730)

fe i lâ tün / fe i lâ tün / fe i lâ tün / fe i lün

. . ‒ ‒ / . . ‒ ‒ / . . ‒ ‒ / . . ‒

Men ne ḥācet ki ḳılam derd-i dilüm yāra 'ayān

Ḳamu derd-i dilümi yār bilübdür bilübem   What use in revealing my sickness of heart to
my love

I know my love knows the whole of my sickness of heart

—Fuzûlî (1483?–1556)

mef' û lü / me fâ î lü / me fâ î lü / fâ û lün

‒ ‒ . / . ‒ ‒ . / . ‒ ‒ . / ‒ ‒ .

Şevḳuz ki dem-i bülbül-i şeydāda nihānuz

Ḥūnuz ki dil-i ġonçe-i ḥamrāda nihānuz   We are desire hidden in the love-crazed call
of the nightingale

We are blood hidden in the crimson heart of the unbloomed rose[15]

—Neşâtî (?–1674)

Below are listed the names given to the poetic feet by classical metrics. The feet are classified first by the number of syllables in the foot (disyllables have two, trisyllables three, and tetrasyllables four) and secondarily by the pattern of vowel lengths (in classical languages) or syllable stresses (in English poetry) which they comprise.

The following lists describe the feet in terms of vowel length (as in classical languages). Translated into syllable stresses (as in English poetry), 'long' becomes 'stressed' ('accented'), and 'short' becomes 'unstressed' ('unaccented'). For example, an iamb, which is short-long in classical meter, becomes unstressed-stressed, as in the English word "betray".[2]

Disyllables[edit]

Macron and breve notation: ¯ = stressed/long syllable, ˘ = unstressed/short syllable

˘	˘		pyrrhus, dibrach
˘	¯		iamb (or iambus or jambus)
¯	˘		trochee, choree (or choreus)
¯	¯		spondee

Trisyllables[edit]

˘	˘	˘	tribrach
¯	˘	˘	dactyl
˘	¯	˘	amphibrach
˘	˘	¯	anapest, antidactylus

˘	—	—		bacchius
—	—	˘		antibacchius
—	˘	—		cretic, amphimacer
—	—	—		molossus

Tetrasyllables[edit]

˘	˘	˘	˘	tetrabrach, proceleusmatic
—	˘	˘	˘	primus paeon
˘	—	˘	˘	secundus paeon
˘	˘	—	˘	tertius paeon
˘	˘	˘	—	quartus paeon
—	—	˘	˘	major ionic, double trochee
˘	˘	—	—	minor ionic, double iamb
—	˘	—	˘	ditrochee
˘	—	˘	—	diiamb
—	˘	˘	—	choriamb
˘	—	—	˘	antispast
˘	—	—	—	first epitrite
—	˘	—	—	second epitrite
—	—	˘	—	third epitrite
—	—	—	˘	fourth epitrite
—	—	—	—	dispondee

a choriamb, a four syllable metric foot with a stressed syllable followed by two unstressed syllables and closing with a stressed syllable. The choriamb is derived from some ancient Greek and Latin poetry

Sonnet

Shakespeare

Among the most common forms of poetry through the ages is the sonnet, which by the 13th century was a poem of fourteen lines following a set rhyme scheme and logical structure. By the 14th century, the form further crystallized under the pen of Petrarch, whose sonnets were later translated in the 16th century by Sir Thomas Wyatt, who is credited with introducing the sonnet form into English literature.[99] A sonnet's first four lines typically introduce the topic, the second elaborates and the third posits a problem - the couplet usually, but not always, includes a twist, or an afterthought. A sonnet usually follows an a-b-a-b-c-d-c-d-e-f-e-f-gg rhyme pattern. The sonnet's conventions have changed over its history, and so there are several different sonnet forms. Traditionally, in sonnets English poets use iambic pentameter, the Spenserian and Shakespearean sonnets being especially notable.[100] In the Romance languages, the hendecasyllable and Alexandrine are the most widely used meters, though the Petrarchan sonnet has been used in Italy since the 14th century.[101]

Sonnets are particularly associated with love poetry, and often use a poetic diction heavily based on vivid imagery, but the twists and turns associated with the move from octave to sestet and to final couplet make them a useful and dynamic form for many subjects.[102] Shakespeare's sonnets are among the most famous in English poetry, with 20 being included in the Oxford Book of English Verse.[103]

In Greek and Latin poetry, a choriamb /ˈkɔriˌæmb/ is a metron (prosodic foot) consisting of four syllables in the pattern long-short-short-long (— ‿ ‿ —), that is, a trochee alternating with an iamb. Choriambs are one of the two basic metra[1] that do not occur in spoken verse, as distinguished from true lyric or sung verse.[2] The choriamb is sometimes regarded as the "nucleus" of Aeolic verse, because the pattern long-short-short-long pattern occurs, but to label this a "choriamb" is potentially misleading.[3]

In the prosody of English and other modern European languages, "choriamb" is sometimes used to describe four-syllable sequence of the pattern stressed-unstressed-unstressed-stressed (again, a trochee followed by an iamb): for example, "over the hill", "under the bridge", and "what a mistake!".

English prosody[edit]
In English, the choriamb is often found in the first four syllables of iambic pentameter verses, as here in Keats' To Autumn:

Who hath not seen thee oft amid thy store?
Sometimes whoever seeks abroad may find
Thee sitting careless on a granary floor,
Thy hair soft-lifted by the winnowing wind;
Or on a half-reap'd furrow sound asleep,
Drows'd with the fume of poppies, while thy hook
Spares the next swath and all its twined flowers:
And sometimes like a gleaner thou dost keep
Steady thy laden head across a brook;
Or by a cider-press, with patient look,
Thou watchest the last oozings hours by hours.

Nahuatl poetry is preserved in principally two sources: the Cantares Mexicanos and the Romances de los señores de Nueva España, both collections of Aztec songs written down in the 16th and 17th centuries. Some songs may have been preserved through oral tradition from pre-conquest times until the time of their writing, for example the songs attributed to the poet-king of Texcoco, Nezahualcoyotl. Karttunen & Lockhart (1980) identify more than four distinct styles of songs, e.g. the icnocuicatl ("sad song"), the xopancuicatl ("song of spring"), melahuaccuicatl ("plain song") and yaocuicatl ("song of war"), each with distinct stylistic traits. Aztec poetry makes rich use of metaphoric imagery

and themes and are lamentation of the brevity of human existence, the celebration of valiant warriors who die in battle, and the appreciation of the beauty of life.

Chastúshka, Russian: частýшка, pronounced [tɕɐsˈtuʂkə], derives from "часто" - "frequently", or from "частить" - old word, that means "to do something with high frequency" and probably refers to high beat frequency (tempo) of chastushki.

Chastushka is a traditional type of short Russian or Ukrainian folk humorous song with high beat frequency, that consists of one four-lined couplet, full of humor, satire or irony. Usually many chastushki are sung one after another. Chastushka makes use of a simple rhyming scheme to convey humorous or ironic content. The singing and recitation of such rhymes were an important part of peasant popular culture both before and after the Bolshevik Revolution of 1917.

A chastushka (plural: chastushki) is a simple rhyming poem which would be characterized derisively in English as doggerel. The name originates from the Russian word "часто" ("chasto") - "frequently", or from частить ("chastit"), meaning "to do something with high frequency" and probably refers to high beat frequency of chastushkas.

The basic form is a simple four-line verse making use of an ABAB, ABCB, or AABB rhyme scheme.

Usually humorous, satirical, or ironic in nature, chastushki are often put to music as well, usually with balalaika or accordion accompaniment. The rigid, short structure (and, to a lesser degree, the type of humor used) parallels the poetic genre of limericks in British culture.

According to Kuilman

The tradition of the four monarchies was of prime interest in the sixteenth and seventeenth century of the European cultural history. It started with the publication of Ovidius' 'Metamorphoses' in a French edition of Jean de Tournes in 1557 (BOLTEN, 1984). The woodcuts of this edition (including the four world ages) are attributed to Bernard Salomon and reach the Low Countries in 1563 through copies of Vergil Solis. Within a century, there were many reprints. Between 1585 and 1590 the theme was taken up by Hendrick Goltzius (1558 – 1617).

This development was strengthened by 'classical' material from Italy. The Italian painter and engraver Antonio Tempesta (1555 – 1630) published in 1606 a large series of hundred and fifty etchings based on the 'Metamorphoses' (fig. 69). A comparison between the illustrations (of the 'Metamorphoses' and the four times of the world) by Salomon, Tempesta and Goltzius was made by HENKEL (1930).

The Aetas aurea, or the Golden Age, is a symbol of a period of prosperity. This etching is by Antonio Tempesta (1555 – 1630). The series of the 'aetas' was published in 1606, but Tempesta's designs were already imitated by Hendrick Goltzius and Chrispijn de Passe (c. 1564 – 1637), who published their own cycles in respectively 1590/1591 and 1602. In: HORODISCH, Abraham (Ed.)(1984, p. 23).

The history of the myth of the four monarchies is an interesting one, but not always as clear as one would wish. The possible source in Asia Minor is already mentioned by KASSIES (1989). The theme was, according to MEYER (1910/1924), Hesiod's own invention and any similarity with the Greek (Boeotian) and oriental division were a coincidence. The Christian version is much younger.

The Biblical story of Nebuchadnezar's dream was the source of the Jewish/Christian branch of the four monarchies. The prophet Daniel explained the dream as follows: the head is made of gold, breast and arms are of silver, belly and thies are of bronze and the legs are of iron. The feeds are partly of iron and partly of clay. The diminishing quality of the metals pointed to the inferior quality of governments following the one of Nebuchadnezar. A large rock rolling from a mountain,
which destroys the statue, is the end of the dream (fig. 70).

According to Kuilman
Dionysius of Halicarnassus, around the beginning of the Christian era, had an unconditional faith in the duration of the Roman Empire. He recognized – in his 'Romanae antiquitates' (the history of Rome until the Punic Wars in twenty books) – the four previous world powers (Assyria, Medes, Pers and Macedonia) and puts the Roman Empire as the 'eternal', fifth world-power.

A fragment of Aemilius Sura ('de annis populi Romani'), mentioning the four world empires, was included in the 'Historiae Romanae' of Vellius Paterculus. Appianus wrote, around 140 BC, a Roman history in twenty-four books, also with the Roman Empire as the fifth and last era.

This optimistic outlook on the position of the Roman Empire could not hold forever and had to be modified. Pompeius Trogus proposed a more realistic version at the beginning of the Christian era (SCHUMACHER, 2000). Only the 'prologi' of his twenty-four books remain, because M. Junius Justinus adapted them at the end of the third century AD. The Roman Empire is seen as the fourth monarchy, leaving room for a possible (Christian) fifth era. SWAIN (1940) noticed that Trogus (and Justinus) where – up to the Renaissance – more important as historians than Livy and Tacitus. TRIEBER (1892) underlined the popularity of Justinus as a historian, who was only shifted aside by the humanistic tendencies, when the orthodox version of Roman as a fifth and eternal era could take hold again.

The fifth period is eternal. The fifth square is related to God and is ultra transcendnt.

The 'canonical' four-way division of seasons is strongly established in the early Hellenic times of the third century AD. There are very few examples from the classical period.

In the second to first century BC the Greek sun-year was adopted by the Jews. Initially, they only used two times of the year. In the new arrangement four angels were assigned to the seasons:
Square 1: Melekjal,
square 2:Helemmelek,
Square 3:Melejal en

Square 4: Narel.

Victorinus of Pettau (died in the third century AD) used in his 'Tractatus de fabrica mundi',
a numerological four-fold method to divide the time, with no relation to the actual seasons.
The 'quattuor tempora' of Victorinus fit into a fourfold way of thinking, supported by the four
living Things, the four Gospels, the rivers of Paradise and the four Generations (Adam –
Noah; Noah – Abraham; Abraham – Moses and Moses to Christ).

Johannicius refers, in his 'Isagoge', to adolescentia, iuventus, senectus en senium as the
four seasons of life. Cassianus (c. 360 – 435) connected, in his 'Collationes', the four
senses with types of knowledge (ESMEIJER, 1973/1978):

———————— anagoge – prophetia

———————— allegoria – revelatio

———————— historia – doctrina

———————— tropologia – scientia

Transcriptions of the encyclopedic 'Liber de natura rerum' show seven cosmological
diagrams. Six in a circular and one in a square setting. These diagrams, for mnemonic use
(to memorize), are subsequently redrawn in manuscripts of the ninth to the thirteenth
century. A good example of a time-division is found in the 'Sacramentarium Fuldense'
(Göttingen) in the so-called Annus-miniature. Annus is placed as a god amidst four wheel
(the remains of the sun-wagon) and surrounded by four elements and the month.

These types of tetradic diagrams were used between the ninth and the thirteenth century
as guidelines for the quadruple way of thinking. In the centre is the observer (homo), the
world (mundus) or the year (annus) in a square or circle. Further circles underline the
cyclic nature of different features like elements (ignis, aer, aqua and terra) or qualities
(calidus, humida, frigida, sicca). However, also the direction of the wind, temperatures,
times of the year and quarters and life periods support the tetradic world view. 1. From
John Sacrobosco's 'Computus ecclesiasticus', Ms 69, fol. 38v, New York Public Library; 2.
From a compilation of Isidore of Seville. Ms. lat 12999, fol. 7r, Bibliotheque Nationale,
Paris; 3. Annus-Mundus. Ms 3516, mappe-monde, fol. 179r, Bibliotheque de l'Arsenal,
Paris; 4. From the 'Dragmaticon' by William of Conches, MS lat. 6415, f. 6r. Bibliotheque
nationale, Paris.

The 'Sententiae' were composed as a memorial of tetradic thinking. The structure is
reflected in its outlay: the first book is concerned with God and his nature, the second book
deals with the Creation and the Fall of man, the third book discussed the Incarnation of
Christ and the Saviour and finally the fourth book explains the Sacraments and the Last
Things.

The tetradic division of the 'Sententiae' of Petrus Lombardus: God – Creation – Incarnation – Sacraments, reflected the four 'senses' of (religious) life. This book – and its associated tetradic approach – was the most influential document of the Scholastic period. It lost its prominence during the thirteenth century and never lived up to a 'revival' or revaluation.

A lion with four heads was given as an illustration in the manuscript of the 'Lux in Tenebris '(fig. 174). The symbolism was echoed in an alchemical brochure at the end of the eighteenth century, called 'Die Lebensgeschichte des Löwen R R R R' (The life-history of the Lion R R R R). The (Green) Lion stood at the beginning of the Great Work. The addition of the letters 'R R R R' pointed to the four processes, which were involved in the search for the 'Philosopher's Stone' and the 'Elixir of Life': separation (separatio), purification (purefactio), unification (conjunctio) and multiplication (multiplicatio).

The term quadrature of the circle is sometimes used to mean the same thing as squaring the circle, but it may also refer to approximate or numerical methods for finding the area of a circle. Recall squaring is making a quadrant out of something. This was an ancient problem that preoccupied a lot of mathematicians interests and was seen as very profound.

In his old age, the English philosopher Thomas Hobbes convinced himself that he had succeeded in squaring the circle. But he was wrong.

By 1742, when Alexander Pope published the fourth book of his Dunciad, attempts at circle-squaring had come to be seen as "wild and fruitless":

"Mad Mathesis alone was unconfined,
Too mad for mere material chains to bind,
Now to pure space lifts her ecstatic stare,
Now, running round the circle, finds it square."

Similarly, the Gilbert and Sullivan comic opera Princess Ida features a song which satirically lists the impossible goals of the women's university run by the title character, such as finding perpetual motion. One of these goals is "And the circle – they will square it/Some fine day."[15]

The sestina, a poetic form first used in the 12th century by Arnaut Daniel, has been said to square the circle in its use of a square number of lines (six stanzas of six lines each) with a circular scheme of six repeated words. Spanos (1978) writes that this form invokes a symbolic meaning in which the circle stands for heaven and the square stands for the earth.[16] A similar metaphor was used in "Squaring The Circle", a 1908 short story by O. Henry, about a long-running family feud. In the title of this story, the circle represents the natural world, while the square represents the city, the world of man.

In James Joyce's novel Ulysses, Leopold Bloom dreams of becoming wealthy by squaring the circle, unaware that the quadrature of the circle had been proved impossible 22 years earlier and that the British government had never offered a reward for its solution.

Anne Bradstreet (1612 – 1672) a 'Gentlewoman in New-England' wrote her 'Quaternion' between 1630 and 1642: four poems, each composed of four parts and dealing with 'The Four Elements' (Fire, Earth, Water, Air), 'Of The Four Humours' (Choler, Blood, Melancholy, Phlegm), 'Of the Four Ages' (Childhood, Youth, Middle Age, Old Age) 'The Four Seasons' (Spring, Summer, Autumn, Winter) and 'The Four Monarchies' (Assyrian, Persian, Grecian, Roman).

——————————- 'Of all your qualities I do partake,

—————————— And what you single are, the whole I make.

—————————— Your hot, moist, cold, dry natures are but four,

—————————— I moderately am all, what need I more'

Hildegard composed her work in a holy inspiration, using the 'Seven Steps to Heaven' (of Eriugena) in an active way: the three division was used in the contemplation to symbolize God's view and the four-division was seen as the human approach to the universe. Consequently, she distinguished four stages in the division of history:

—————————— 1. Status before the creation of the world;

—————————— 2. Time before the incarnation;

—————————— 3. Status of the incarnation;

—————————— 4. Turning point of the end of time and history of salvation.

The 'trinitarisch-tetragonische Wirksamheit des Schöpfers' (BRONDER, 1972) is the all-embracing entity in the representation of the cosmos of Hildegard of Bingen.

As Hildegard elaborates the medical and scientific relationship between the human microcosm and the macrocosm of the universe, she often focuses on interrelated patterns of four: "the four elements (fire, air, water, and earth), the four seasons, the four humors, the four zones of the earth, and the four major winds."

She herself travelled widely on four preaching tours. She is considered a saint in the Catholic Church

In Persian mythology, two four-eyed dogs guard the Chinvat Bridge.

The Mabinogion (/ˌmæbəˈnoʊɡiən/; Welsh pronunciation: [mabɪˈnɔɡjɔn]) is the earliest prose literature of Britain. The stories were compiled in the 12th–13th century from earlier oral traditions by medieval Welsh authors. The two main source manuscripts were created c. 1350–1410, as well as some earlier fragments. But beyond their origins, first and foremost these are fine quality storytelling, offering high drama, philosophy, romance, tragedy, fantasy, sensitivity, and humour; refined through long development by skilled performers.

The Four Branches of the Mabinogi (Pedair Cainc y Mabinogi) are the most clearly mythological stories contained in the Mabinogion collection. Pryderi appears in all four, though not always as the central character.

Pwyll Pendefig Dyfed (Pwyll, Prince of Dyfed) tells of Pryderi's parents and his birth, loss and recovery.
Branwen ferch Llŷr (Branwen, daughter of Llŷr) is mostly about Branwen's marriage to the King of Ireland. Pryderi appears but does not play a major part.
Manawydan fab Llŷr (Manawydan, son of Llŷr) has Pryderi return home with Manawydan, brother of Branwen, and describes the misfortunes that follow them there.
Math fab Mathonwy (Math, son of Mathonwy) is mostly about Math and Gwydion, who come into conflict with Pryderi.
Native

The Afrinagans are four "blessing" texts recited on a particular occasion: the first in honor of the dead, the second on the five epagomenal days that end the year, the third is recited at the six seasonal feasts, and the fourth at the beginning and end of summer.

In Daoist creation myth, "The Way gave birth to unity; unity gave birth to duality; duality gave birth to trinity; trinity gave birth to the myriad creatures." (Daodejing). This is a four part creation with the fourth part being different from the previous three. That is the quadrant model pattern.

According to the Cheonjiwang Bonpuri (Korean) creation myth Cheonjiwang, a chief God, informed his twin sons that he found it difficult to rule the four realms- the heavens, the

earth, the mortal world, and the netherworld all at the same time, and told the twins to try a contest between each other in order to aid him.

Great Star was forced to rule the netherworld, and Small Star went to rule the mortal world.

Wise Wife was given the title of Bajiwang, the earth goddess, and thus, the four realms of the heavens, the mortal world, the netherworld, and the earth each came to have a ruler.

The whole creation myth is about how these four realms were divided among these four Gods.

In the story Cheonjiwang has his four generals, General Lightning (Korean: 번개장군), General Thunder (Korean: 벼락장군), General Fire (Korean: 화덕진군 and Master of the Winds and the Rains (Korean: 풍우도사), to accompany him to Sumyeong Jangja's realm (the mortal realm). The four generals themselves led an army of 10,000 soldiers.

The achievement of epic poetry was to create story-cycles and, as a result, to develop a new sense of mythological chronology. Thus Greek mythology unfolds as a phase in the development of the world and of humans.[18] While self-contradictions in these stories make an absolute timeline impossible, an approximate chronology may be discerned. The resulting mythological "history of the world" may be divided into three or four broader periods:

The myths of origin or age of gods (Theogonies, "births of gods"): myths about the origins of the world, the gods, and the human race.
The age when gods and mortals mingled freely: stories of the early interactions between gods, demigods, and mortals.
The age of heroes (heroic age), where divine activity was more limited. The last and greatest of the heroic legends is the story of the Trojan War and after (which is regarded by some researchers as a separate fourth period)

Cinema chapter

Philosophy Chapter

Gromov Witten theory is a theory to find the number of curves on a manifold. This is a classical problem in algebraic geometry that every algebraic geometer knows.

Square 1: For lines of degree one curves there is 2875. This is a classical result in the 1880s

Square 2: In the 1980s the number of lines for d=2 conics was 609,250.

Square 3: For the number of curves by a cubic equation there was 317,206,375. Mathematicians needed a computer to find this number. Originally they discovered there was a problem in the computer code. Physicists asked them to redo the equation and they discovered the number.

square 4: For a manifold of degree four even a more massive effort was undertaken than with degree three. It was one of the most difficult problems in mathematics and took a huge amount of effort to discover. The fourth square is always different.

Square 5: By the time that physicists were trying to find the number of curves for degree five computer technology got to the point that there was no longer any effort to find the numbers and after finding degree four all of the numbers after four were found. Square 5 is always transcendent. The nature of this problem mirrors the nature of a child learning numbers, how he can learn the first four numbers having a difficult time and does not understand numbers, but by number five he understands all numbers and no longer has trouble learning numbers. There was a huge amount of effort to find the first four degrees in Gromov Witten theory. It took a century of mathematicians working tirelessly. At the fifth degree and beyond there was no more effort because high tech computers did it all effortlessly by that point.

This is not a coincidence. The nature of reality is it reveals the quadrant model pattern throughout. Groom Witten theory is essential for string theory, which I also described ultimately reflects the quadrant model pattern.

STOCK (1979) indicated that the discourse on the 'Categories' of Aristotle – which is treated in the first book of 'De Divisione Naturae' (463A) – can be found in a slightly different form in the 'Tractatus de Catagoriis Aristotelis' (Decem Catagoriae). This treatise from the fourth century AD was written by a successor of Themistius, probably Agorius Praetextanus. The text gave continuity between the tetradic thoughts of Aristotle and the European interpretation of Eriugena. The resemblance is as follows (STOCK, 1979):

Eriugena Decem Categoriae (Aristotle)

_____

_____

1: quae creat et non creatus in solo et in omni

2: quae et creatur et creat in solo et non in omni

3: quae creatur et non creat in omni et non in solo

4: quae nec creat nec creatur nec in solo nec in omni

According to Aristotle of all the things that exist,

Some may be predicated[further explanation needed] of a subject, but are in no subject; as man may be predicated of James or John, but is not in any subject.
Some are in a subject, but cannot be predicated of any subject. Thus a certain individual point of grammatical knowledge is in me as in a subject, but it cannot be predicated of any subject; because it is an individual thing.
Some are both in a subject and able to be predicated of a subject, for example science, which is in the mind as in a subject, and may be predicated of geometry as of a subject.
Last, some things neither can be in any subject nor can be predicated of any subject. These are individual substances, which cannot be predicated, because they are individuals; and cannot be in a subject, because they are substances.

A brief explanation (with some alternative translations) is as follows:

Substance (οὐσία, ousia, essence or substance).[6] Substance is that which cannot be predicated of anything or be said to be in anything. Hence, this particular man or that particular tree are substances. Later in the text, Aristotle calls these particulars "primary substances", to distinguish them from secondary substances, which are universals and can be predicated. Hence, Socrates is a primary substance, while man is a secondary substance. Man is predicated of Socrates, and therefore all that is predicated of man is predicated of Socrates.

Quantity (ποσόν, poson, how much). This is the extension of an object, and may be either discrete or continuous. Further, its parts may or may not have relative positions to each other. All medieval discussions about the nature of the continuum, of the infinite and the infinitely divisible, are a long footnote to this text. It is of great importance in the development of mathematical ideas in the medieval and late Scholastic period. Examples: two cubits long, number, space, (length of) time.

Qualification or quality (ποιόν, poion, of what kind or quality). This determination characterizes the nature of an object. Examples: white, black, grammatical, hot, sweet, curved, straight.

Relative or relation (πρός τι, pros ti, toward something). This is the way one object may be related to another. Examples: double, half, large, master, knowledge.

Where or place (ποῦ, pou, where). Position in relation to the surrounding environment. Examples: in a marketplace, in the Lyceum.

When or time (πότε, pote, when). Position in relation to the course of events. Examples: yesterday, last year.

Being-in-a-position, posture, attitude (κεῖσθαι, keisthai, to lie). The examples Aristotle gives indicate that he meant a condition of rest resulting from an action: 'Lying', 'sitting', 'standing'. Thus position may be taken as the end point for the corresponding action. The term is, however, frequently taken to mean the relative position of the parts of an object (usually a living object), given that the position of the parts is inseparable from the state of rest implied.

Having or state, condition (ἔχειν, echein, to have or be). The examples Aristotle gives indicate that he meant a condition of rest resulting from an affection (i.e. being acted on): 'shod', 'armed'. The term is, however, frequently taken to mean the determination arising from the physical accoutrements of an object: one's shoes, one's arms, etc. Traditionally, this category is also called a habitus (from Latin habere, to have).

Doing or action (ποιεῖν, poiein, to make or do). The production of change in some other object (or in the agent itself qua other).

Being affected or affection (πάσχειν, paschein, to suffer or undergo). The reception of change from some other object (or from the affected object itself qua other). Aristotle's name paschein for this category has traditionally been translated into English as "affection" and "passion" (also "passivity"), easily misinterpreted to refer only or mainly to affection as an emotion or to emotional passion. For action he gave the example, 'to lance', 'to cauterize'; for affection, 'to be lanced', 'to be cauterized.' His examples make clear that action is to affection as the active voice is to the passive voice — as acting is to being acted on.

The first four are given a detailed treatment in four chapters, doing and being-affected are discussed briefly in a single small chapter, the remaining four are passed over lightly, as being clear in themselves. Later texts by scholastic philosophers also reflect this disparity of treatment

Aristotle only really talks about the first four

The present information comes from Plotinus and Simplicius, with additional evidence from Plutarch of Chaeronea and Sextus Empiricus. According to both Plotinus and Simplicius there were four Stoic categories, to wit:

substance (ὑποκείμενον [ypokeímenon {"underlying"}])
The primary matter, formless substance (ousia) which makes up things.
quality (ποιόν [poión {"whom"}])
The way in which matter is organized to form an individual object. In Stoic physics, a physical ingredient (pneuma: air or breath) which informs the matter.
somehow disposed (πὼς ἔχον [pós échon {"how haves"}])
Particular characteristics, not present within the object, such as size, shape, action, and posture.
somehow disposed in relation to something (πρός τί πως ἔχον [prós tí pos échon {"why that having"}])
Characteristics which are related to other phenomena, such as the position of an object within time and space relative to other objects

The term Stoic categories refers to Stoic ideas regarding categories of being: the most fundamental classes of being for all things. The Stoics believed there were four categories (substance, quality, disposition, relative disposition) which were the ultimate divisions. Since we do not now possess even a single complete work by Zeno of Citium, Cleanthes or Chrysippus what we do know must be pieced together from a number of sources: doxographies and the works of other philosophers who discuss the Stoics for their own purposes.

Schoepenhaurs On the Basis of Morality is divided into four sections. The first section is an introduction in which Schopenhauer provides his account of the question posed by the Royal Danish Society and his interpretation of the history of western ethics. In the second section, Schopenhauer embarks on a criticism of Kantian ethics, which he viewed as the orthodoxy in ethics. The third section of the work is Schopenhauer's positive construction of his own ethical theory. The final section of the work provides a brief description of the metaphysical foundations of ethics

Kant is considered the greatest modern philosopher. His works are purely tetrads.

Kant performs four paralogisms

One of the ways that pure reason erroneously tries to operate beyond the limits of possible experience is when it thinks that there is an immortal Soul in every person. Its proofs, however, are paralogisms, or the results of false reasoning.

The Soul is substance[edit]
Every one of my thoughts and judgments is based on the presupposition "I think." "I" is the subject and the thoughts are the predicates. Yet I should not confuse the ever-present logical subject of my every thought with a permanent, immortal, real substance (soul). The logical subject is a mere idea, not a real substance. Unlike Descartes who believes that the soul may be known directly through reason, Kant asserts that no such thing is possible. Descartes declares cogito ergo sum but Kant denies that any knowledge of "I" may be possible. "I" is only the background of the field of apperception and as such lacks the experience of direct intuition that would make self-knowledge possible. This implies that the self in itself could never be known. Like Hume, Kant rejects knowledge of the "I" as substance. For Kant, the "I" that is taken to be the soul is purely logical and involves no intuitions. The "I" is the result of the a priori consciousness continuum not of direct intuition a posteriori. It is apperception as the principle of unity in the consciousness continuum that dictates the presence of "I" as a singular logical subject of all the representations of a single consciousness. Although "I" seems to refer to the same "I" all the time, it is not really a permanent feature but only the logical characteristic of a unified consciousness.[31]

The Soul is simple[edit]
The only use or advantage of asserting that the soul is simple is to differentiate it from matter and therefore prove that it is immortal, but the substratum of matter may also be simple. Since we know nothing of this substratum, both matter and soul may be fundamentally simple and therefore not different from each other. Then the soul may decay, as does matter. It makes no difference to say that the soul is simple and therefore

immortal. Such a simple nature can never be known through experience. It has no objective validity. According to Descartes, the soul is indivisible. This paralogism mistakes the unity of apperception for the unity of an indivisible substance called the soul. It is a mistake that is the result of the first paralogism. It is impossible that thinking could be composite for if the thought by a single consciousness were to be distributed piecemeal among different consciousnesses, the thought would be lost. According to Kant, the most important part of this proposition is that a multi-faceted presentation requires a single subject. This paralogism misinterprets the metaphysical oneness of the subject by interpreting the unity of apperception as being indivisible and the soul simple as a result. According to Kant, the simplicity of the soul as Descartes believed cannot be inferred from the "I think" as it is assumed to be there in the first place. Therefore, it is a tautology.[32]

The Soul is a person[edit]

In order to have coherent thoughts, I must have an "I" that is not changing and that thinks the changing thoughts. Yet we cannot prove that there is a permanent soul or an undying "I" that constitutes my person. I only know that I am one person during the time that I am conscious. As a subject who observes my own experiences, I attribute a certain identity to myself, but, to another observing subject, I am an object of his experience. He may attribute a different persisting identity to me. In the third paralogism, the "I" is a self-conscious person in a time continuum, which is the same as saying that personal identity is the result of an immaterial soul. The third paralogism mistakes the "I", as unit of apperception being the same all the time, with the everlasting soul. According to Kant, the thought of "I" accompanies every personal thought and it is this that gives the illusion of a permanent I. However, the permanence of "I" in the unity of apperception is not the permanence of substance. For Kant, permanence is a schema, the conceptual means of bringing intuitions under a category. The paralogism confuses the permanence of an object seen from without with the permanence of the "I" in a unity of apperception seen from within. From the oneness of the apperceptive "I" nothing may be deduced. The "I" itself shall always remain unknown. The only ground for knowledge is the intuition, the basis of sense experience.[33]

The Soul is separated from the experienced world[edit]

The soul is not separate from the world. They exist for us only in relation to each other. Whatever we know about the external world is only a direct, immediate, internal experience. The world appears, in the way that it appears, as a mental phenomenon. We cannot know the world as a thing-in-itself, that is, other than as an appearance within us. To think about the world as being totally separate from the soul is to think that a mere phenomenal appearance has independent existence outside of us. If we try to know an object as being other than an appearance, it can only be known as a phenomenal appearance, never otherwise. We cannot know a separate, thinking, non-material soul or a separate, non-thinking, material world because we cannot know things, as to what they may be by themselves, beyond being objects of our senses. The fourth paralogism is passed over lightly or not treated at all by commentators. In the first edition of the Critique of Pure Reason, the fourth paralogism is addressed to refuting the thesis that there is no certainty of the existence of the external world. In the second edition of the Critique of Pure

Reason, the task at hand becomes the Refutation of Idealism. Sometimes, the fourth paralogism is taken as one of the most awkward of Kant's invented tetrads. Nevertheless, in the fourth paralogism, there is a great deal of philosophizing about the self that goes beyond the mere refutation of idealism. In both editions, Kant is trying to refute the same argument for the non-identity of mind and body.[34] In the first edition, Kant refutes the Cartesian doctrine that there is direct knowledge of inner states only and that knowledge of the external world is exclusively by inference. Kant claims mysticism is one of the characteristics of Platonism, the main source of dogmatic idealism. Kant explains skeptical idealism by developing a syllogism called "The Fourth Paralogism of the Ideality of Outer Relation:"

If that whose existence can be inferred only as a cause of given perceptions has only a doubtful existence.
And the existence of outer appearances cannot be immediately perceived but can be inferred only as the cause of given perceptions.
Then, the existence of all objects of outer sense is doubtful.[35]
Kant may have had in mind an argument by Descartes:

My own existence is not doubtful
But the existence of physical things is doubtful
Therefore, I am not a physical thing.
It is questionable that the fourth paralogism should appear in a chapter on the soul. What Kant implies about Descartes' argument in favor of the immaterial soul is that the argument rests upon a mistake on the nature of objective judgement not on any misconceptions about the soul. The attack is mislocated.[36]

These Paralogisms cannot be proven for speculative reason and therefore can give no certain knowledge about the Soul. However, they can be retained as a guide to human behavior. In this way, they are necessary and sufficient for practical purposes. In order for humans to behave properly, they can suppose that the soul is an imperishable substance, it is indestructibly simple, it stays the same forever, and it is separate from the decaying material world. On the other hand, anti-rationalist critics of Kant's ethics consider it too abstract, alienating, altruistic or detached from human concern to actually be able to guide human behavior. It is then that the Critique of Pure Reason offers the best defense, demonstrating that in human concern and behavior, the influence of rationality is preponderant.

Kant presents the four antinomies of reason in the Critique of Pure Reason as going beyond the rational intention of reaching a conclusion. For Kant, an antinomy is a pair of faultless arguments in favor of opposite conclusions. Historically, Gottfried Leibniz and Samuel Clarke (Newton's spokesman) had just recently engaged in a titanic debate of

unprecedented repercussions. Kant's formulation of the arguments was affected accordingly.[38]

The Ideas of Rational Cosmology are dialectical. They result in four kinds of opposing assertions, each of which is logically valid. The antinomy, with its resolution, is as follows:

Thesis: The world has, as to time and space, a beginning (limit).
Antithesis: The world is, as to time and space, infinite.
Both are false. The world is an object of experience. Neither statement is based on experience.
Thesis: Everything in the world consists of elements that are simple.
Antithesis: There is no simple thing, but everything is composite.
Both are false. Things are objects of experience. Neither statement is based on experience.
Thesis: There are in the world causes through freedom.
Antithesis: There is no freedom, but all is nature.
Both may be true. The thesis may be true of things-in-themselves (other than as they appear). The antithesis may be true of things as they appear.
Thesis: In the series of the world-causes there is some necessary being.
Antithesis: There is nothing necessary in the world, but in this series all is contingent.
Both may be true. The thesis may be true of things-in-themselves (other than as they appear). The antithesis may be true of things as they appear.
According to Kant, rationalism came to fruition by defending the thesis of each antinomy while empiricism evolved into new developments by working to better the arguments in favor of each antithesis.

Kants Doctrine of Method contains four sections. The first section, Discipline of Pure Reason, compares mathematical and logical methods of proof, and the second section, Canon of Pure Reason, distinguishes theoretical from practical reason.

The Divisions of Critique of Pure Reason

Dedication

1. First and second Prefaces
2. Introduction
3. Transcendental Doctrine of Elements
A. Transcendental Aesthetic
B. Transcendental Logic
(1) Transcendental Analytic
a. Analytic of Concepts
i. Metaphysical Deduction
ii. Transcendental Deduction

The first part of Kant's book, the Critique of Aesthetic Judgment, discusses the four possible "reflective judgments": the agreeable, the beautiful, the sublime, and the good. Kant makes it clear that these are the only four possible reflective judgments, as he relates them to the Table of Judgments from the Critique of Pure Reason.

In the Critique of Pure Reason, Kant claimed that the understanding was the ability to judge. The forms of judgments were said to be the basis of the categories and all philosophy. But in his Critique of Judgment, he called a new, different ability the faculty of judgment. That now resulted in four faculties: sensation, understanding, judging, and reason.

Kant's divisions, however, are guided by his search in the mind for what makes synthetic a priori judgments possible.[55]

FUNCTION OF THOUGHT IN JUDGMENT CATEGORIES OF UNDERSTANDING PRINCIPLES OF PURE UNDERSTANDING

Square 1: Quantity Quantity

Universal

Particular

Singular Unity

Plurality

Totality Axioms of Intuition

square 2: Quality Quality

Affirmative

Negative

Infinite Reality

Negation

Limitation Anticipations of Perception

Square 3: Relation Relation

Categorical

Hypothetical

Disjunctive Of Inherence and Subsistence (substantia et accidens)

Of Causality and Dependence (cause and effect)

Of Community (reciprocity between the agent and patient) Analogies of Experience

Square 4: Modality Modality

Problematical

Assertorical

Apodeictical Possibility-Impossibility

Existence-Non-existence

Necessity-Contingence Postulates of Empirical Thought in General

In the Transcendental Deduction, Kant aims to show that the categories derived in the Metaphysical Deduction are conditions of all possible experience. He achieves this proof roughly by the following line of thought: all representations must have some common ground if they are to be the source of possible knowledge (because extracting knowledge

from experience requires the ability to compare and contrast representations that may occur at different times or in different places). This ground of all experience is the self-consciousness of the experiencing subject, and the constitution of the subject is such that all thought is rule-governed in accordance with the categories. It follows that the categories feature as necessary components in any possible experience.[26]

1.Axioms of intuition
2.Anticipations of perception
3.Analogies of experience
4.Postulates of empirical thought in general

The dark triad is a group of three personality traits: narcissism, Machiavellianism and psychopathy. Use of the term "dark" implies that people scoring high on these traits have malevolent qualities:

Narcissism is characterized by grandiosity, pride, egotism, and a lack of empathy.
Machiavellianism is characterized by manipulation and exploitation of others, a cynical disregard for morality, and a focus on self-interest and deception.
Psychopathy is characterized by enduring antisocial behavior, impulsivity, selfishness, callousness, and remorselessness.
All three traits have been associated with a callous-manipulative interpersonal style. A factor analysis carried out at the Glasgow Caledonian University found that among the big five personality traits, low agreeableness is the strongest correlate of the dark triad, while neuroticism and a lack of conscientiousness were associated with some of the dark triad members.

Several researchers have suggested expanding the dark triad to contain a fourth dark trait. Everyday sadism, defined as the enjoyment of cruelty, is the most common addition. While sadism is highly correlated with the dark triad, researchers have shown that sadism predicts anti-social behavior beyond the dark triad.

The fourth square is always different and does not seem to belong

Aulus Cornelius Celsus (c. 25 BC – c. 50 AD) was a Roman encyclopaedist, known for his extant medical work, De Medicina, which is believed to be the only surviving section of a much larger encyclopedia. The De Medicina is a primary source on diet, pharmacy, surgery and related fields, and it is one of the best sources concerning medical knowledge in the Roman world.

Aulus Cornelius Celsus is credited with recording the cardinal signs of inflammation known as "Celsus tetrad": calor (warmth), dolor (pain), tumor (swelling) and rubor (redness and hyperaemia). He goes into great detail regarding the preparation of numerous ancient medicinal remedies including the preparation of opioids. In addition, he describes many 1st century Roman surgical procedures which included removal of a cataract, treatment for bladder stones, and the setting of fractures.

Gottfried Wilhelm von Leibniz's university thesis 'De Dissertatio de arte combinatoria' (1666) was an appraisal of the work of Ramon Lull. Leibniz mentioned Lull only once in the synopsis of the 'Arte Combinatoria' together with the scholar Athenasius Kircher (1602 – 1680). The dissertation started with a 'Demonstratio Existentiae Dei'. The diagram shows the relation between the four elements and the qualities, which were described by Aristotle in his 'De Generatione et Corruptione'. It was added in a later print of the dissertation.

Leibniz expresses the quadrant image in his drawing.

A tetromino is a geometric shape composed of four squares, connected orthogonally. This, like dominoes and pentominoes, is a particular type of polyomino. The corresponding polycube, called a tetracube, is a geometric shape composed of four cubes connected orthogonally.

A popular use of tetrominoes is in the video game Tetris, where they have been called Tetriminos (spelled with an "i" as opposed to the "o" in "tetromino") since 2001.

Tetris is one of the most popular games of all time. It is no coincidence it is related to the number four.

In computing, a nibble (often nybble or even nyble to match the vowels of byte) is a four-bit aggregation, or half an octet. It is also known as half-byte[2] or tetrade. In a networking or telecommunication context, the nibble is often called a semi-octet, quadbit, or quartet. A nibble has sixteen (2^4) possible values. A nibble can be represented by a single hexadecimal digit and called a hex digit.

A full byte (octet) is represented by two hexadecimal digits; therefore, it is common to display a byte of information as two nibbles. Sometimes the set of all 256 byte values is represented as a table 16×16, which gives easily readable hexadecimal codes for each value.

4-bit computer architectures use groups of four bits as their fundamental unit. Such architectures were used in early microprocessors and pocket calculators and continue to be used in some micro controllers

There are 16 nibbles representing the 16 squares of the quadrant model

Two levers connected by a rod so that a force applied to one is transmitted to the second is known as a four-bar linkage. The levers are called cranks, and the fulcrums are called pivots. The connecting rod is also called the coupler. The fourth bar in this assembly is the ground, or frame, on which the cranks are mounted.

Linkages are important components of machines and tools. Examples range from the four-bar linkage used to amplify force in a bolt cutter or to provide independent suspension in an automobile, to complex linkage systems in robotic arms and walking machines. The internal combustion engine uses a slider-crank four-bar linkage formed from its piston, connecting rod, and crankshaft to transform power from expanding burning gases into rotary power. Relatively simple linkages are often used to perform complicated tasks.

In kinematics, cognate linkages are linkages that ensure the same input-output relationship or coupler curve geometry, while being dimensionally dissimilar. In case of four-bar linkage coupler cognates, the Roberts–Chebyschev Theorem, after Samuel Roberts and Pafnuty Chebyshev, states that each coupler curve can be generated by three different four-bar linkages. These four-bar linkages can be constructed using similar triangles and parallelograms, and the Cayley diagram (named after Arthur Cayley).

Johannes Scotus Eriugena (/dʒoʊˈhæniːz, -ˈhænɪs ˈskoʊtəs ˌ ˈskɒtəs ɪˈrɪdʒənə/; c. 815 – c. 877) was an Irish theologian, neoplatonist philosopher, and poet. He wrote a number of works, but is best known today, and had most influence in subsequent centuries, for having translated and made commentaries upon the work of Pseudo-Dionysius.

John Scotus' book – also called in Greek 'Periphyseon' – was, above all, an unmistakable sign, that tetradic thinking had reached visibility. Or, like HEER (1966) put it in a more roundabout way: 'Eriugena united the Greek doctrine of deification (as in Clement, Origen and Dionysius) with Celtic-Germanic beliefs regarding rebirth and return'.

The fourfold division of nature is put forward on the first page of Book I of Eriugena's book (and later repeated in Book II and III) by the Nutritor (Master), who speaks to the Alumnus (Disciple):

'It is my opinion that the division of Nature by means of four differences results in four species, being divided first into that which creates and is not created (quae creat et non

creatus), secondly into that which is created and also creates (quae et creatur et creat), thirdly into that which is created and does not create (quae creatur et non creat), while the fourth neither creates nor is created (quae nec creat nec creatur).'

DUHEM (1958, Tome III, p. 53) typified the work of Eriugena as neo-Platonic: 'la philosophie neo-platonicienne de Scot Erigene s'inspire surtout de Chalcidius' (the neo-platonic philosophy of Eriugena, who was inspired by Chalcidius (and his commentary of the 'Timaeus' of Plato). He is also portrayed as a 'Greek' mind in a 'Latin' world (LEFF, 1958).

It is perhaps apologetic to call every visualization of division thinking in the European cultural history 'neo-platonic', but the association of this term with the neo-platonic writers of the early centuries AD (like Ammonius Saccas (Saccas being a nickname meaning 'uncertain interpretation'; WALLIS, 1972/1995), his pupil Plotinus, Jamblichus, Porphyrius, etc.) is an unhappy one. Furthermore, the connotation does not give credit to Aristotle, who might be regarded as the main architect of the tetradic mind. Robert O'NEILL (2011) wrote a very clarifying article on Neoplatonism.

Eriugena's great work, De divisione naturae (Περί φύσεων), which was condemned by a council at Sens by Honorius III (1225), who described it as "swarming with worms of heretical perversity," and by Gregory XIII in 1585, is arranged in five books. The form of exposition is that of dialogue; the method of reasoning is the syllogism. Nature (Natura in Latin or physis in Greek) is the name of the most comprehensive of all unities, that which contains within itself the most primary division of all things, that which is (being) and that which is not (nonbeing). The Latin title refers to these four divisions of nature: (1) that which creates and is not created; (2) that which is created and creates; (3) that which is created and does not create; (4) that which is neither created nor creates. The first is God as the ground or origin of all things, the last is God as the final end or goal of all things, that into which the world of created things ultimately returns. The second and third together compose the created universe, which is the manifestation of God, God in process, Theophania; the second is the world of Platonic ideas or forms, and the third is a more pantheistic world, or a pandeistic one,[8] depending on the interference of God. Thus we distinguish in the divine system beginning, middle and end; but these three are in essence one; the difference is only the consequence of our finite comprehension. We are compelled to envisage this eternal process under the form of time, to apply temporal distinctions to that which is extra- or supra-temporal. It is in turn through our experience that the incomprehensible divine is able to frame an understanding of itself.

The Division of Nature has been called the final achievement of ancient philosophy, a work which "synthesizes the philosophical accomplishments of fifteen centuries." It is presented, like Alcuin's book, as a dialogue between Master and Pupil. Eriugena anticipates Thomas Aquinas, who said that one cannot know and believe a thing at the same time. Eriugena explains that reason is necessary to understand and interpret revelation. "Authority is the

source of knowledge, but the reason of mankind is the norm by which all authority is judged."[9]

De divisione naturae ("The division of nature") is the title given by Thomas Gale to his edition (1681) of the work originally titled by Eriugena Periphyseon. This work was the magnum opus of ninth century theologian Johannes Scotus Eriugena.

The work is arranged in five books. The form of exposition is that of dialogue; the method of reasoning is the syllogism. Natura is the name for the universal, the totality of all things, containing in itself being and non-being. It is the unity of which all special phenomena are manifestations. But of this nature there are four distinct classes:

Square 1: That which creates and is not created;
Square 2: That which is created and creates;
Square 3: That which is created and does not create;
Square 4: That which neither is created nor creates.
The first is God as the ground or origin of all things, the last is God as the final end or goal of all things, that into which the world of created things ultimately returns. The second and third together compose the created universe, which is the manifestation of God, God in process, Theophania; the second being the world of Platonic ideas or forms, and the third being a more panentheistic, pandeistic, or panendeistic world, depending on the post-creation scope and interference of God.

Scotus is considered one of the greatest philosophers of all time, and he pushed the idea that God is Being. In my quadrant model the seventeenth square is being. The seventeenth square is the fifth quadrant, which represents God (ultra transcendence) ((Although God is even beyond being you cannot even talk about God adequately any attempt is futile)

Book I of the Topics is introductory, laying down a number of preliminary principles upon which dialectical argumentation proceeds. After defining dialectical reasoning (syllogism) and distinguishing it from demonstrative, contentious, and (one might say) "pseudo-scientific"[8] syllogism, Aristotle notes the utility of the art of dialectic, then sets out four bases (accident, property, genus, definition) from which invention of such reasoning proceeds. He next elucidates various senses of "sameness", as bearing directly upon the usual character of such arguments. Dialectical propositions and dialectical problems are characterized. Then, the ὄργανα (órgana) or means by which arguments may be obtained are described, in a four-fold summary, as:

the provision of propositions
discovery of the number of senses of a term
the discovery of differences
the investigation of similarities

The Prior Analytics represents the first formal study of logic, where logic is understood as the study of arguments. An argument is a series of true or false statements which lead to a true or false conclusion.[9] In the Prior Analytics, Aristotle identifies valid and invalid forms of arguments called syllogisms. A syllogism is an argument that consists of at least three sentences: at least two premises and a conclusion. Although Aristotles does not call them "categorical sentences," tradition does; he deals with them briefly in the Analytics and more extensively in On Interpretation.[10] Each proposition (statement that is a thought of the kind expressible by a declarative sentence)[11] of a syllogism is a categorical sentence which has a subject and a predicate connected by a verb. The usual way of connecting the subject and predicate of a categorical sentence as Aristotle does in On Interpretation is by using a linking verb e.g. P is S. However, in the Prior Analytics Aristotle rejects the usual form in favor of three of his inventions: 1) P belongs to S, 2) P is predicated of S and 3) P is said of S. Aristotle does not explain why he introduces these innovative expressions but scholars conjecture that the reason may have been that it facilitates the use of letters instead of terms avoiding the ambiguity that results in Greek when letters are used with the linking verb.[12] In his formulation of syllogistic propositions, instead of the copula ("All/some... are/are not..."), Aristotle uses the expression, "... belongs to/does not belong to all/some..." or "... is said/is not said of all/some..."[13] There are four different types of categorical sentences: universal affirmative (A), particular affirmative (I), universal negative (E) and particular negative (O).

A - A belongs to every B
E - A belongs to no B
I - A belongs to some B
O - A does not belong to some B

Depending on the position of the middle term, Aristotle divides the syllogism into three kinds: Syllogism in the first, second and third figure.[15] If the Middle Term is subject of one premise and predicate of the other, the premises are in the First Figure. If the Middle Term is predicate of both premises, the premises are in the Second Figure. If the Middle Term is subject of both premises, the premises are in the Third Figure.

"In Aristotelian syllogistic (Prior Analytics, Bk I Caps 4-7), syllogisms are divided into three figures according to the position of the middle term in the two premises. The fourth figure, in which the middle term is the predicate in the major premise and the subject in the minor, was added by Aristotle's pupil Theophrastus and does not occur in Aristotle's work, although there is evidence that Aristotle knew of fourth-figure syllogisms."

The fourth square is always different and does not seem to belong

The fallacy of four terms (Latin: quaternio terminorum) is the formal fallacy that occurs when a syllogism has four (or more) terms rather than the requisite three. This form of argument is thus invalid.

Sometimes a syllogism that is apparently fallacious because it is stated with more than three terms can be translated into an equivalent, valid three term syllogism.[2] For example:

Major premise: No humans are immortal.
Minor premise: All Greeks are people.
Conclusion: All Greeks are mortal.
This EAE-1 syllogism apparently has five terms: "humans", "people", "immortal", "mortal", and "Greeks". However it can be rewritten as a standard form AAA-1 syllogism by first substituting the synonymous term "humans" for "people" and then by reducing the complementary term "immortal" in the first premise using the immediate inference known as obversion (that is, "No humans are immortal." is equivalent to "All humans are mortal.").

The letter S is the subject of the conclusion, P is the predicate of the conclusion, and M is the middle term. The major premise links M with P and the minor premise links M with S. However, the middle term can be either the subject or the predicate of each premise where it appears. The differing positions of the major, minor, and middle terms gives rise to another classification of syllogisms known as the figure. Given that in each case the conclusion is S-P, the four figures are:

Figure 1 Figure 2 Figure 3 Figure 4
Major premise: M–P P–M M–P P–M
Minor premise: S–M S–M M–S M–S
(Note, however, that, following Aristotle's treatment of the figures, some logicians—e.g., Peter Abelard and John Buridan—reject the fourth figure as a figure distinct from the first. See entry on the Prior Analytics.)

This is the foundation of all logic

the Nyaya school first codified and established a 'system of logic'. The Nyāya recognized four 'sources of knowledge' (pramana): perception, inference, comparison and testimony.

Venn diagrams typically represent two or three sets, but there are forms that allow for higher numbers. Shown below, four intersecting spheres form the highest order Venn diagram that has the symmetry of a simplex and can be visually represented. The 16 intersections correspond to the vertices of a tesseract (or the cells of a 16-cell respectively)

According to the quadrant model the fourth is always different. Four sets are possible although they are very transcendent. The 16 cell reflects the image of the quadrant model (the 16 squares)

In De Libero Arbitrio III.20 & 21 (circa 395 C.E.), when Augustine first attends to the question of the soul's origin in a manner that focuses upon particular possibilities, he does so as part of an anti-Manichean theodicy intended to show that it is the human soul rather than God that is responsible for the presence of moral evil in the world. Thus, as he later points out in Letter 143 (circa 412 C.E.), he is not concerned to adjudicate between these competing hypotheses, but merely to show that each is consistent with a non-Manichean, Neoplatonizing account of moral evil. Nonetheless, the four hypotheses he does advance are important evidence about how he understands the conceptual landscape [O'Daly 1987, pp. 15–20; Mendelson 1998, pp. 30–44], and the anti-Manichean polemic notwithstanding, it is instructive that he makes no attempt to choose between or even to offer a tentative ranking of them.

Interestingly enough, two of the four hypotheses require the soul's existence prior to embodiment. On the first, the soul is sent by God to administer the body (henceforth the "sent" hypothesis); on the second, the soul comes to inhabit the body by its own choice (henceforth the "voluntarist" hypothesis). In later presentations of these hypotheses (though not in De Libero Arbitrio III), Augustine treats the voluntarist hypothesis as involving both a sin on the soul's part and a cyclical process whereby the soul is subject to multiple incarnations [Letter 166.27]. The other two hypotheses, the "traducianist" and the "creationist," do not involve pre-existence, but there is nonetheless a significant contrast between them. On the traducianist account, all souls are propagated from Adam's soul in a manner analogous to that of the body, thus linking each soul to all previous ones by a kind

of genealogical chain. On the creationist hypothesis, however, God creates a new soul for each body, thus creating a kind of vertical link between God and each individual soul.

These hypotheses do not exhaust the logical possibilities, but they were the main contenders in Augustine's time. There remains controversy over the extent to which Augustine himself was inclined towards either of the hypotheses that required pre-existence [O'Connell 1968, O'Daly 1987, pp. 15–20; O'Donnell 1992 II.34–5], but there are passages in the Confessions [see Confessions I.6–8] and elsewhere [e.g. De Genesi Contra Manicheos 2.8 (circa 388–9 C.E.) and De Genesi ad Literam Imperfectus Liber 1.3 (circa 393 C.E.)] that have led some to regard it as a possibility he takes very seriously indeed, perhaps even preferring it, at least until the early part of the fifth century [O'Connell 1968; Teske 1991]

The Four Branches of the Mabinogi or Y Pedair Cainc Mabinogi are the earliest prose literature of Britain. Originally written in Wales in Middle Welsh, but widely available in translations, the Mabinogi is generally agreed to be a single work in four parts, or "Branches." The interrelated tales can be read as mythology, political themes, romances, or magical fantasies. They appeal to a wide range of readers, from young children to the most sophisticated adult. The tales are popular today in book format, as storytelling or theatre performances; they appear in recordings and on film, and continue to inspire many reinterpretations in artwork and modern fiction.

Each Branch contains several tale episodes in a sequence, and each Branch is titled with the name of a leading protagonist. These titles are Pwyll, Branwen, Manawydan and Math, but this is a modern custom: the Branches are not titled in the mediaeval manuscripts. Only one character appears in all four Branches, Pryderi, though he is never dominant or central to any of the Branches.

Square 1: Pwyll Prince of Dyfed tells of the heroic and magical sojourn of Pwyll in Annwfn, his shapeshifting, chastity and a duel, which all establish a mighty alliance. The formidable Rhiannon courts him, and he helps her win her freedom to marry him. The strange abduction at birth of their baby son follows, with his rescue, fostering and restoration by the good lord Teyrnon of Gwent. The child is named Pryderi.
Square 2: Branwen Daughter of Llŷr follows Branwen's marriage to the King of Ireland, who abuses her due to insult by her half brother Efnisien. A tragically genocidal war develops fomented by Efnisien, in which a Cauldron which resurrects the dead figures,

and the giant king Bran's head survives his death in an enchanted idyll. Pryderi is merely named as a war survivor, and Branwen dies heartbroken.

Square 3: Manawydan Son of Llŷr brother of Branwen, heir to the throne of Britain, becomes Pryderi's good friend during the war. Pryderi arranges his friend's marriage to Rhiannon. The land of Dyfed is devastated. Journeys in England setting up craft businesses follow. An enchanted trap removes Pryderi and Rhiannon: Manawydan becomes a farmer. He cannily negotiates their release, as well as the restoration of the land, by confronting the villain behind it all.

Square 4: Math Son of Mathonwy is a dark sequence of deception and treachery: war with Dyfed, the death of Pryderi, the double rape of a virgin girl, and the rejection of an unwanted hero son by proud Arianrhod. Gwydion her magician brother is the architect of all these destinies. He adds an artificially incubated pregnancy, and a synthetic woman. She, Blodeuedd, creates a treacherous love triangle, murder in a peculiar manner. Gwydion makes a shamanic journey of redemption.

The local news station was interviewing an 80-year-old lady because she had just gotten married - for the fourth time.

The interviewer asked her questions about her life, about what it felt like to be marrying again at 80, and then about her new husband's occupation.

"He's a funeral director," she answered.

"Interesting," the newsman thought. He then asked her if she wouldn't mind telling him a little about her first three husbands and what they did for a living.

She paused for a few moments, needing time to reflect on all those years. After a short time, a smile came to her face and she answered proudly, explaining that she'd first married a banker when she was in her early 20s, then a circus ringmaster when in her 40s, later on a preacher when in her 60s, and now in her 80s, a funeral director.

The interviewer looked at her, quite astonished, and asked why she had married four men with such diverse careers.

She smiled and explained, "I married one for the money, two for the show, three to get ready, and four to go."

Four guys are hanging out at a bar, and one gets up to go to the bathroom. While he is gone, one of the others sparks up a conversation about his son.

He says, "I was afraid to think of my son's future when he was working as a secretary for a Real estate agency, but when he left that job, he started his own agency, and he's so rich now, that he gave his best friend a new house for his birthday!"

Another man says, "I thought my son was going nowhere when he had a job getting coffee for a stockbroker, but when he left that job, he started playing the market, and now he's so rich, he gave his best friend a million dollars in stock for his birthday!"

Another man says, "I thought my son wasn't going anywhere with his job as a secretary in a car dealership, but now he owns his own dealership, and he gave his best friend a new Mercedes for his birthday!"

The fourth man returned from the bathroom, and they asked him about his son.

The fourth man replied, "Well, I fear for my son's future because he's a hair stylist, and last year, I found out that he was gay, but, on the plus side, his four boyfriends gave him a new house, a million in stock, and a Mercedes for his birthday."

Q: Whats 69 and 69?
A: Dinner for 4.
Did you know the toughest golf foursome to play behind?

A: It's Monica Lewinsky, OJ Simpson, Ted Kennedy, and Bill Clinton.

Q: Why?

A: Monica is a hooker. OJ is a slicer. Kennedy can't drive over water and Clinton doesn't know which hole to play.

Four nuns were standing in line at the gates of heaven. Peter asks the first if she has ever sinned. "Well, once I looked at a man's penis," she said.
"Put some of this holy water on your eyes and you may enter heaven," Peter told her.

Peter then asked the second nun if she had ever sinned. "Well, once I held a man's penis," she replied.

"Put your hand in this holy water and you may enter heaven," he said.

Just then the fourth nun pushed ahead of the third nun. Peter asked her, "Why did you push ahead in line?"

She said, "Because I want to gargle before she sits in it!"

A turnstile antenna is a radio antenna consisting of a set of two identical dipole antennas aligned at right angles to each other and fed in phase quadrature; the two currents applied to the dipoles are 90° out of phase.The name reflects the notion the antenna looks like a turnstile when mounted horizontally. The turnstile antenna is often referred to as crossed dipoles. The antenna can be used in two possible modes. In normal mode the antenna radiates horizontally polarized radio waves perpendicular to its axis. In axial mode the antenna radiates circularly polarized radiation along its axis.

The turnstile antenna was invented by George Brown in 1935[1] and described in scholarship in 1936. The patent history reveals the popularity of the turnstile antenna over the years.

The turnstile antenna is the shape of a quadrant.

The fundamental requirement for the turnstile to function is ensuring each dipole's currents are of equal magnitude and in phase quadrature.[2] This is done with feed-line techniques or by adding reactance in series with the dipoles.

Quadrature feed
A popular method of feeding the two dipoles in a turnstile antenna is to split the RF signal from the transmission line into two equal signals with a two way splitter, then delay one by 90 degrees additional electrical length. Each phase is applied to one of the dipoles

The Stokes parameters are a set of values that describe the polarization state of electromagnetic radiation. They were defined by George Gabriel Stokes in 1852, as a mathematically convenient alternative to the more common description of incoherent or partially polarized radiation in terms of its total intensity (I), (fractional) degree of polarization (p), and the shape parameters of the polarization ellipse. The effect of an optical system on the polarization of light can be determined by constructing the Stokes vector for the input light and applying Mueller calculus, to obtain the Stokes vector of the light leaving the system.

The relationship of the Stokes parameters S0, S1, S2, S3 to intensity and polarization ellipse parameters is shown in the equations below and the figure at right.

{\begin{aligned}S_{0}&=I\\S_{1}&=Ip\cos 2\psi \cos 2\chi \\S_{2}&=Ip\sin 2\psi \cos 2\chi \\S_{3}&=Ip\sin 2\chi \end{aligned}}
The Stokes parameters are defined by

{\begin{matrix}I&\equiv &\langle E_{x}^{2}\rangle +\langle E_{y}^{2}\rangle \\~&=&\langle E_{a}^{2}\rangle +\langle E_{b}^{2}\rangle \\~&=&\langle E_{l}^{2}\rangle +\langle

E_{r}^{2}\rangle ,\\Q&\equiv &\langle E_{x}^{2}\rangle -\langle E_{y}^{2}\rangle ,\\U&\equiv &\langle E_{a}^{2}\rangle -\langle E_{b}^{2}\rangle ,\\V&\equiv &\langle E_{l}^{2}\rangle -\langle E_{r}^{2}\rangle .\end{matrix}}

A four-bar linkage, also called a four-bar, is the simplest movable closed chain linkage. It consists of four bodies, called bars or links, connected in a loop by four joints. Generally, the joints are configured so the links move in parallel planes, and the assembly is called a planar four-bar linkage.

If the linkage has four hinged joints with axes angled to intersect in a single point, then the links move on concentric spheres and the assembly is called a spherical four-bar linkage. Bennett's linkage is a spatial four-bar linkage with hinged joints that have their axes angled in a particular way that makes the system movable.

The Hoeckens linkage is a four-bar mechanism that converts rotational motion to approximate straight-line motion. It is named after Karl Hoecken (1874−1962).

The example to the right spends over half of the cycle in the near straight portion.

The Hoeckens linkage is a cognate linkage of the Chebyshev linkage.

To many clinicians, it may appear that the function of the anterior cruciate and posterior cruciate ligaments (ALL and PLL) is to limit anterior and posterior shear of the knee, as well as prevent rotation of the tibia in relation to the femur. This is what we were taught in orthopedics as we learned to perform the drawer and Lachman's tests of the knee.

In reality, the function of these ligaments is more than merely their contribution to knee stability. These ligaments are vital in transferring power from the muscles of the hip and pelvis (particularly the gluteus maximus and medius) to the leg. This transfer of power is done through the four-bar mechanism created by the degree of tension of these ligaments, and the stiffness of the tibia and femur.[1-4]

A four-bar mechanism is a simple closed-chain linkage composed of four bars (also referred to as links) and joined by four pivoting connections.[5] This mechanism provides efficiency of motion, strength and stability.

Examples of four-bar mechanisms in engineering include vise-grips, lever-armed water pumps, car jacks, oil well pumps, folding chair mechanisms, and umbrellas. This mechanism is so efficient that many of the more modern prosthetic knees (for above-the-knee amputations) are now made with four-bar linkages. Researchers are trying to emulate this naturally occurring mechanism in knee-replacement prostheses.

The four-bar mechanism of the knee is a relatively simple apparatus that transfers power while maximizing leverage and minimizing energy loss. It is part of a broader biotensegrity system, which combines contractile and non-contractile tissues to efficiently transfer power and motion through the musculoskeletal system with minimal energy expenditure.

The four links transfer power and motion from relatively distant sources of power through a driver. In the knee, the femur, which is the longest lever in the body, acts as the driver as it transfers power from the gluteal muscles through its stiffness and strength to create tension on the ALL and PLL. This tension moves the femur relative to the plane(s) of the tibial plateau.

(It should be noted that the four-bar mechanism of the knee does not exactly mirror man-made mechanical models of four-bar machines. The ACL and PCL are relatively stiff only while under load, and even when under load, they maintain some elasticity.)

Certainly the ALL and PLL do not work autonomously in transferring power. The lower extremity is a complex aggregate of structures that includes ligaments, muscles, joint capsules and fascia. There is a concert of activity between these structures during knee motion.

While each of these components is important, the gluteal muscles have a prominent role in both power transfer and protection of the knee.6-10 This knee-gluteal muscle relationship is particularly interesting since the gluteal muscles do not directly attach to or even reside near the knee.

Steno, in his Dissertationis prodromus of 1669 is credited with four of the defining principles of the science of stratigraphy: the law of superposition: "... at the time when any given stratum was being formed, all the matter resting upon it was fluid, and, therefore, at the time when the lower stratum was being formed, none of the upper strata existed"; the principle of original horizontality: "Strata either perpendicular to the horizon or inclined to the horizon were at one time parallel to the horizon"; the principle of lateral continuity: "Material forming any stratum were continuous over the surface of the Earth unless some other solid bodies stood in the way"; and the principle of cross-cutting relationships: "If a body or discontinuity cuts across a stratum, it must have formed after that stratum."[32] These principles were applied and extended in 1772 by Jean-Baptiste L. Romé de l'Isle. Steno's ideas still form the basis of stratigraphy and were key in the development of James Hutton's theory of infinitely repeating cycles of seabed deposition, uplifting, erosion, and submersion

The first three Steno called principles and the last one he called a law. The fourth is always different.

During the Sui dynasty, stone and brick were introduced as material for building pagodas. The Four-Gates Pagoda was built from blocks quarried from a hard local rock. All extant older stone pagodas are sculptured pagodas or columns in the shape of a pagoda. The simple design of the Four Gates Pagoda is typical for one-storey, pavilion-style pagodas: It

has a square cross-section delineated by plane side walls. All elements of the structure are symmetrical with four identical sides each facing one of the four cardinal directions. In the center of each wall is a door with straight sides and round arch on top (hence the name). The roof of the pagoda is pyramid shaped. It consists of 23 tiers of overlapping stone slabs and is supported by 5 tiers of stone eaves. The tip of the roof is occupied by a stone steeple. The overall shape of the steeple resembles a box-shaped pagoda which is carved with Buddhist scriptures and sits on its own Sumeru pedestal with stone corner decorations in the shape of banana leaves. The spire of the steeple is made up of 5 stone discs. The total height of the pagoda is 10.4 meters; each side is 7.4 meters long.

The most common Qi circulating formulation and a treatment for the stress, anger, and frustration associated with Liver Qi Stagnation is known as the "Four Gates". The Four Gates are the right and left side acupuncture points Lv 3-Liver 3 (Taichong) and LI 4-Large Intestine 4 (Hegu).

Together these four acupuncture points are thought to enhance the circulation of Qi and blood throughout the body and have a calming and analgesic effect.

Large Intestine 4 is located on the padded area of your hand between the thumb and index finger, between the first and second metacarpal bones. Massage the point with your thumb on both hands for approximately 30 seconds.

Liver 3 is located in a hollow on the top of your foot below the gap between your big toe and the next toe, between the bones that attach to the large and second toes and gently knead the point for approximately thirty seconds. Then switch sides to stimulate Lv 3 on your other foot.

Scientists and psychologists have studied that this treatment is actually effective.

The Four Seas are point groupings which have a strong effect on their related system within the body (i.e. qi, blood, marrow, digestion).
The Sea of Qi Points (ST 9, CV 17, GV 15, GV 14) effect the amount and flow of Qi (energy) within the body. A person with excess Qi may experience problems of an excess

nature in the upper body (headache, red face, fullness in the chest, etc.). A person with Qi deficiency may experience problems with fatigue, weakness, shortness of breath, etc.

The Sea of Blood Points (UB 11, ST 37, ST 39) effect the amount and flow of Blood (which constitutes more than the western idea of blood) within the body. Excesses in the Blood, according to the classics, may make someone feel larger than they are and make them aware of a subtle illness or imbalance within their body. Blood excess is not a primary diagnosis in TCM, whereas Blood stagnation is. Blood deficiency may lead to a variety of issues within a person such as dizziness, dryness, thinking problems, etc. Again, according to the classics, Blood deficiency may make someone feel smaller than they are, however, this doesn't seem to be a common complaint in modern clinical practice. For Blood issues, points such as UB 17, UB 18, UB 19, SP 10 and LV 8 are much more widely used.

The Sea of Water and Grain Points (ST 30, ST 36) effect digestion and appetite.

The Sea of Marrow Points (GV 20, GV 16) effect mental functioning and energy levels. When deficient a person may experience fatigue, tinnitus, weakness in the lower limbs, etc.

Acupuncture has numerous approaches around the world, including virtually every Asian nation. However, approximately 600 years ago, the Koreans developed one of the most significant techniques of balancing the meridians. The procedure is virtually unknown to most acupuncturists except in Korea, extreme northern China and in the northern islands of Japan.

The technique requires the use of four specific acupuncture points for each meridian that is shown to be either too high or too low. In Chinese acupuncture, the utilization of the single "tonification" or "sedation" point is all that is classically used.

Even though simple tonification and sedation will suffice in most cases, for those stubborn conditions that are having great difficulty in establishing a balance, this Korean system is ideal. This technique will balance meridians when other procedures will not

The four steps for a "deficient" meridian are:

Tonify the horary point of the mother organ.

Tonify the mother organ's element point on the affected organ.

Sedate the horary point of the controlling meridian (KO cycle).

Sedate the controlling organ's element point on the affected organ.

The four steps for an "excessive" meridian are:
Tonify the horary point of the controlling organ (KO cycle).

Tonify the controlling organ's element point on the affected organ.

Sedate the horary point on the "son" organ.

Sedate the son organ's element point on the affected organ.

The four estates are: politics, administration, judiciary, journalism.

Abstract Master Cui's Four Flowers point combination is a group of non-channel points specifically described for the purpose of applying moxibustion in severe vacuity conditions. Traditionally, this group of points was located using an unusual technique, but over time some doctors simplified the point location method or equated them with channel points.

Two diagrams known as bagua (or pa kua) loom large in feng shui, and both predate their mentions in the Yijing (or I Ching).[citation needed] The Lo (River) Chart (Luoshu) was developed first,[42] and is sometimes associated with Later Heaven arrangement of the bagua. This and the Yellow River Chart (Hetu, sometimes associated with the Earlier Heaven bagua) are linked to astronomical events of the sixth millennium BC, and with the Turtle Calendar from the time of Yao. The Turtle Calendar of Yao (found in the Yaodian section of the Shangshu or Book of Documents) dates to 2300 BC, plus or minus 250 years.[44]

In Yaodian, the cardinal directions are determined by the marker-stars of the mega-constellations known as the Four Celestial Animals:

East
The Azure Dragon (Spring equinox)—Niao (Bird 鳥), α Scorpionis
South
The Vermilion Bird (Summer solstice)—Huo (Fire 火), α Hydrae
West
The White Tiger (Autumn equinox)—Mǎo (Hair 毛), η Tauri (the Pleiades)
North
The Black Tortoise (Winter solstice)—Xū (Emptiness, Void 虛), α Aquarii, β Aquarii
The diagrams are also linked with the sifang (four directions) method of divination used during the Shang dynasty.[45] The sifang is much older, however. It was used at Niuheliang, and figured large in Hongshan culture's astronomy. And it is this area of China that is linked to Huangdi, the Yellow Emperor, who allegedly invented the south-pointing spoon (see compass)

The Year of the Four Emperors was a year in the history of the Roman Empire, AD 69, in which four emperors ruled in succession: Galba, Otho, Vitellius, and Vespasian.

The suicide of emperor Nero, in 68, was followed by a brief period of civil war, the first Roman civil war since Mark Antony's death in 30 BC. Between June of 68 and December of 69, Rome witnessed the successive rise and fall of Galba, Otho and Vitellius until the final accession of Vespasian, first of the Imperial Flavian dynasty, in July 69. The social, military and political upheavals of the period had Empire-wide repercussions, which included the outbreak of the Batavian rebellion.

I discussed that the four fields of inquiry are science, religion, art, and philosophy. There is the questionable fifth, history. A lot of people say that history is a science so it is not a separate field of inquiry. There is a connection between the first square and the fifth. The first, science, is the light, the fifth, history, is the true light. Some historians argue that history is not a science because they say it cannot be replicated and studied (arguably). Also history, the fifth square, and philosophy, the fourth square, are very connected. Some historians and philosophers say that history and philosophy are the same thing. The fourth square always indicates the nature of the fifth. In the end of this book I am going to give some examples from history that fulfill the quadrant model pattern.

Regardless the fifth is always questionable. The fourth is different. Some say that philosophy should just be reduced to science. As I mentioned philosophy encompasses science art and religion, the nature of the fourth square. The fifth square is always questionable.

Ancient historians tell us that Alexander the Great's four generals divided his empire and assumed control of different parts. His four generals were Lysimachus, Cassander, Seleucus, and Ptolemy.
Square 1: Lysimachus received Thrace and most of Asia Minor.
Square 2: Cassander obtained Macedonia and Greece.
Square 3: Ptolemy was given Egypt, Palestine, Cilicia, Petra, and Cyprus while
Square 4:Seleucus controlled the rest of Asia: Syria, Babylon, Persia, and India.
After Alexander's death his empire was divided among these four parts

In Japan, the four brings misfortune. They avoid to pronounce it because the same word means "the death". The fourth square is knowledge/death

Amerindians, this number is the perfection: the prayers are repeated four times, the dances have four tempo, and the warriors do four pauses before to rush on their enemies.

There are four opposed camps of the morality and nature of evil: moral absolutism, amoralism, moral relativism, and moral universalism.

The Valley of Mexico can be subdivided into four basins, but the largest and most-studied is the area which contains Mexico City. This section of the valley in particular is colloquially

referred to as the "Valley of Mexico".[3] The valley has a minimum altitude of 2,200 meters (7,200 ft) above sea level and is surrounded by mountains and volcanoes that reach elevations of over 5,000 meters (16,000 ft).[4] It is an enclosed valley with no natural outlet for water to flow and a gap to the north where there is a high mesa but no high mountain peaks. Within this vulnerable watershed all the native fishes were extinct by the end of the 20th century.[5] Hydrologically, the valley has three features. The first feature is the lakebeds of five now-extinct lakes, which are located in the southernmost and largest of the four sub-basins. The other two features are piedmont, and the mountainsides that collect the precipitation that eventually flows to the lake area. These last two are found in all four of the sub-basins of the valley.[1][3] Today, the Valley drains through a series of artificial canals to the Tula River, and eventually the Pánuco River and the Gulf of Mexico. Seismic activity is frequent here, and the valley is considered an earthquake prone zone.[6]

Mexico cityIntercity buses[edit]

The city has four major bus stations (North, South, Observatorio, TAPO), which comprise one of the world's largest transportation agglomerations, with bus service to many cities across the country and international connections.

The Project Management Triangle (called also Triple Constraint or the Iron Triangle) is a model of the constraints of project management. It is a graphic aid where the three attributes show on the corners of the triangle to show opposition. It is useful to help with intentionally choosing project biases, or analyzing the goals of a project.[1] It is used to illustrate that project management success is measured by the project team's ability to manage the project, so that the expected results are produced while managing time and cost.[2][3][4]

Like any human undertaking, projects need to be performed and delivered under certain constraints. Traditionally, these constraints have been listed as "scope" (features and quality), "time", and "cost".[5] These are also referred to as the "Project Management Triangle," where each side represents a constraint. One side of the triangle cannot be changed without affecting the others. A further refinement of the constraints separates product "quality" or "performance" from scope, and turns quality into a fourth constraint.

The fourth is always different

In statistics, a contingency table is a type of table in a matrix format that displays the (multivariate) frequency distribution of the variables. They are heavily used in survey research, business intelligence, engineering and scientific research. They provide a basic picture of the interrelation between two variables and can help find interactions between them. The term contingency table was first used by Karl Pearson in "On the Theory of Contingency and Its Relation to Association and Normal Correlation",[1] part of the Drapers' Company Research Memoirs Biometric Series I published in 1904.

A crucial problem of multivariate statistics is finding (direct-)dependence structure underlying the variables contained in high-dimensional contingency tables. If some of the conditional independences are revealed, then even the storage of the data can be done in a smarter way (see Lauritzen (2002)). In order to do this one can use information theory concepts, which gain the information only from the distribution of probability, which can be expressed easily from the contingency table by the relative frequencies.
contingency tables sort of look like quadrants

In the field of machine learning, a confusion matrix, also known as a contingency table or an error matrix [3] , is a specific table layout that allows visualization of the performance of an algorithm, typically a supervised learning one (in unsupervised learning it is usually called a matching matrix). Each column of the matrix represents the instances in a predicted class while each row represents the instances in an actual class (or vice-versa).[2] The name stems from the fact that it makes it easy to see if the system is confusing two classes (i.e. commonly mislabeling one as another).

Contents [hide]
Example[edit]
If a classification system has been trained to distinguish between cats, dogs and rabbits, a confusion matrix will summarize the results of testing the algorithm for further inspection. Assuming a sample of 27 animals — 8 cats, 6 dogs, and 13 rabbits, the resulting confusion matrix could look like the table below:

		Predicted		
		Cat	Dog	Rabbit
Actual class	Cat	5	3	0

Dog   2   3   1
Rabbit 0   2   11
In this confusion matrix, of the 8 actual cats

In predictive analytics, a table of confusion (sometimes also called a confusion matrix), is a table with two rows and two columns that reports the number of false positives, false negatives, true positives, and true negatives. This allows more detailed analysis than mere proportion of correct guesses (accuracy). Accuracy is not a reliable metric for the real performance of a classifier, because it will yield misleading results if the data set is unbalanced (that is, when the number of samples in different classes vary greatly). For example, if there were 95 cats and only 5 dogs in the data set, the classifier could easily be biased into classifying all the samples as cats. The overall accuracy would be 95%, but in practice the classifier would have a 100% recognition rate for the cat class but a 0% recognition rate for the dog class.

Assuming the confusion matrix above, its corresponding table of confusion, for the cat class, would be:

5 true positives
(actual cats that were
correctly classified as cats)2 false positives
(dogs that were
incorrectly labeled as cats)
3 false negatives
(cats that were
incorrectly marked as dogs)   17 true negatives
(all the remaining animals,
correctly classified as non-cats)
The final table of confusion would contain the average values for all classes combined.

Let us define an experiment from P positive instances and N negative instances for some condition. The four outcomes can be formulated in a 2×2 contingency table or confusion matrix, as follows:

True condition
Total population   Condition positive Condition negative Prevalence =
Σ Condition positive
/
Σ Total population
Predicted
condition   Predicted condition
positive True positive   False positive
(Type I error)   Positive predictive value (PPV), Precision =

Σ True positive

/

Σ Test outcome positive

False discovery rate (FDR) =

Σ False positive

/

Σ Test outcome positive

Predicted condition

negative False negative

(Type II error)　　True negative　　False omission rate (FOR) =

Σ False negative

/

Σ Test outcome negative

Negative predictive value (NPV) =

Σ True negative

/

Σ Test outcome negative

Accuracy (ACC) =

Σ True positive + Σ True negative

/

Σ Total population

True positive rate (TPR), Sensitivity, Recall =

Σ True positive

/

Σ Condition positive

False positive rate (FPR), Fall-out =

Σ False positive

/

Σ Condition negative

Positive likelihood ratio (LR+) =

TPR

/

FPR

Diagnostic odds ratio (DOR) =

LR+

/

LR−

False negative rate (FNR), Miss rate =

Σ False negative

/

Σ Condition positive

True negative rate (TNR), Specificity (SPC) =

Σ True negative

/

Σ Condition negative

Negative likelihood ratio (LR−) =

FNR

/

TNR

Detection theory or signal detection theory is a means to quantify the ability to discern between information-bearing patterns (called stimulus in living organisms, signal in machines) and random patterns that distract from the information (called noise, consisting of background stimuli and random activity of the detection machine and of the nervous system of the operator). In the field of electronics, the separation of such patterns from a disguising background is referred to as signal recovery.[1]

predicted condition negative condition negative true negative

predicted condition positive condition negative false positive type 1 error

predicted condition negative and condition positive is a false negative type two error

predicted condition positive and condition positive is a true positive

The confusion table has four squares based off of two dualities

Signal detection theory (SDT) is used when psychologists want to measure the way we make decisions under conditions of uncertainty, such as how we would perceive distances in foggy conditions. SDT assumes that the decision maker is not a passive receiver of information, but an active decision-maker who makes difficult perceptual judgments under conditions of uncertainty. In foggy circumstances, we are forced to decide how far away from us an object is, based solely upon visual stimulus which is impaired by the fog. Since the brightness of the object, such as a traffic light, is used by the brain to discriminate the distance of an object, and the fog reduces the brightness of objects, we perceive the object to be much farther away than it actually is (see also decision theory).

To apply signal detection theory to a data set where stimuli were either present or absent, and the observer categorized each trial as having the stimulus present or absent, the trials are sorted into one of four categories:

	Respond "Absent"	Respond "Present"
Stimulus Present	Miss	Hit

Stimulus Absent   Correct Rejection False Alarm

Based on the proportions of these types of trials, numerical estimates of sensitivity can be obtained with statistics like the sensitivity index d' and A',[7] and response bias can be estimated with statistics like c and β.[7]

Signal detection theory can also be applied to memory experiments, where items are presented on a study list for later testing. A test list is created by combining these 'old' items with novel, 'new' items that did not appear on the study list. On each test trial the subject will respond 'yes, this was on the study list' or 'no, this was not on the study list'. Items presented on the study list are called Targets, and new items are called Distractors. Saying 'Yes' to a target constitutes a Hit, while saying 'Yes' to a distractor constitutes a False Alarm.

	Respond "No"	Respond "Yes"
Target	Miss	Hit
Distractor	Correct Rejection	False Alarm

square 4: stimulus absent respond present false alarm

square 3: stimulus present respond present hit

square 2: stimulus absent respond absent corr rejection

square 1: stimulus present respond absent miss

Bayes Criterion[edit]
In some cases, it is far more important to respond appropriately to H1 than it is to respond appropriately to H2. For example, if an alarm goes off, indicating H1 (an incoming bomber is carrying a nuclear weapon), it is much more important to shoot down the bomber if H1 = TRUE, than it is to send a fighter squadron to inspect a false alarm (i.e., H1 = FALSE, H2 = TRUE) (assuming a large supply of fighter squadrons). The Bayes criterion is an approach suitable for such cases.[8]

Here a utility is associated with each of four situations:

U_{11}: One responds with behavior appropriate to H1 and H1 is true: fighters destroy bomber, incurring fuel, maintenance, and weapons costs, take risk of some being shot down;

U_{12}: One responds with behavior appropriate to H1 and H2 is true: fighters sent out, incurring fuel and maintenance costs, bomber location remains unknown;
U_{21}: One responds with behavior appropriate to H2 and H1 is true: city destroyed;
U_{22}: One responds with behavior appropriate to H2 and H2 is true: fighters stay home, bomber location remains unknown;

Evaluation of binary classifiers[edit]
Main article: Evaluation of binary classifiers

From the contingency table you can derive four basic ratios
There are many metrics that can be used to measure the performance of a classifier or predictor; different fields have different preferences for specific metrics due to different goals. For example, in medicine sensitivity and specificity are often used, while in information retrieval precision and recall are preferred. An important distinction is between metrics that are independent on the prevalence (how often each category occurs in the population), and metrics that depend on the prevalence – both types are useful, but they have very different properties.

Given a classification of a specific data set, there are four basic data: the number of true positives (TP), true negatives (TN), false positives (FP), and false negatives (FN). These can be arranged into a 2×2 contingency table, with columns corresponding to actual value – condition positive (CP) or condition negative (CN) – and rows corresponding to classification value – test outcome positive or test outcome negative. There are eight basic ratios that one can compute from this table, which come in four complementary pairs (each pair summing to 1). These are obtained by dividing each of the four numbers by the sum of its row or column, yielding eight numbers, which can be referred to generically in the form "true positive row ratio" or "false negative column ratio", though there are conventional terms. There are thus two pairs of column ratios and two pairs of row ratios, and one can summarize these with four numbers by choosing one ratio from each pair – the other four numbers are the complements.

The column ratios are True Positive Rate (TPR, aka Sensitivity or recall), with complement the False Negative Rate (FNR); and True Negative Rate (TNR, aka Specificity, SPC), with complement False Positive Rate (FPR). These are the proportion of the population with the condition (resp., without the condition) for which the test is correct (or, complementarily, for which the test is incorrect); these are independent of prevalence.

The row ratios are Positive Predictive Value (PPV, aka precision), with complement the False Discovery Rate (FDR); and Negative Predictive Value (NPV), with complement the False Omission Rate (FOR). These are the proportion of the population with a given test result for which the test is correct (or, complementarily, for which the test is incorrect); these depend on prevalence.

In diagnostic testing, the main ratios used are the true column ratios – True Positive Rate and True Negative Rate – where they are known as sensitivity and specificity. In informational retrieval, the main ratios are the true positive ratios (row and column) – Positive Predictive Value and True Positive Rate – where they are known as precision and recall.

One can take ratios of a complementary pair of ratios, yielding four likelihood ratios (two column ratio of ratios, two row ratio of ratios). This is primarily done for the column (condition) ratios, yielding likelihood ratios in diagnostic testing. Taking the ratio of one of these groups of ratios yields a final ratio, the diagnostic odds ratio (DOR). This can also be defined directly as (TP×TN)/(FP×FN) = (TP/FN)/(FP/TN); this has a useful interpretation – as an odds ratio – and is prevalence-independent.

There are a number of other metrics, most simply the accuracy or Fraction Correct (FC), which measures the fraction of all instances that are correctly categorized; the complement is the Fraction Incorrect (FiC). The F-score combines precision and recall into one number via a choice of weighing, most simply equal weighing, as the balanced F-score (F1 score). Some metrics come from regression coefficients: the markedness and the informedness, and their geometric mean, the Matthews correlation coefficient. Other metrics include Youden's J statistic, the uncertainty coefficient, the Phi coefficient, and Cohen's kappa.

Sensitivity and specificity are statistical measures of the performance of a binary classification test, also known in statistics as classification function:

Sensitivity (also called the true positive rate, or the recall in some fields) measures the proportion of positives that are correctly identified as such (e.g., the percentage of sick people who are correctly identified as having the condition).
Specificity (also called the true negative rate) measures the proportion of negatives that are correctly identified as such (e.g., the percentage of healthy people who are correctly identified as not having the condition).
Thus sensitivity quantifies the avoiding of false negatives, as specificity does for false positives.

For any test, there is usually a trade-off between the measures. For instance, in an airport security setting in which one is testing for potential threats to safety, scanners may be set to trigger on low-risk items like belt buckles and keys (low specificity), in order to reduce the risk of missing objects that do pose a threat to the aircraft and those aboard (high sensitivity). This trade-off can be represented graphically as a receiver operating characteristic curve.

A perfect predictor would be described as 100% sensitive (e.g., all sick are identified as sick) and 100% specific (e.g., no healthy are identified as sick); however, theoretically any predictor will possess a minimum error bound known as the Bayes error rate.

In general, Positive = identified and negative = rejected. Therefore:

True positive = correctly identified
False positive = incorrectly identified
True negative = correctly rejected
False negative = incorrectly rejected
Let us consider a group with P positive instances and N negative instances of some condition. The four outcomes can be formulated in a 2×2 contingency table or confusion matrix, as follows

In statistics, polychoric correlation is a technique for estimating the correlation between two theorised normally distributed continuous latent variables, from two observed ordinal variables. Tetrachoric correlation is a special case of the polychoric correlation applicable when both observed variables are dichotomous. These names derive from the polychoric and tetrachoric series which are used for estimation of these correlations. These series' were mathematical expansions once but not anymore.

Fisher's exact test[1][2][3] is a statistical significance test used in the analysis of contingency tables. Although in practice it is employed when sample sizes are small, it is valid for all sample sizes. It is named after its inventor, Ronald Fisher, and is one of a class of exact tests, so called because the significance of the deviation from a null hypothesis (e.g., P-value) can be calculated exactly, rather than relying on an approximation that becomes exact in the limit as the sample size grows to infinity, as with many statistical tests.

The test is useful for categorical data that result from classifying objects in two different ways; it is used to examine the significance of the association (contingency) between the two kinds of classification. So in Fisher's original example, one criterion of classification could be whether milk or tea was put in the cup first; the other could be whether Dr Bristol thinks that the milk or tea was put in first. We want to know whether these two classifications are associated – that is, whether Dr Bristol really can tell whether milk or tea was poured in first. Most uses of the Fisher test involve, like this example, a 2 × 2 contingency table. The p-value from the test is computed as if the margins of the table are

fixed, i.e. as if, in the tea-tasting example, Dr Bristol knows the number of cups with each treatment (milk or tea first) and will therefore provide guesses with the correct number in each category. As pointed out by Fisher, this leads under a null hypothesis of independence to a hypergeometric distribution of the numbers in the cells of the table.

A two by two table is a quadrant

With large samples, a chi-squared test can be used in this situation. However, the significance value it provides is only an approximation, because the sampling distribution of the test statistic that is calculated is only approximately equal to the theoretical chi-squared distribution. The approximation is inadequate when sample sizes are small, or the data are very unequally distributed among the cells of the table, resulting in the cell counts predicted on the null hypothesis (the "expected values") being low. The usual rule of thumb for deciding whether the chi-squared approximation is good enough is that the chi-squared test is not suitable when the expected values in any of the cells of a contingency table are below 5, or below 10 when there is only one degree of freedom (this rule is now known to be overly conservative[4]). In fact, for small, sparse, or unbalanced data, the exact and asymptotic p-values can be quite different and may lead to opposite conclusions concerning the hypothesis of interest.[5][6] In contrast the Fisher exact test is, as its name states, exact as long as the experimental procedure keeps the row and column totals fixed, and it can therefore be used regardless of the sample characteristics. It becomes difficult to calculate with large samples or well-balanced tables, but fortunately these are exactly the conditions where the chi-squared test is appropriate.

For hand calculations, the test is only feasible in the case of a 2 × 2 contingency table. However the principle of the test can be extended to the general case of an m × n table,[7][8] and some statistical packages provide a calculation (sometimes using a Monte Carlo method to obtain an approximation) for the more general case.

For example, a sample of teenagers might be divided into male and female on the one hand, and those that are and are not currently dieting on the other. We hypothesize, for example, that the proportion of dieting individuals is higher among the women than among the men, and we want to test whether any difference of proportions that we observe is significant. The data might look like this:

	Men	Women	Row total
Dieting	1	9	10
Non-dieting	11	3	14
Column total	12	12	24

The question we ask about these data is: knowing that 10 of these 24 teenagers are dieters, and that 12 of the 24 are female, and assuming the null hypothesis that men and women are equally likely to diet, what is the probability that these 10 dieters would be so unevenly distributed between the women and the men? If we were to choose 10 of the teenagers at random, what is the probability that 9 or more of them would be among the 12 women, and only 1 or fewer from among the 12 men?

Before we proceed with the Fisher test, we first introduce some notation. We represent the cells by the letters a, b, c and d, call the totals across rows and columns marginal totals, and represent the grand total by n. So the table now looks like this:

	Men	Women	Row Total
Dieting	a	b	a + b
Non-dieting	c	d	c + d
Column Total	a + c	b + d	a + b + c + d (=n)

The formula above gives the exact hypergeometric probability of observing this particular arrangement of the data, assuming the given marginal totals, on the null hypothesis that men and women are equally likely to be dieters. To put it another way, if we assume that the probability that a man is a dieter is P, the probability that a woman is a dieter is p, and we assume that both men and women enter our sample independently of whether or not they are dieters, then this hypergeometric formula gives the conditional probability of observing the values a, b, c, d in the four cells, conditionally on the observed marginals (i.e., assuming the row and column totals shown in the margins of the table are given). This remains true even if men enter our sample with different probabilities than women. The requirement is merely that the two classification characteristics—gender, and dieter (or not) -- are not associated.

For example, suppose we knew probabilities P,Q,p,q with P+Q=p+q=1 such that (male dieter, male non-dieter, female dieter, female non-dieter) had respective probabilities (Pp,Pq,Qp,Qq) for each individual encountered under our sampling procedure. Then still, were we to calculate the distribution of cell entries conditional given marginals, we would obtain the above formula in which neither p nor P occurs. Thus, we can calculate the exact probability of any arrangement of the 24 teenagers into the four cells of the table, but Fisher showed that to generate a significance level, we need consider only the cases where the marginal totals are the same as in the observed table, and among those, only the cases where the arrangement is as extreme as the observed arrangement, or more so. (Barnard's test relaxes this constraint on one set of the marginal totals.) In the example, there are 11 such cases. Of these only one is more extreme in the same direction as our data; it looks like this:

While Barnard retracted his test in a published paper,[5] most researchers prefer using Barnard's exact test over Fisher's exact test for analyzing 2×2 contingency tables. The only exception is when the true sampling distribution of the table is hypergeometric. Barnard's test can be applied to larger tables, but the computation time increases and the power advantage quickly decreases.[6] It remains unclear which test statistic is preferred when implementing Barnard's test; however, most test statistics yield uniformly more powerful tests than Fisher's exact test.[7]

The two by two table is the quadrant

Barnard's test is used to test the independence of rows and columns in a contingency table. The test assumes each response is independent. Under independence, there are three types of study designs that yield a 2×2 table. To distinguish the different types of designs, suppose a researcher is interested in testing whether a treatment quickly heals an infection. One possible study design would be to sample 100 infected subjects, randomly give them the treatment or the placebo, and see if the infection is still present after a set time. This type of design is common in cross-sectional studies. Another possible study design would be to give 50 infected subjects the treatment, 50 infected subjects the placebo, and see if the infection is still present after a set time. This type of design is common in case-control studies. The final possible study design would be to give 50 infected subjects the treatment, 50 infected subjects the placebo, and stop the experiment once a set number of subjects has healed from the infection. This type of design is uncommon, but has the same structure as the lady tasting tea study that lead to R. A. Fisher creating the Fisher's Exact test. The probability of a 2×2 table under the first study design is given by the multinomial distribution; the second study design is given by the product of two independent binomial distributions; the third design is given by the hypergeometric distribution.

The difference between Barnard's exact test and Fisher's exact test is how they handle the nuisance parameter(s) of the common success probability when calculating the p-value. Fisher's test avoids estimating the nuisance parameter(s) by conditioning on the margins, an approximately ancillary statistic. Barnard's test considers all possible values of the nuisance parameter(s) and chooses the value(s) that maximizes the p-value. Both tests have sizes less than or equal to the type I error rate. However, Barnard's test can be more powerful than Fisher's test because it considers more 'as or more extreme' tables by not conditioning on both margins. In fact, one variant of Barnard's test, called Boschloo's test, is uniformly more powerful than Fisher's exact test.[3] A more detailed description

chi squared statistical tests also involve quadrant tables

QMRThere are a variety of used by the Coptic Christians.

Old Coptic crosses often incorporate a circle which may vary in size depending on the representation. For the Coptic Church, the circle represents the eternal and everlasting love of God, as shown through Christ's crucifixion, Christ's halo and resurrection.[1]

The Coptic cross is widely used in the Coptic church and the Ethiopian and Eritrean churches. Many Copts have the cross tattooed on the inside of their right arm.[2] The Coptic cross in its modern and ancient forms is considered a sign of faith and pride to the Copts [3] The Ethiopians Christians wear it as a symbol of faith.[4]

In 1984, a Coptic Cross was given as a gift by the Coptic Orthodox Church and mounted on the top of the All Africa Conference of Churches building, since the Coptic Church is considered to be the mother church in Africa.[5]

One of the forms of the Coptic cross, which is referred to as the Ethiopian Coptic cross[6] was worn by Stevie Ray Vaughan.[7] Keith Richards [8] also wears an Ethiopian Coptic Cross.

Ever since Sir William Thomson's vortex theory, mathematicians have tried to classify and tabulate all possible knots. As of May 2008, all prime knots up to 16 crossings have been tabulated. 16 is the squares of the quadrant number

Jim Hoste, Jeff Weeks, and Morwen Thistlethwaite used computer searches to count all knots with 16 or fewer crossings. This research was performed separately using two different algorithms on different computers, lending support to the correctness of its results. Both counts found 1701936 prime knots (including the unknot) with up to 16 crossings.[1]

Starting with three crossings (the minimum for any nontrivial knot), the number of prime knots for each number of crossings is

1, 1, 2, 3, 7, 21, 49, 165, 552, 2176, 9988, 46972, 253293, 1388705, ..
16 is the squares of the quadrant model

Dominican sisters carry on a number of apostolates. They are distinct from the nuns. The sisters are a way of living the vocation of a Third Order Dominican.[citation needed]

As well as the friars, Dominican sisters live their lives supported by four common values, often referred to as the Four Pillars of Dominican Life, they are: community life, common prayer, study and service. St. Dominic called this fourfold pattern of life the "holy preaching". Henri Matisse was so moved by the care that he received from the Dominican Sisters that he collaborated in the design and interior decoration of their Chapelle du Saint-Marie du Rosaire in Vence, France.

Four Pillars of Manufacturing Engineering[edit]

The Four Pillars of Manufacturing Engineering
The four pillars of manufacturing engineering provides a model of fundamental knowledge required for manufacturing practitioners. The model was formally introduced at the Society of Manufacturing Engineers Annual Meeting June 4–7, 2011 in Bellevue, WA. The concept

is supported by the Curricula 2015 Report.[9] Since then the model has been the subject
of numerous scholarly papers and strategic reports.[10]

There are four fundamental pillars:

Materials and Manufacturing Processes
Product, Tooling and Assembly Engineering
Manufacturing Systems and Operations
Manufacturing Competitiveness.
Supporting the pillars are the foundation skills in mathematics and physical science,
engineering science and a broad set of personal effectiveness skills.

The Four Pillars is a research programme set up in 1987 by the Geneva Association, also known as the International
Association for the Study of Insurance Economics. The aim of the Four Pillars research programme is to study the
key importance in the new service economy of Social Security, Insurance, Savings and Employment. The programme
focuses on the future of pensions, welfare and employment. The Geneva Association launched its Four Pillars
research programme with a view to identifying possible solutions to the issue of the future financing of pensions and,
more generally, to organising social security systems in our post-industrial societies. Demographic trends - especially
increased life and health expectancy - could be seen as positive if we were able to devise ways of enabling "ageing in
good-health populations" to make a valid economic and social contribution to the functioning of our service
economies over the decades to come.

The concept of the Four Pillars owes its origin to the fact that in most countries the funding of pensions is based on
three pillars:

The 1st pillar - the compulsory, pay-as-you-go, state pension;
The 2nd pillar - the supplementary (often funding-based) occupational pension;
The 3rd pillar - individual savings (personal pension and assets and life insurance).
The Geneva Association advocated in its publications and seminars a strengthening of the 2nd pillar and further
development of 3rd pillar resources. However, the attention of the Geneva Association has focused above all on a 4th
pillar i.e. the future need for a flexible extension of work-life, mainly on a part-time basis, in order to supplement
income from the three existing pillars. The reorganization of end-of-career and the new age-management strategy - in
which gradual retirement is destined to play a key role - involved in establishing this pillar, also correspond to many of
the changes (e.g. in quality of work and the life cycle) that are specific to our contemporary service economies.[1

QMRThe book Geometrie der Lage (1847) was a landmark in projective geometry. As
Burau (1976) wrote:

Staudt was the first to adopt a fully rigorous approach. Without exception his predecessors
still spoke of distances, perpendiculars, angles and other entities that play no role in
projective geometry.[1]

Furthermore, this book (page 43) uses the complete quadrangle to "construct the fourth harmonic associated with three points on a straight line", the projective harmonic conjugate.

The semiotic square, also known as the Greimas square, is a tool used in structural analysis of the relationships between semiotic signs through the opposition of concepts, such as feminine-masculine or beautiful-ugly, and of extending the relevant ontology.

The semiotic square, derived from Aristotle's logical square of opposition, was developed by Algirdas J. Greimas, a Lithuanian linguist and semiotician, who considered the semiotic square to be the elementary structure of meaning.

Greimas first presented the square in Semantique Structurale (1966), a book which was later published as Structural Semantics: An Attempt at a Method (1983). He further developed the semiotic square with Francois Rastier in "The Interaction of Semiotic Constraints" (1968).

The square has an x like a quadrant

The Stoics were interested in Heraclitus' treatment of fire. In addition to seeing it as the most fundamental of the four elements and the one that is quantified and determines the quantity (logos) of the other three, he presents fire as the cosmos, which was not made by any of the gods or men, but "was and is and ever shall be ever-living fire."[66] Fire is both a substance and a motivator of change, it is active in altering other things quantitatively and performing an activity Heraclitus describes as "the judging and convicting of all things."[67] It is "the thunderbolt that steers the course of all things."[68] There is no reason to interpret the judgement, which is actually "to separate" (κρίνειν krinein), as outside of the context of "strife is justice" (see subsection above).
Fire is the forth square. Fire is always transcendent.

The Radcliffe Quadrangle at Harvard University, formerly the residential campus of Radcliffe College, is part of Harvard's undergraduate campus, in Cambridge, Massachusetts, USA. Generally just called the Quad, it is a traditional college quad slightly removed from the main part of campus. It should not be confused with Radcliffe Yard or with Harvard Yard — where most classes are conducted.

In architecture, a quadrangle (or colloquially, a quad) is a space or courtyard, usually rectangular (square or oblong) in plan, the sides of which are entirely or mainly occupied by parts of a large building (or several smaller buildings). The word is probably most closely associated with college or university campus architecture, but quadrangles may be found in other buildings such as palaces. Most quadrangles are open-air, while a few have

been roofed over (often with glass), to provide additional space for social meeting areas or coffee shops for students.

The word quadrangle was originally synonymous with quadrilateral, but this usage is now relatively uncommon.[1]

Some modern quadrangles resemble cloister gardens of medieval monasteries, called garths, which were usually square or rectangular, enclosed by covered arcades or cloisters. However, it is clear from the oldest examples (such as Mob Quad) which are plain and unadorned with arcades, that the medieval colleges at Oxford and Cambridge were creating practical accommodation for college members. Grander quadrangles that look like cloisters came later, once the idea of a college was well established and benefactors or founders wished to create more monumental buildings.[2]

In North America, Thomas Jefferson's design for the University of Virginia centered the housing and academic buildings in a Palladian form around three sides of the Lawn, a huge grassy expanse. Later, some American college and university planners imitated the Jeffersonian plan, the Oxbridge idea, Beaux-Arts forms, and other models. The University of Chicago's Gothic campus is also notable for its innovative use of quadrangles.[citation needed] All five barracks at The Citadel (military college) feature quadrangles with red-and-white squares (the colors of the South Carolina battle flag), which are used for formations by the Corps of Cadets.

Quadrangles are also found in traditional Kerala houses (Naalukettu) and is known as the Nadumittam ("Middle Space").[3]

The Quadrangle is the common name for a cluster of museums and cultural institutions in Metro Center, Springfield, Massachusetts, on Chestnut Street between State and Edwards Streets.

The Dr. Seuss National Memorial Sculpture Garden, in the center of the Quadrangle, is surrounded by a park, a library, four active museums, a fifth museum due to open in 2016, and a cathedral. A second cathedral is just on the Quadrangle's periphery.

In mathematics, specifically projective geometry, a complete quadrangle is a system of geometric objects consisting of any four points in a plane, no three of which are on a common line, and of the six lines connecting each pair of points. Dually, a complete quadrilateral is a system of four lines, no three of which pass through the same point, and the six points of intersection of these lines. The complete quadrangle was called a tetrastigm by Lachlan (1893), and the complete quadrilateral was called a tetragram; those terms are occasionally still used.