5

The Caravan of Dreams

Abstraction and Imagination

"The past no longer exists. The future is nowhere to be found..

And how can the present move from place to place?"

— **Nagarjuna**

In the primate brain, the ability to predict is located in the same general area for both apes and man. Patricia M. Goldman-Rakic of Yale Medical School, a prominent authority in this field, observed when this area is damaged a monkey's ability to search for a remembered location vanishes. It can use familiar routines to jump to a tree with fruit in clear view, but it can't remember to return the next day. Just like when the young child's toy train enters the tunnel, out of sight is literally out of mind. Piaget's "conservation" vanishes. This encouraged scientists to investigate similar phenomena among humans. It was known some individuals suffering strokes in the prefrontal cortex lost interest in the future. One researcher who investigated this condition is D. H. Ingvar, a Swedish neurophysiologist. Ingvar made his reputation with studies of mental activity using computer displays of structures activated during specific mental processes. In 1985 he wrote "Lesions or dysfunctions of the frontal or prefrontal cortex give rise to states characterized by 'loss of the future,' with consequent indifference, inactivity, lack of ambition, and inability to foresee the consequences of one's future behavior. It is concluded that the

prefrontal cortex is responsible for the temporal organization of behavior and cognition due to its seemingly specific capacity to handle serial information, and to extract causal relations from such information." In simpler terms, damage or serious problems in the prefrontal cortex eliminate the future in some people. They can't imagine a future so they make no plans and don't care about it. It follows the prefrontal cortex is the structure that sets our consciousness into a time frame. It apparently does this by a unique ability to relay commands in a serial order. By creating this chain of events in consciousness, it may also establish causes. The brain's timekeeper had been located.

Why didn't someone pick up on this sooner? There is a good reason. New computerized techniques for mapping and scanning the living brain have revolutionized the field of brain science more than the telescope changed astronomy. "Virtually everything we have learned about memory over the centuries has come from the abnormal, from people with brain injuries," explains Larry R. Squire, who conducted the verbal memory study in the first chapter. "Now we are able to carry the study to normal people, and study normal behavior, and that is very exciting." Mortimer Mishkin, a prominent researcher in perception and memory at the U.S. National Institutes of Health, agrees. "The information you can get is unbeatable. It has opened a window into the brain we did not dream of ten or fifteen years ago." Using similar tests on humans, Goldman-Racik obtained similar results. In some manner, the prefrontal cortex caches information in a sequential form. While it's there, we alter it on line to create a sense of prediction. Without these self-created sequential images pulling us forward in life, our conscious attention can't get out of the present tense. Two neurologists, P.J. Eslinger and A.R. Damasio, described dramatic changes in the behavior of a man whose prefrontal area was removed due to a cancerous tumor. Highly intelligent, he continued to test well but his daily activity was completely without internal direction.

"EVR (the patient's initials) was not spontaneously motivated for action. As he awoke, there was no evidence that an internal, automatic program was ready to propel him into the routine daily activities of

self-care and feeding, let alone those of traveling to a job and discharging the assignments of a given day. If these goals were presented externally and repeatedly, they triggered the expected actions. But when external recall mechanisms provided by relatives and friends failed, or when the environment failed to challenge him with situations that demanded a response, he resumed his relative goalless, unpressured existence. He seemed to have no goals to aim for, no expectations, and without repeated directions and urgings from others, he would simply sit about doing nothing until something directly presented itself to his attention. Only then would he react." It was the same phenomena Ingvar had noted in Sweden. EVR was completely off the track of time.

Goldman-Rakic went on to describe this unique ability of the prefrontal cortex to supply information not available from our immediate perceptions. "The prefrontal cortex can play this role," she explains, "because of its elemental capacity to access and hold 'on line' information relevant to the task at hand. It seems possible that many integrated higher order functions including language, concept formation, and planning for the future may be built on this functional element." Given enough memory capacity, the prefrontal cortex can "access and process information derived from present events and/or long term stores, to guide a response over the period of seconds, minutes, and possibly hours required to fulfill the command." In other words, combining perception with memory it creates consecutive mental images, the projections and predictions that keeps our conscious mind directed towards our long term goals.

Beta Rollout: The Brain Updates Again

Four million years ago, groups of small brained early African hominids began to move out onto the savannas. Further out into the grasslands, trees were scarce. The heat was intense, but by standing up they could reduce the heat burden. They shed their insulating fur and developed evaporative cooling by sweating. Over three million years they slowly became completely bipedal, a balancing act any bird can do

but one primates mastered rather late. They also developed varicose veins, lower back pain, and pot bellies as everything sagged downward.

The rewards, however, were great. With both hands free to carry weapons, tools, food, and babies, they started traveling. “Once you get apes up on two legs,” remarked University of Massachusetts researcher Roy Larick, “they’re going to be everywhere before you know it.” Some bipedal hominids had made it from the Sudan to Chad by 3.5 million years ago. Other groups of early humans, generally referred to as *homo erectus*, were using stones for pounders near the Three Rivers Gorge in China’s Sichuan Province as early as two million years ago. These early ancestors continued to improve slowly but they never evolved beyond stone chipping as high tech. Bipedalism and the improved cooling system also promoted the final growth of our brain. As our erect posture tilted our necks up, the skull bulged outward in all directions becoming nearly a hemisphere with a face. By now every learned muscle routine was inadvertently hustling huge networked patterns through sequential steps. The neural architecture was in place for something to give it conscious guidance. We would soon have something to think about. The larynx began to descend, making a human vocal tract possible. We would soon have something to talk about. About 200,000 years ago a new species of early humans, *homo sapiens,* began to hunt the savannas of prehistoric Africa. Although the term means “thinking man,” these humans didn’t initially demonstrate any noticeable social or mental differences from other early humans inhabiting the earth at that time. Over thousands of years, some moved north. They began to communicate more specifically, pressuring both the speech cortex and the larynx to further development.

By 85,000 BCE, one group settled in the Middle East in the vicinity of modern day Israel. Everything remained stable for another 40,000 years. At first they apparently coexisted peacefully with migrating groups of Neanderthals emigrating from the Caucasus. The end of the ice age had melted earlier barriers of snow and ice and east European Neanderthals were moving south through the opened mountain passes.

There they found the Cro-Magnons who had moved up from Africa. For 50,000 years, ten times the length of our modern era, they lived as neighbors. They were appear to have been uninterested and uninvolved with each other, keeping to their own kind and rarely interbreeding. Then something remarkable happened that changed everything. Some Cro-Magnons started to act like modern humans. The time had finally come for *homo sapiens sapiens*, man with a mind that could consciously search for reasons; the only mind with the time and the capability to imagine answers. In fact, human conscious chronological time itself had arrived just in time, and it gave us all the time in the world.

From then until now we have all searched our pasts and we have all planned our futures. As families, groups, tribes and nations we learned to examine our yesterdays and plan our tomorrows. This changed our entire relationship with the world, with our fellow humans and with ourselves. As the ability became more and more a part of the human mental repertoire, it mirrored the way this talent matures in each of us between the ages of two and four. As children, our ability to recall and imagine becomes available only gradually. We do not recall waking up one day and just choosing to remember or predict. As we mature, we shift by degrees into human reflective consciousness. It seems likely we did so as a species as well. It is even possible that our unique ability to recall our past and imagine possible futures in chronological sequence could have appeared and disappeared several times before it finally took hold. It took a hundred thousand years to work out all the bugs, but these things take time. The neural staging had to come first, both the unusually massive brain and our arboreal predictive sequencing routines. As visual memory is involved, we developed the ability to sequence more information than simple muscle routines, allowing us to guide and modify them as when we practiced a skill. However, our ability of modern humans to use the prefrontal cortex for a form of mental radar still required a last sophisticated refinement to make it work. We needed to learn how to manipulate abstract ideas and thoughts as well as images and memories.

Thinking with Abstracts

To create our conscious awareness of a future we use images to represent future goals and destinations that don't exist yet. We call this imagination. The prefrontal cortex, which directs sequential activity and monitors mental searches may also be involved in the creation of abstractions, the subtle and invisible catalysts we use to create our imagination, our expectations, and our future. Wiener demonstrated time doesn't move in any particular direction, so it's up to each individual to judge by observation. We also know our perception of time varies depending on how fast the brain is operating. Time can stand still if we get excited enough. Most aspects of time, in fact, seem to be more internal than external in nature. Since our brain is so interconnected, the process of implementing patterns in sequence, allowing us to perform learned activities, could have evolved into the ability to observe and sequence memory itself.

The prefrontal cortex monitors the search for patterns, as it does for word associations, so it must be able to monitor patterns created by sense impressions. The total of these impressions, according to Crick, are gathered about ten times a second in a natural rhythm, fading as new ones appear. If the prefrontal cortex "notices" things, this would start to create a vague sense of time moving forward as soon as the brain matures enough to hold an image. Even when we are not searching our minds for specific recall it creates generalized illusion similar to the receding view in a rear-view mirror. Even if a car is not moving, the illusion of forward movement can be created by projecting receding images onto the rear view mirror. In a like manner, the receding impressions of the present moment fading into memory create the constant illusion of time itself moving forward.

In fact, we and our mind are stationary in time. And although there is something real in front of a car to see, nobody sees the future. We can only imagine future scenarios, both short and long term. Since they're all different it's quite obvious we must be making most of it up ourselves. We agree about general phenomena. The sun's going to rise tomorrow. But for the important issues, nobody else knows what we

expect to do after we get up tomorrow morning. This is because the only place we can find models for personal goals or expectations is our own memories. Our perfect imaginary future, for instance, always seems to be a version of our childhood with ourselves in charge. So why doesn't the future appear to be our past in direct reverse? If our furthest imaginary future is a reflection of our deepest remembered past, won't images line up identically on opposite sides of our internal time track?

They don't because we use abstractions to create original scenes from past experience. Abstract concepts such as "red", "angry", or "wet" come unattached to any particular image. We can't locate them with our senses but we need them to create new arrangements from the parts we have available. "If I paint my bookcase red, I imagine it would look like so" is an example. What we are doing is constructing a visual "transform" in the mind, a new image created by altering an existing image. Changing one color for another isn't hard. What's harder is knowing what "red" is. If we can't find "red" unattached to something in the world around us, how can we find it in the bubbling chaos we call consciousness? It's hard to imagine looking for something that doesn't exist in time or space. Even Sherlock Holmes would give up. It makes no sound, it leaves no trace.

Playing With Pictures

Red, blue, up, down, big, small. We need these abstractions to create every future image we imagine, every step in our reasoning, every reflective thought we think. They allow us to speculate, wonder, and prepare. The best example of what the unaided mind can do with a lot of images and abstractions is a dream. All dreams are created inside the brain, so all the images must come from our own memory. Why are they so different from what we experienced? It's the same technique that creates charging dinosaurs in a Spielberg movie. Any image in memory is being recalled together from a lot of different parts. It's not

hard to isolate and manipulate any part of the code at the program level before it gets to consciousness. For computers this means serious number crunching, but to animate a dinosaur we just massage the visual data that makes the dinosaur image. There are complex programs using formulas for perspective, angles, colors, and shading to do this as well as to merge landscapes, age houses, or animate flowers. The human brain is infinitely better at this. It switches angles, toys with sensation, and paints impossible pictures in the visual cortex while we do our unconscious cytokine tuneups at night. Whatever is on our mind can get tossed into the soup and it can stir up quite a illusion.

"That was a scary day at the office but I do it for the family," we think as we drift off to sleep. Conscious awareness is off-line. The primeval hippocampus can't send images to the visual area but it hasn't completely settled down yet. "Scary" it mumbles in basic emotional brain code, "But home" The visual cortex gets the message in vague way but it can't do a search with the prefrontal cortex dozing so tosses some images around. "Scary?" Try swamp, try bugs, try stuck lawnmower, try bulldozers, big bulldozers, "home?" try house, "scary?", try car accident, bugs, swamp, home, take 'em all!" The dream flashes into a nightmare with us in a car stuck in mud in the front of our house with a bug as big as a bulldozer bearing down on us. If we want to have more say in the matter there are both Western and Eastern techniques for "lucid dreaming" to give us better control in our dreams. Still, all dream images are created at the moment from memory manipulated every which way. The so-called "out of body" experiences are good examples of dream states taken too seriously. It's easy for the mind to create "flying through the air" and not much harder to create the world the dreamer seems to be flying through. Dreams of flying about on Jupiter on the other hand are bound to be inaccurate. It bears no relation to any human experience so there's nothing in memory to even start with.

For humans, carrying out a conscious strategy requires an entire collection of these internally altered images to check our progress towards our goals. We call these images our expectations. To arrange these

images, we use the prefrontal cortex's ability to cache and hold sequential patterns. It's a progressive reference, a moving mental clipboard to peek at while sequential tasks are being performed to match our internal model. We actually can't imagine any real future. Everything happens in the present instant in our own minds. Setting goals, we begin with a real image like the actual bookcase from memory. We use "red" as an abstract and manipulate the existing pattern in a cache memory to create an image of what it "might" look like "if" we painted it red. All future images are formed this way, by creating complex alterations of memories we acquired from experience. But where do our abstracts come from? The same sequencing ability we developed to repeat complex activities may also create abstractions, the tools we use to make the personal futures we carry about in our minds.

To direct sequential activities, the prefrontal cortex automatically arranges patterns to occur in order. This is so we can tie our shoes without thinking and not find ourselves absently untying them. The sequential arrangement of stored patterns creates a forward chronology in the present moment as each muscle movement occurs. In the human brain this compression of "future event images" in the present moment stacks patterns associated with large neural networks temporarily in sequences like decks of cards. Since every planned activity requires thousands of sequential patterns in the cache memory for a moment, there's bound to be crosstalk.

For instance, walking down a familiar street each cerebellar pattern associated with walking implements a single muscle movement. In the cache memory monitored by the prefrontal cortex, current visual input from the eyes is compared to a string of visual transforms created from memory as we walk along. If the house doesn't visually enlarge as we approach, matching the transforms, something's wrong. However if progressive views of the approaching house match our expectations, we're nearly home. We all have our own ideas of the way something will be when we finish it, but we check our progress with images of expected stages on the way. With such huge patterns cached in sequence, some information must travel

between them while they are waiting or during implementation. As both habitual and learned activities unconsciously implement millions of sequenced patterns, we'll have plenty of occasions to juxtapose those containing common aspects. If we sequence patterns linked to memories containing a red bird, a red flower and finally a red house, "red" would register three times more than other parts. If this happens enough times, "red" itself will begins to leave its own sub-imprint, eventually creating its own small pattern to be folded into the memory. We'd finally call something "red" after someone named the color for us, but that's just the word label we use. We still can't locate a "red" without something to attach it to. Except in the mind. The mind knows red, it has special color systems to color things used by all creatures with color vision. In the human alone, we know what we're talking about when we say "red". It's not just a part of a picture. It has it's own reality in our virtual reality. We lift it off red objects and use it abstractly to color anything we want in the imagination.

Since the creation of these little patterns doesn't require sense inputs, new information can now be internally generated. Reverberation between similar aspects of patterns cached together for a moment spin off these numerous sub-patterns like little grains of quantum sand transforming into abstract pearls. It's been done before. Compressing chaotic patterns together in sequence at brain level mirrors the way galactic shock waves compress interstellar hydrogen to create sparkling fields of budding stars. In our case, the bright rewards are tiny patterns that simply mean "up" or "good" or "dark", available to transform memories into imagination.

The size and complexity of the patterns we cache has a great deal to do with this. Our massive increase in cerebral capacity provided unprecedented detail. The final evolution of the human prefrontal cortex made it possible for the largest and most detailed mental patterns on earth to be monitored sequentially in a regular and ongoing manner. Over time, this virtual information, these abstract concepts, begin to appear in the mind. Networks grow in response to these new patterns and further extended them.

"Red" is an abstract. But once "red" has it's own pattern we can imagine what a "red bookcase" will look like simply by altering any image of the bookcase in memory with our pattern for "red." The imaginary red bookcase appears in the cache memory, synthesized by a simple transform. Comparing birds and flowers to derive abstract colors is a simple example of this capability. More complex images can also be compared, sometimes with interesting results. If one notices the way the earth seems to be drawn to the sun and compares it with the image of a falling apple being drawn to the earth, one might synthesize an impressive abstract such as the law of gravity. Newton himself once said "Genius is but the gift of analogy." The gift of conscious sequential comparison, which came with our most recent brain upgrade, is the genius of humankind. Simply by doing what it does best, the prefrontal cortex helps create the abstracts that let us fashion any imaginable future.

Over time, we became adept at generating abstract information from neither genetics nor experience but through patterns juxtaposed in the brain. As we alter the images sequentially "forward" we create an imaginary future. We can reverse direction. "If only I had painted it before I built it in." With this we can reconsider, and in reconsideration we learn from our past. The term pagination refers to a sequential arrangement of pages. Humans reflect and plan using imagination, sequentially recalling, transforming, and inspecting images created from memory and abstract concepts. It happens both consciously and unconsciously as thought and movement constantly sequence patterns and synthesize abstractions within the flowing dynamic of the living brain.

This ability to derive conscious abstractions from unconscious activity does not diminish with age. In fact the more experiential memory we have, the clearer those universal abstracts may stand out. In a study at the University of Oregon, Cynthia Adams asked a number of women of different ages to listen to a story and then repeat it to a child. Adams and her fellow researchers expected some older seniors might do as well as younger women. They were surprised to find that the seniors did better. They not only told the

tales with less repetition and verbal baggage, they expressed themselves more clearly and fluently. “When these older women retold their tales, they challenged the stereotype of age related memory decline,” she reported. “It may be that as we grow older, we improve our ability to home in on the important themes found in information.” If age-related mental deterioration has not set in, the ongoing experience of life allows us to acquire a larger and larger collection of images. Repeated scanning will highlight major generalities in ever clearer and more detailed form. It is our unique ability to derive rule systems, hold them on-line and use them later which among humans alone allows the old to become the wise. It may have evolved originally to find fruit trees or craft better tools, but our huge brains provide so much additional detail we grind out complex abstractions without thinking about it. In fact, until we accumulate a basic set of abstractions to use for our transforms, we really can’t “think” about things at all. It made communication easier when we learned to think in abstracts but it also made speech really necessary. We can’t point to places that exist only our minds.

This can only happen with an organic living brain. Automatic ongoing pattern sequencing can’t occur in a computer environment. Computer memories are reactive rather than active, they have to be asked. Neurons, on the other hand, are living cells. The brain is not an immense digital computer sequencing pictures like slides. Each cell is alive and pulsing away day and night. Most of this random muttering is too quiet for us to perceive consciously but there is always a mental background hum. This continual chatter, a backdrop of constant activity, characterizes the mind at rest. It is the constant flickering of billions of energy patterns as our cellular chorus carries on an ancient tradition of mindless mental exercises, incidentally fusing our memory with the present moment to create for us the unique awareness we call reflective consciousness.

Walter J. Freeman, the researcher who described brain activity as related to smell, believes human invention may be the natural result of a system characterized more by such chaotic, dynamic states than

static patterns. “Our evidence suggests the controlled chaos of the brain is more than an accidental by-product. Indeed, it may be the chief property that makes the brain different from an artificial intelligence machine. One profound advantage that chaos may confer on the brain is that chaotic systems continually produce novel activity patterns.” The mind at rest is not resting at all. It is alive, forever mixing and matching, mindlessly weaving memories into expectations along a time horizon that never ends. The rhythm is as steady as a heartbeat. Every conscious moment is caught in our nets of memory, rolled in abstractions and cast forward again as our future. Hindus speak of the universal dance of Shiva, an endless rhythm making this world appear out of sheer energy. Shiva is timeless. He keeps the beat as the images and illusions of thought arrange themselves into the greatest imagination of all, our uniquely human perception of time and space

The Time is Now

The silkworm mechanically pulps another mulberry leaf in timeless eternity. There is no memory in the asteroid belt, no memory flung about the galaxies. It is all happening now, and only now. Everything that doesn’t remember knows this. If we really want the odds, the chances of there being a tomorrow are very good. The chance of any specific past or future existing outside our individual minds is infinitesimal. Our sense of time itself does not arrive until we are nearly three. The concept of time in man as a species arrived less than 50,000 years ago. We all just assume that the universe works along a time line. However chances are equally good we think it up ourselves.

This is the most difficult concept to master, the likelihood that all past and future states exist only as personal images in human minds like our personal web pages. The present moment may be all we can ever agree about in any detail at all. Time can just as easily be a series of disconnected eternal “nows” that each of us zippers into our own time chronology carrying us from our own personal past to our own personal

future. Furthermore, as only humans on earth do conscious prefrontal pattern sequencing, the rest of the known universe must have no sense of time at all. Only a brain of a certain size with certain structures evolved to a certain stage can ever hope to sequence information derived from chaotic patterns. We have no way of knowing what any other brains might do. Without our unique capabilities, this most vital aspect of human consciousness simply can't exist.

Finally, as the networks and patterns we use for memory and projection, our past and future, are individual and personal, it provides insight into some of some of those big questions. There can be no "*Where did we all come from?*" or "*Where we all going?*" We each draw from only our own past and imagine only our own future. How can we imagine where anyone else is going? The information each of us has collected is unique. The innumerable coincidences and sensations creating each waking moment before our eyes happen before our eyes only. As a result, we each have a unique and personal memory, a past nobody knows and a future that is ours alone. This leads to an unexpected conclusion basic to this perspective: There is no way we can prove that any time exists except the present moment.

Real events only occur when at least two people agree about something in the same time and space. This usually happens when scientists independently observe the same phenomena or accept the validity of certain procedures and instruments and get similar results. As it happens, no two scientists, or any other human beings, have ever completely agreed about many aspects of the past or the future. Neither have these two places been located by any form of apparatus yet devised. All our instruments make observations in the present. So do we. From a strictly scientific point of view then, no time really exists except the present moment. Any other point in time would have to be a personal memory or an image we made up in our caravan of dreams. There can never be two people in complete agreement about places existing only in the mind. Scientists write their papers in the subjunctive tense for this very reason. Nothing "is" when it "might be" because nobody can really tell it as it is. We only say as we see it, each offering our part to a

network of other minds. Like our own neurons, we are all part of something beyond imagination, but we are each on our own.

Naturally, we have problems with the time questions. They concern a chronological past and a chronological future. These are places peculiar to the human mind and personal to each of us. There is only our past, and only our future. We made them both up ourselves in our heads when we weren't looking. They're a little different for each of us and neither are real now. One might have happened before and the other hasn't happened yet. Nobody can vouch for us in either place because the only place we can get consensus information is the present. A moment later it's already patterns in memory, modifying past patterns, generalizing and transforming into "future" scenarios. If our memory crashed, we would lose both past and future in that instant. Time is perceived as the recollection of change. Without conscious memory time would vanish. Memory is the mother of our meaning to ourselves and to others. Our lives are made valuable to us by this measure. We can always find time in the mind, the mind that makes time for us and for the only world we will ever perceive.

The Mirror of Memory

Returning from the human species to individuals, the same reasoning applies to at least two more of the questions requiring religious interpretation. The answers to our personal "time" questions, "*Where do we come from?"* and "*Where are we going?",* may be clear already. The present moment seems to be the only "real time" that exists in the synthetic sort of chronology we each create. It forms the stable fulcrum enabling us to recall backward and sequence forward. Our pre-frontal cortex never shuts off while we're awake. It's always weaving futures out of our past but we don't start collecting a chronological past until we're nearly three and we can't go back before then. We no longer comprehend the simpler mental codes of an earlier time. They are as much a part of the structure as the scenery by now.

This creates problems for personal predictions of any ultimate future. Since we use our past for our images and our earliest past is denied us by our neural development, the furthest we can get into our imaginary future will always be a version of our earliest remembered past, a version of our childhood but with ourselves in charge. This is why those who trust in God usually give God the personality of their own parents be they stern, loving or capricious. Since we can't go back before time, we can't predict all the way to a chronological final future. As a computer scientist might say about our inability to focus either our earliest beginnings or our final endings, "It's not a software problem, it's a hardware problem." Our early existence is not available on line because we upgraded the hardware and overwrote the programs we used to read it. It's our inability to keep the time line within our own lifetime that keeps us guessing. We keep losing our mental focus like a Ping-Pong ball that keeps dropping off the end of the table on either side. Since we can't recall our origins, we haven't the appropriate abstracts to imagine our endings either. Our deepest past remains in patterns we haven't used since the age of two. It just doesn't compute. Any attempt to imagine our final future will always be out of focus at an individual level.

As nearly everything else is at least imaginable, this unimaginable beginning and destination business becomes very irritating to the mind. The timeless questions pop up nearly as soon as we can sense chronology. Still, it's a foregone conclusion we'll never get agreement, nor even a consensus on the final future. Our furthest future is projected from our deepest past. Both sides of time progress or regress equally towards the present moment. Tomorrow is the reflection of yesterday, and we predict our future with about the same accuracy as we remember the past. Both are as real as those images we remember, transform, and project. Both are nonexistent outside our own personal virtual reality. Time is a human mental mirror trick that leaves us, like Alice, stuck forever in the middle of the looking-glass with views in both directions. We are always in the world that is with only our mind in worlds before or beyond. We are now and were now and we always will be now. Yet we all remember another time and we all project and

hope for our eventual return to the timeless oneness, our own eternity we once knew so well. This is where it began, of course, and also where it will end for us. Our sense of time and space, our complex tapestry of experience and reality; it all comes, and it all eventually goes. It seems the problems we had with the "time" questions lie with the personal idiosyncrasy of memory and imagination. Something kept hinting that despite the individuality of our lives, we all came from some same place and will return to it again. This is why all religions provide their explanations, to comfort and to reassure us. Explanations are bound to change over time, but the questions will always confront us.

We may have some new insights now, as reasonable as they are direct. So where did we come from? We come from the undefined *chairos*, the timeless early mind, into the specific chronology we acquire as we mature. What are we doing here? We are perceiving it all and fitting it all into the patterns we have created through our own personal activities and experiences, each differently, all our lives. Where are we going? Back to the same timeless undifferentiated mind we came from. The cycle is repeated in each of us. We appear out of our own timelessness, we put it into our personal perspective and temporary definition, and then, finally, we must blend back into timelessness again.

From a chronological perspective, this takes several decades to accomplish. From a personal perspective it takes a lifetime. If there were ever a miracle to be thankful for, it might be for the way we shift into the sense of time in time to use it, then transcend out of it when it's time to go. Time is our greatest trick. The human experience of chronological consciousness is the best example of perfect timing that we will ever experience. It gives us all the virtual time of our lives, and a future worth living for.