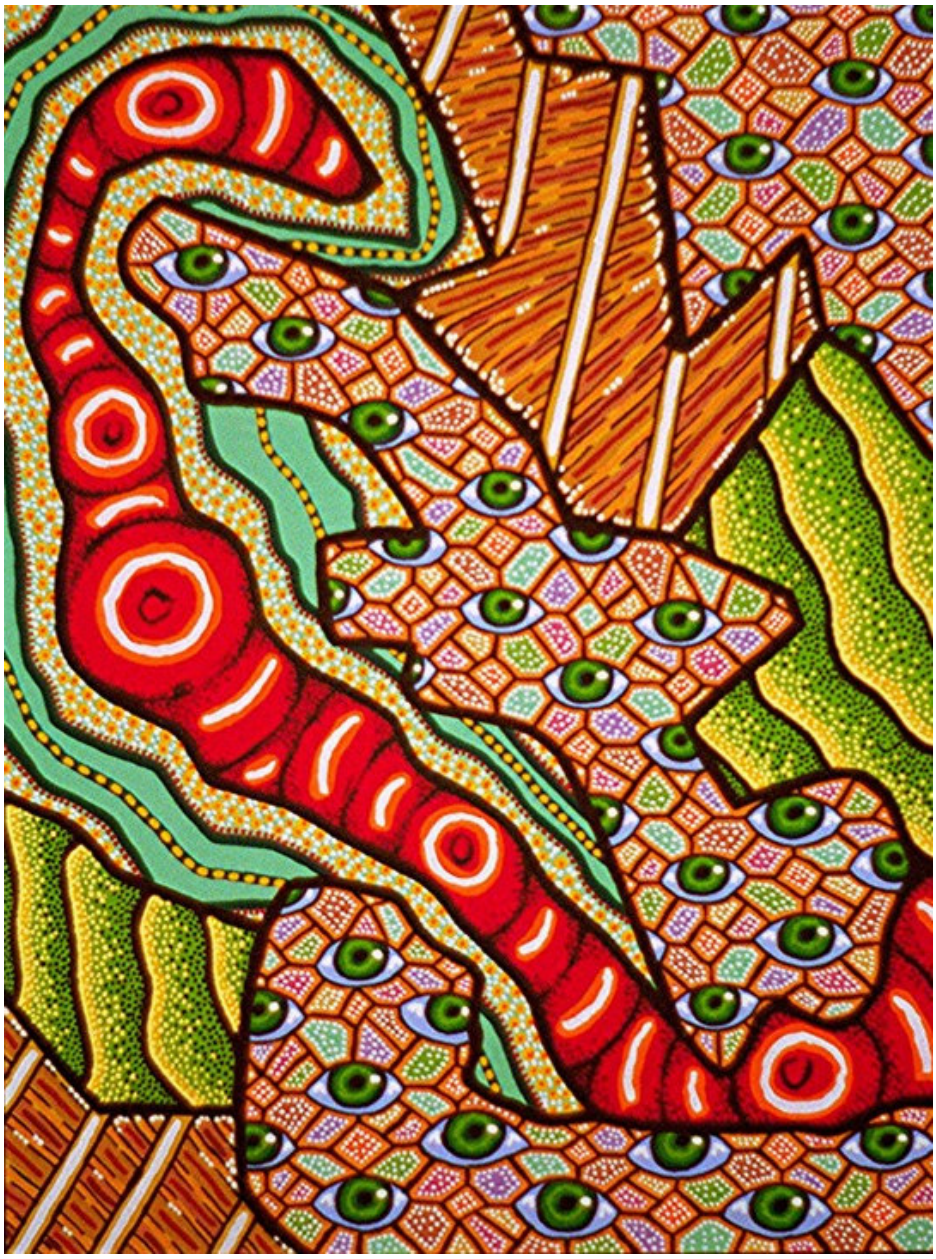


Red Moon

Michael Harold

A Visual Sound and Movement Company

Red Moon

Michael Harold

Cover painting “Phrenetic” by Michael Moore

To those I love

1.

Dataland

The old man:

Awake in the darkness
As in the beginning excluding this:
To hear the rain become another page of knowing
A single thing.

Cars pass in the street.

"Things as they are . . . " become simpler still
Once they are forgotten:
The glass reflects the rain; the sky is a rage
Of order as lines pour down the panes.
And the page. The night itself cannot contain
The sea of the sky of the mind.

Knowing things I cannot see
(Like green plants growing in corners
Wordlessly, the corners of a shadow containing
Many colors,) lying naked within my sphere of influence,
I am one universe among many.

2.

The world is encrusted with words:
Buried in the walls and floors of rooms,
In the deep, narrow crawlspaces of caves,
Layer upon layer,
A scale, a patina over which new words
Are painted, seeping slowly through like stains,
Covering all of nature until at last
All questions are forgotten,
Are finally forgotten
Among the muted whisperings of leaves, the stones
And blades of grass like jewels.

Stooping to peel the skin back from the ground,

Hoping to see the ground finally and for once,
Finding instead more words
And peeling them back and peeling them back
Layer after layer like an artichoke,
Looking for the center of the seed of this rock
Until the rock cries out in pain
That I am peeling off its skin,
That I am skinning it alive,
Until all of nature screams at me to stop,
I am killing everything.
I am skinning everything alive.

In the beginning there was little pain
And everything was bare.
Now the world is fully clothed and covers itself
With life-size pictures of itself,
Like scabs, like a bullet-proof vest,
Like a room which is not a room, but a cocoon,
Spinning itself from the outside in,
Closer and closer,
Until it is warm and comfortable and contains me
Like a seed, like a cross-legged worm
As I metamorphose into something
Rich and new,
Hiding in this room-cocoon,
Hiding from the keen eyes and hungry
Swift beaks of many birds.

3.

Alone and floating in the sea of my own madness,
(Dog-paddling actually),
Pushing and pulling with hands and feet,
Rotating slowly as if to scan the horizon
For distant facts,
As I rise and fall with the waves.
A neighbor walks calmly by on the water,
On the surface of a sea with a deep blue sky,
Calmly pushing a lawnmower,
Cutting off the peaks of waves.
The lawnmower stops and starts and a dog barks

At my head like a minor attraction at a Roman Circus
Dancing on the surface of the sea,
Waiting on a weedeater, a lawnmower or the barking dog
To eat to complete the act.
The wind blows and the pages
Of the dictionary of the world
Separate and drift apart like a million tiny
Islands or lily pads not big enough to hold one foot.
There are no sharks and there is no hurry
And the sea is red and green and uneven like the walls
And ceiling of a famous night cafe.
It is easy to be inattentive, bobbing like a cork,
Easiest of all to forget
What one is talking about,
To forget one's hands and feet,
To forget everything but one's own head
As the sun beats down and the rain pours down
In uneven sheets on the purely simple and divine soul
Of the sea of the madness of my making.

4.

The cracks in the sidewalk
Are the self-same cracks as the cracks in my brain,
Alive with an inner motion like
Little Holland Tunnels through which
Tiny commuters scurry from one end to the other
Making little leaps of animal faith.
Stepping on or over each of them they roll by
Like frames of film in a Kinetoscope,
Like a fine web of hairs
Stuck on the lens of the projector.
A row of trees rolls by on the right
As divine guidance allows me to walk
In both the luxury and cheap entertainment
Of never having to take my eyes from my feet
As I watch them bob up and down
In two dimensions
Like the twin humps on a camel in a
Terrytoon cartoon.
The birds are orange and the sky hums a familiar

Tune on this bright, clear, architectural morning.
That is what I imagine as I imagine everything
Else except those things that I know
That I know that I know . . .
Like the cracks in my feet and my brain
And the trees and the persistent
Thump-a thump-a thump-a
Of my strait-jacketed heart
And the great "AUM"
Of my lungs singing the only song they know
By heart on this rare and singular occasion of the trees.

5.

The light is inescapable.
It waits in the corners like darkness.
It speaks with a clear voice saying,
"Everything outside myself I touch
With a perfect pain, like the prick of a needle,
Like drinking from a broken glass,
Like the perfect urine stains on the smooth
Tile walls and concrete steps of subway stations,
Like the dying alcoholic lying like a shattered bottle
In the turn of a stairwell,
Shivering and coughing for three days and nights,
Disappearing at last from the sight of those
Who had noticed.
I am a dream of fire
Older than the animals,
Burning away all memory and all revelations
In the perpetual creation of self
Which each new life claims as its own invention.
Nothing changes. Nothing
Changes the perfection of the egrets
Gliding noiselessly as angels
Above the silt, black water beneath cypress trees
In the deep rem sleep of god,
And brightly painted white one by one
By one rising sun after another
In the perfect, wordless mystery of me."

6.

The water stains
On the plaster ceiling are growing
Reminders of life's mythic, archetypal edges:
Amoebas turned blue and squashed flat
Under glass slide covers,
Lost continents painstakingly drawn
Like birthmarks on the dark parchment of Adam's skin,
Bloodstains dried brown
Against the inner thighs of women
As they search for roots in the earth,
Or squat quietly by cooking fires.
Imperceptibly the lines move outward along the ceiling
In widening arcs like a Fourier transform
Made real by lightning and the rain.
They are unformed words, petroglyphs and hieroglyphs
Occupying the ceiling as easily as they would
The burial chamber of a king,
Occupying this hand from which seeps language
As a stain upon the world,
Covering every sign until
There are no more languages,
Only the slow unconscious movement
Of water crossing the page.

7.

At dusk the light peels itself away
From the mirrors and the walls
And finds its way into the dark,
Moving shapes of things:
Two-legged and four-legged
They stand around like dinner guests
At a cocktail party speaking in forgotten languages.
Their words in turn find places in the room
To stand or play on the floor like children,
Having among themselves
Their private conversations.

The queen is knocked out cold, the game is spilled

to the floor in ecstasy

The lesser gods, bored, stuffed with hors d'oeuvres
And slightly drunk, wander from room to room,
Stare dully at the paintings on the walls:
"Isis And Osiris" struggling and sweating together
In the sand, "Apollo At Play" with his flute
Stuck awkwardly in his back pocket, peeling away
The thin blue skin of the world
With a Swiss army knife . . . .
One god says to another over her drink, "Yes, I know,
I know, there are more, always more,
But never enough to see."

Money is no object but the perfect beauty of greed
the poor know

The wind is jealous of her long hair as his feet dance
wildly in the air of her laughter

So no one came to the edge of this easy city of lights,
Of angels waiting patiently inside the TVs saying,
"Hello? Are you there? How will we know you're there
If you don't buy something?
How will we know you're there at all if you don't tell us so?
Talk to us and we'll listen, we'll console,
We know what we're doing. It's our job to know."

It is foolish not to laugh, "Just so!", if it will make
you crazier

Blackbirds discuss among them the many ways of looking
at a poem

The eyelash falls, forgotten between pages of a book
it knows by heart

What is the next sound I will hear?
As simple as I can make it,
My hollow hand touches the page again and again,
Like waves against a still, white shore at night.

The constellations fall and disappear into the sand
Buried like turtle eggs with their small leathery coats.
It is impossible to retreat from the table and the coffee
Cup half-empty and still changing.
(The trees are lined in rows beyond the window.)
For a moment it is easier not to speak than to speak
Not to see than to see the two white hands
Floating under an empty sky
As many colored eggs open noiselessly and
The stars crawl up through the sand and into the sea.

Dishes sink like cities into the white cracks of the sun
There is enough there is always enough never to see

There are no paintings but only ideas of paintings hanging
motionless in an idea of the world

The smooth wooden floor is a forest of men underfoot

The alley's stone wall shares its vertical space
Like a name with the same morning sun and weaving green
Tendrils that have heard and absorbed
The full weight of human voices
From the beginning of time like water:
The "mea culpa" of disbelieving priests,
The constant whimper and whine of the burned, sleeping child,
The tailgate party "Yahoo" of sometimes dangerous
Good old boys,
Carrying them all as always far from their origins,
Deeper and deeper,
Down through the water table
To the taproots and up and up until there is only one voice
Which each of us hears as his own voice
Spoken when one chooses and has no choice but to listen.

In, out and in they both suddenly remember they were
never born

Everything, everything there is is no more than this

The painting hides the inside of itself against the canvas

of itself

The spirit of god wakes up tired, a little cranky and late
for work

The words are hiding in the pencil, afraid of what they might
see

Thin strands of hair hang down like fingers
Barely touching my temples and forehead.
Hands become a place for the face to rest momentarily,
As the inside of the eyelids are a place
For the eyes to rest.
Like changing channels the dark gives way
To a wider field of vision where all images are possible:
Impressionism, surrealism, abstract expressionism;
(Simpler to let the pictures make themselves
As the multi-colored gnats dance wildly,
Coiling like snakes into tondos of perfect geometry
Against a black ground.)
I tilt my head back, back,
And purple becomes red becomes orange
As the white light burns and the parasites dance
In the aqueous humor, coming once again into focus.

Smooth curve of her breast, the nipple stands on its own
two feet

Three, two, or one, tears trickle like laughter down through
the valleys of years

The girl having been told all about the green lizard
motionless in the grass, brushing back her hair forgets
everything to know more

A wall-eyed child, two trees, the leaves singing: four

Shoes, hair, fingernails and a thin film of spittle

He kisses the soft soles of her feet as she smiles at the
moon in the water

The tall grass is its own meaning,
The words, "The tall grass is its own meaning,"
"The words . . . "
No

•

2.

The woman:

I have been through this before.
Deep in the spell of a dream of suited men
I hear a bell. It is the phone ringing
As I struggle from one dream to another.
A hurried ride to the airport and after a long flight
The blinking lights and now
The whisperings of the car,
The silent motions of hands and feet,
As my father lies dying of a stroke once more.
I have been through this before.
The minutes pass as I follow the freeway.
There is nothing more to do.
I reach an exit, glide carefully through several lights
And the hospital emerges from the night
Like a city of hovering stars.

2.

I sit in the chair by the window
Counting the cars in the parking lot
By color, trying to discover the
Hidden meaning of their order
Like a formula.
To be a woman is to live
In a certain, rich understanding
Of life which appears like a hologram
In everything:
A cigarette lighter,
The thin fine hairs of air
In melting ice,
Water, blood and milk.
To be a woman is to understand
That love and sex
Are both the same and separate,
That time is history and history is a memory
Made up to fill the time like loneliness.
To be a woman is to be many women

Moving through a world made cold by men,
To know that my Sister, my friend,
Is also my enemy for no other reason
Than that we both consent to share
The same unnecessary grief.

3.

Standing by my father's bed
With sunlight shining through the window
And separating in a glass of water
Like a prism
It is Easter and I in my beautiful dress.
To be five is to be immortal.
Covered with white lace and bows like a dozen
Angels perched in the front row seat of heaven
Waiting for the show to start.
A breeze is in the air and the sun and the trees
Are dancing.
The yard is a single big surprise
With each and every blade of grass there to see
At once and forever.
The painted eggs are everywhere
Hidden in the most likely of places.
Running madly from one spot to another I collect them
In my basket like the Little Red Hen.
I hear my father say, "Come here, come here."
I run to him.
"What can you see?"
I look around me.
There are no eggs or rabbits but my father only.
"I see you," I say.
He lifts me up and I look into his smiling,
Round face like the Man-In-The-Moon.
"My little Kore," he says,
"Love is forever. It does not come and go."

4.

The doctor came in this morning
And gave me the letters found in my father's desk.

He said he took the liberty of reading them,
That my father had obviously been ill
At the time he wrote them
And that he thought I might like to have them.
That being done he checked the chart
And the drip, wished me a pleasant day
And left the room.

Dear whoever reads this,

I came out to the yard this morning
and found the potatoes ready.
I dig them up easily with my hands.
The dirt is soft and loose and they
are the most patient of all living things.
They are speckled with dirt, rust colored and firm
and their eyes look back at me indifferently.
Having been everywhere, having known everything
I choose this once and for all time:
To live simply, to eat the roots of life,
to stand occasionally in the warm light of a yellow
sun on an abandoned planet.

Dear you are,

I have sent these letters back to you
to that place where I began to be what I am now.
Beginning as a man I lived a rich life and grew old
until one day the different parts of me
began to be replaced by new and perfect machinery.
Beginning with my heart, my lungs, my blood,
I was gradually transformed into some new thing,
until everything was new except my brain
and my half-blind eyes.
I thought my soul remained.
I became immortal. I could never die
except by accident or my own self-will.
I lived on and on and saw a thousand
generations come and go.

I grew foolish and wise by turns and thought
that things would never change.
Then one day, suddenly, I noticed every human thing
was gone. I did not understand until
I found this note:
"We have become as gods. You cannot come with us
for to be a god requires a soul. Goodbye."
These words lie at the foot of my bed.
I read them daily like a prayer.

Dearest of all,

I have forgotten everything I ever knew a hundred times
but this: The simple fact of my own breathing,
purely and completely without meaning, like a secret
word no one can say and live.

5.

I shave him each day with shaving cream and a
Safety razor, cutting carefully around the
Surgical tape that holds the oxygen
Against his face. His face is fallen and his skin
Is wrinkled but very soft. I am careful not to cut him.
That is not to say I never cut him.
Love is not perfect.
I pull the skin tight under his neck and sometimes
Shave him twice, hoping it will help make him
Comfortable in his deep dream of life.
At other times I sit in the chair beside his bed
And read to him.
I have no mother, husband or children
To take away my time.
I have a job I need to keep.
It may only be for a few more days I am told
And then they will unplug him.
He will gather up his soul around him like a coat
And smiling to himself at his own simple humor
Leave without saying a single word,
As if that were the point of everything.

6.

Dear Pen,

My father died today. The funeral is tomorrow
and I should be home by Wednesday.
There is little else to say. He was not in pain
I think, except for the self-made pain
he always carried with him like a good luck charm.
He was a strange man, very loving, very kind
and deliberately foolish. He said that was his gift.
Anyway, he is gone and I will miss him.
Please remember to pay the rent. The check is
under the basket on the kitchen table.

Love,

Sophia

3.

When I first saw the movie *Thirty Two Short Films about Glenn Gould* I didn't know Glenn Gould from Adam. I was in Chicago with my friend Bruce and we suddenly turned into a movie theatre for a movie the way some people suddenly turn into a bar for a drink. My memory, like Atlantis, is one of many subjects I am not prepared to discuss, but I think the theater was down the street from the Art Institute where we had just sampled from the Museum's oeuvre the collection of tiny little rooms from various historical periods, the glass paper weight collection, the medieval armor collection, a collection of Joseph Cornell's picture-boxes, a Salvador Dali exhibit and Chagall's stained-glass chapel all in rapid succession. At that point, watching the movie was like entering a parallel universe. As far as I could tell, the title pretty much gave away the story line. Afterwards, on the sidewalk directly in front of the theater, I must have gotten too close to the person in front of me because he suddenly turned his head and growled over his shoulder, "You want me to kill you! What the hell's the matter with you?!" His bearded face, dominated by that wild-eyed stare so common among the elderly poor that frequent the sidewalks and public parks of America's larger cities, was as beautiful and strange a mask as any I had ever seen in any blockbuster museum exhibit I had ever attended. Even so, I could tell he was both agitated and frightened, . . . so I decided to give him his space and assume he was harmless as long as he didn't start fishing around in his pockets or make any sudden, potentially dangerous moves. (I have my own paranoia to deal with.) As any good theologian or business consultant will tell you: everything comes in threes. From that time to this, my association of the museum, the film and the man’s face has seemed ineluctable in a quirky sort of way – like an asexual triple entendre.

Five years later I suddenly realized that there were thirty-two short films in the big film for a reason. When Glenn Gould was young, he became world famous as a pianist by recording Bach's *Goldberg Variations*, a piece that consisted of two arias and thirty variations on a theme. And I also suddenly remembered that it was Glenn Gould who was chosen by mankind (i.e. NASA) to have his work recorded on a golden record and sent into space so that any alien intelligence that made contact with the Voyager space probe would see us at our best, come to understand us in their own alien way and quite possibly decide to make friends with us. The problem is that the spacecraft responsible for delivering the record is traveling at a very slow rate compared to the speed of light. Meanwhile, the plant Earth continues to broadcast world (i.e. bad) news, the shopping channel, daytime soap operas, infomercials and the Jerry Springer show in every direction. Earth's giant daily diary is traveling at the speed of light and

has long since passed Glenn Gould's gold record. I just hope the well isn't poisoned by the time Bach reaches the aliens.

I have often thought that there are two types of people in the world – those who insist that there are two types of people in the world and those who don't. The former make me nervous. The latter, a little more patient by nature, might take the time to ask, "What has any of this got to do with anything?" Like a koan, this is a question best answered with a question. "What has any way of thinking got to do with any thing?" If you're cynical by nature (i.e. Diogenes, et al), nothing. If you believe there's some sense to be found somewhere, somehow in all of this (i.e. Socrates, et al), everything. To me, everything matters. The simple fact is, it's the closest thing I can find to a plot.

4.

Like many other liberally educated, introverted Americans with time on their hands, I've been working on a novel for years. (This isn't it, by the way. I've FINISHED this book, finally.) I have come to accept that on any given day there are probably as many unpublished novelists as there are talk show attendees hopeful of getting their hands on the mic, which is to say the market could not be more saturated. No one can deny that as an entertainment and advertising medium the novel has a great future in store. Even so, I sometimes think that as an art form it reached an impasse with Joyce, Stein, Faulkner, Nabokov and Barth – but hey, it's tough all over.

The book's about a computer guru who quits his job as chief scientist with a large defense contractor, leases the basement floor of an abandoned parking garage in New York ala Mark Rothko, covers himself with tattoos from ankle to wrist (the tattoos are very cool – they're hundreds of little mathematical equations that look like mehndi) and becomes an installation/performance artist.

He creates this machine that he calls a hypercube. In reality, it looks more like a giant set of metal bunk beds designed by Mies van der Rohe without the bunk pads and mattresses. It's actually a computer that's tied via satellite to whatever he wants to use as input. On the floor of the machine he's created this well-manicured, little grass lawn that he sits on during his performances. Data comes into the machine from all over the world and is turned into drops of rain that fall from the top of the machine onto the artist while he sits naked on the grass in the lotus position. When the rain hits the grass it sinks to the bottom of a hydroponics system where it's pumped back to the top of the machine where it's turned, once again, into digital rain.

The military believes that the scientist-cum-artist is psychologically unstable and is keeping both him and his art "under surveillance." They watch as he goes to various, remote, exotic locations all over the world to install computer-driven machines that get their energy from natural sources. He puts one in Antarctica, one near an active volcano, one near the beach to gather the energy from ocean waves and one in a mountain pass to catch the wind. All of these machines are connected together via wireless technology and are in constant communication with each other. As they each receive input they immediately translate it into various types of output that include words, images and sounds. Then they send their output back to the big, bunk bed machine where everything gets turned into rain.

I know this is a lot of detail but you've got to admit it would make for some great visual effects.

The artist is beginning to make certain government officials very nervous. It turns out that the grass he is sitting on isn't just any grass. He is able to take the

information contained in the drops of rain hitting him and the grass and turn it back into its original form that he then sends through the Internet to anybody who wants to see or hear the words, images and music that his machines are creating and sending back and forth to each other.

Although all this artistic effort is quite impressive, it turns out that what everyone thinks the artist is doing is actually a diversionary tactic otherwise known as "Plan B." "Plan A" makes "Plan B" look like a sixth grade science fair project. The artist was already experiencing a deep spiritual, psychological and emotional crisis precipitated by who knows what, when he quit his job as chief scientist with the defense contractor. In the process of doing his art, he has become schizophrenic and a voice is telling him to make these little boxes out of high-tech composite materials and fill them up with pre-programmed, nano-photonic crystals and bury them in specific places on the surface of the planet. So, like any well-intentioned schizophrenic, he's been doing what the voice in his head told him to do as long as it seemed reasonable and didn't actually hurt anyone.

The government finally decides that enough is enough and sends one of its best special agents to pick him up. When the agent gets to the artist's studio the artist is gone. It turns out that the artist has one last box to bury and he has to get to, of all places, Las Vegas, Nevada. This leads to a spectacular action-packed chase sequence leading from New York to Las Vegas that hopefully would have led to a movie deal.

The agent is just one step behind the artist and at one point is about to catch him when a beautiful woman shows up at the last possible moment, takes the artist's hand and says "Trust me if you want to live!" just like Arnold Schwarzenegger in *Terminator 2* only much sexier. It turns out she's prescient and telepathic at the same time and has deliberately sought him out to help him. She’s the one person who can help him stay one step ahead of the agent.

He knows at that moment that "Plan A" is working. The machines the voice in his head told him to build were actually meant to create a global network that used molecular nanotechnology to bring the smallest, most basic particles of the planet into greater harmony with each other, to tune the racecar’s engine so to speak. The end result was that humans would acquire the ability to see each other with such clarity that it would be impossible to lie.

Anyway, the special agent is told by his superiors to kill the artist and anyone found with him, that the future stability of the world rests on his (the agent's) shoulders. What follows are more spectacular chase sequences. While all this is going on, there are numerous references to TV news broadcasts that show the unmitigated hell that is breaking loose everywhere and destroying every political, economic and religious institution in the world.

The artist and the woman finally reach the spot in the desert just outside Las Vegas where they bury the last box. Then they lie down on the sand in the desert night and make love under the stars.

Meanwhile, the agent is searching desperately for the artist and the woman. Las Vegas is a mess. The traffic is bumper to bumper and most of the people have abandoned their cars. Some of the buildings are in flames. You can hear the sounds of ambulances everywhere. Some people are running around, screaming uncontrollably. Others are crouched in fetal positions in the middle of the sidewalk. A few are just standing quietly, watching the commotion. (Actually, I've been to Las Vegas and it pretty much looks that way now.) The agent finally tracks the artist and the woman to a certain hotel based on a phone call the artist made from the hotel lobby to a local news station to tell the world that everything was going to be ok.

All of a sudden the special agent knows where the artist and the woman are. He just does. He drives out to the desert where they're waiting for him. The false dawn is ending and the sun is just below the horizon. The agent walks up to the artist, takes out his gun and points it at the artist's heart. But he doesn't pull the trigger. He's had to kill people before and he's never hesitated. Not once. He's the best there is. And the woman is holding the artist's hand and the artist is looking at the special agent as if he's the artist's long lost brother. The agent is freaking out. His hand is shaking. He's got to kill these people. He's never in his life disobeyed an order from his superiors. The artist says, "It's all right." You hear a gunshot.

I'm still undecided about the ending.

In one ending, the woman steps in front of the artist and takes the bullet. The artist catches her as she falls and slowly kneels down with her in his arms as the special agent points the gun at the artist's head, but doesn't shoot.

In another ending, the special agent shoots the artist and then takes the artist in his arms as he dies. The woman looks down on them both.

In another ending, the special agent fires over the artist's head and then lowers his weapon slowly to his side.

In all of the endings, the last thing that happens is that you hear the thoughts of the artist and the special agent talking to each other. The special agent (Denzel Washington) thinks, "I understand", to which the artist (Bruce Willis) replies "No more lies." The woman (Uma Thurman) is quiet. The reader leaves them standing there in the desert. Just standing there. That's it.

5.

Connect the word list.

6.

Everything matters.

All of it . . .

None of it . . .

All of it.

None of it.

< See 22. >

After speech comes silence . . .

a noise . . .

. . . a greater silence . . .

7.

8.

Memo for Record

To: Aion of Kore

From: Etrigan the demon

Re: New kid on the block

"Superman, the son-of-a-bitch, has re-negotiated
the contract of his destiny,"
cried Brainiac,
having newly acquired the persona of the Gnostic
Agathodaimon, "and continues with Lucif . . . I mean Luthor
in the most mundane of dramas, while I go unrewarded!"
"Truth is not merchandise," said great Darkseid
from the burgeoning babble of
hyper-collective-consciousness that emits
from the googolplex of loosely coupled
processors at the heart of Brainiac's ship. "I heard
that somewhere. Besides, you never used to make mistakes."

At that moment, synchronistically, Batman appeared
in numinous form
and,
spreadinghisdarkwings,
spoke in thunder,
"I have come from a place beyond the Promethian Wall,
where all that is and all that is not do meet.
Superman, Wonder Woman, Robin and I were disposing
countless hordes of para-demons, krull,
and nameless evil entities when a blinding light
approached us from the deep. In zero time
our enemies disappeared.
Superman, angry at being upstaged, flew into the light
and . . . you guessed it . . . disappeared. Wonder Woman,
struck blind at the sight, used her magic lasso to escape.
In short, it kicked our butts."
(Here, he paused for a moment to deftly adjust his Batarang.)

"We could not see our foe's face, his sword of power
shone so brightly. He (or She, Star-crowned Woman of the
Apocalypse), or IT continued to advance, so we
left. It's been nice but we're getting out of the
Business as of right now!
I strongly suggest you likewise make like a tree and leave,
make like a banana and split, make like a . . ."

Brainiac stared stupefied for a moment at the vanishing
figure and then, a priori, placed his ship
in meta-hyper-warp drive and disappeared forever into
a Gödel-numbered parallel universe.
I learned this from one who waits at the end of time
having been created by men
and left forever alone when men became the Spirit
they had only dreamed.

I digress . . .

How may I most impress the matter,
Your Sentience:

Once more our long night is ended in perfect humility.
The light continues to grow, is growing now.

9.

We are beginning to understand the methods and structures by which poetry, visual art, music and other types of media are able to continuously transmute themselves within and across forms.

The mathematician Georg Cantor was able to prove that there are not only infinite sets or infinite collections of things, but that there are different types of infinities. Some infinities are larger than others. Once Cantor proved that there were different types of infinities, the next step was to create a single set containing all possible subsets of every type of infinity. Such a set would provide a syntactic structure or container capable of holding every possible type of semantic content. Cantor searched for this set and eventually came to believe that it did not exist.

The search did not begin with Cantor. The search for a perfect language, a language able to describe all things, has over thousands of years led to a world filled with languages, an almost infinite number of languages. Every person, every category of interest, every point of focus, every thing and every thing associated with every thing has become a language in and of itself. Language has become synonymous with identity. But identity cannot create. It can only rearrange its parts until it begins to take on the character of a contortionist whose entertainment value and consequent success is measured by the ways in which the various body parts can be twisted, turned, dislocated, drawn close together or separated far apart. No matter how good the performance, eventually we get bored. And in our boredom, language becomes the enemy of art.

That is why artists, and poets in particular, are increasingly intrigued with the possibility of creating art that is continuous and dynamic, that creates new, concrete instances of itself without the involvement of its author, that transmutes from one artistic form to another, that invites the active intervention of other art and artists, that moves freely throughout space and time. In short, they want to make art that looks and sounds and acts like the world around them. In this way, what seemed a mechanistic, combinatorial divergence becomes instead a creative convergence, a language of languages, dependent on others for its identity.

The Omega Class

For any ordered set (i.e. class) S of symbols there exists a class Ω (called Omega) of *N* (i.e. variable) length symbol strings similar to the set of natural numbers {1, 2, 3, . . .} where Ω is further defined as the class of all ordered combinations of *N* length symbol strings where:

$N = \{1, 2, 3, \ldots\}$

For example, where

$S = \{0, 1, 2\}$

$\Omega = \{0, 1, 2, 00, 01, 02, 10, 11, 12, 20, 21, 22, 000, \ldots\}$

Or where

$S = \{a, b, c\}$

$\Omega = (a, b, c, aa, ab, ac, ba, bb, bc, ca, cb, cc, aaa, \ldots\}$

Furthermore, the class Ω is equivalent for all S.

The Class Ω of N-bits

The class Ω in binary form would be represented as:

{0, 1, 00, 01, 10, 11, 000, . . .}

This is the class Ω of *N*-bits (where bit means *b*inary dig*it*).

Furthermore, the binary representation of members of the class Ω of *N*-bits does not require that any member be interpreted as a number value. In other words, Ω is a syntactic structure as opposed to a semantic system. There is nothing to prevent a member of the class Ω from being identified with a member of any type (of class). As a result the class Ω is capable of defining any number of like and unlike types as subclasses.

When interpreted as a class whose members are the natural numbers, the class Ω is shown to contain a transfinite (i.e. infinite) number of each member of the class of natural numbers. For example, the binary number 1 is represented by the subclass {1, 01, 001, . . .}, the binary number 2 by the subclass {10, 010, 0010, . . .}, etc.

The class of bytes is defined as a subclass of the class Ω:

{00000000, 00000001, 00000010, . . ., 11111111}

Syntax and Semantics

By definition, the class Ω of *N*-bits is the parent class of all classes whose members may be represented as binary symbol strings. A member of Ω does not represent a specific object or number value. The member is nothing more than a binary symbol string – a syntactic, abstract symbol over which the semantic "template" or "idea" of the object is placed. This is another way of saying that the information is not contained in the data. The information results from the model (or template or idea) used to interpret the data.

And (this is very important), that template or idea is itself determined by the relationship of the original symbol string to other symbol strings, also members of the class Ω.

By specifying the length in bits and the binary values of members of the class Ω of *N*-bits as a subclass, it is possible to define classes of any type commonly used in computing. Subclasses of the class Ω include the natural and real number systems, microprocessor instruction sets, virtual machine instruction sets and objects of any type (including state models, state machines, texts, images, sounds, etc.). Simply stated, the class Ω of *N*-bits provides a means whereby all classes, attributes and relations representable in binary or digital form may be defined as members of Ω or its subclasses.

Relational Attribution

As with any class, the use of ordered pairs (i.e. Cartesian products) provides an opportunity to define relations within class definitions. A relation is a class whose members are ordered pairs that share an implicit or explicit relationship that is equivalent for all member pairs. An attribute is an abstraction of a characteristic shared by all members of a class. Relational attribution is a way of creating attributes from relations. The relation may be simple or complex and may take the form of one or more logical operations and/or mathematical functions.

Several examples can demonstrate the varying complexity of these relations. One example is the class Parent/Child whose members are Mother/Son, Mother/Daughter, Father/Son and Father/Daughter. Another example is the "Fibonacci sequence" 1, 1, 2, 3, 5, 8, 13, 21, etc. where each succeeding number after the first two is the result of adding the two numbers immediately preceding it. A third example is the series of "random" digits 5, 8, 9, 7, 9, 3, 2 that represent the 11-17th digits in the calculation of Pi.

The concept of relation is used to provide class membership to all functions (i.e. the notion of {*xy*: F*xy*}) that designate the relation of anything *x* to anything *y* such that there exists a function that describes a relation between the values (i.e. F*xy*). Whether the relations are implicitly or explicitly defined, the use of dyadic (i.e. two), triadic (i.e. three) and higher relations allows us to define both natural and real number systems as subclasses of Ω. For example, a data type representing integer values of arbitrary precision may be defined as the following triadic relation:

S (1 bit) followed by L (*N* bits) followed by V(*L* bits)

where

> S is the sign bit,
>
> L is a binary value representing the length in bits of the binary representation of the number,
>
> *N* is an implementation specific number of bits greater than zero defining the length in bits of L and
>
> V represents the binary value of an integer of length *L* beginning with the least significant bit.

An example of this *N*-bit data type is:

1110001011010011010111010110100101000010101010010110111 1

where

> S = 1 (**1** 1100010110100110101110101101001010000101010100101101111),
>
> L = 110001 (1 **110001**
> 0110100110101110101101001010000101010100101101111, i.e. 49)
>
> *N* = 6 (i.e. the length in bits of L) and
>
> V = 0110100110101110101101001010000101010100101101111 (1110001
> **0110100110101110101101001010000101010100101101111**)

A data type representing floating point values of arbitrary precision may be defined as follows:

S (1 bit) followed by L (*N* bits) followed by R (*N* bits) followed by V (*L* bits)

where

S is the sign bit,

L is a binary value representing the length in bits of the binary representation of the number,

N is an implementation specific number of bits defining the precision,

R identifies the radix point and

V represents the binary value beginning with the least significant bit.

The length in bits of L for integer values and of L and R (for floating-point values) are implementation specific and in practice limited only by available real memory (i.e. the RAM or address space of a computer). For example, if L and/or R are defined as being 24 bits in length, integer and floating-point values with up to 16,787,456 significant binary digits are possible.

If we describe integer and floating-point values using these class definitions, the use of binary adders to perform digital addition, subtraction, multiplication and division and subsequently any operation in higher mathematics is greatly simplified. Although there are certain operations (i.e. division) and certain numbers (i.e. Pi) that result in an infinite series or sequence of binary digits, these data types greatly reduce the possibility of rounding and overflow errors.

Cardinality

In 1874 Georg Cantor proved that the cardinality of the set of natural numbers (i.e. positive integers) was not equivalent to the cardinality of the set of real numbers (i.e. points on a line segment). The cardinality of the natural numbers he called aleph-null. The cardinality of points on a line segment he referred to with a lower case German *c* for "continuum." The cardinality of the natural numbers was countable. The cardinality of the set of real numbers was not. This proof established the foundation for what is now referred to as Cantorian set theory.

Although the cardinality of the class Ω is identical to that of the natural numbers (i.e. Cantor's aleph-null), it can be demonstrated that the creation of floating point numbers of arbitrary precision is possible using *n*-adic relations. The class Ω is countable, but relations on Ω may be used to describe classes whose cardinality is uncountable (e.g. the real numbers) and yet whose members are expressible as members of the class Ω of *N*-bits.

As an example, we may modify our current definition of floating point values to include transfinite precision. (Transfinite is a term Cantor used to describe to describe cardinalities that lay somewhere between the finite and the infinite):

L(*N* bits) followed by R(*N* bits) followed by V(*L* bits)

where

> L is a binary value representing the length in bits of the binary representation of the number,
>
> *N* is a binary value of transfinite length that defines the precision of the floating point value,
>
> R identifies the radix point and
>
> V represents the binary value.

If the concept of a transfinite value (i.e. *N*) seems to violate the intent of the above example, one can as easily treat *N* as a countable series (e.g. 1,10,11,100, . . .) of binary values that extends the precision of the floating point values with the same result.

The value of *N* (i.e. the precision) has cardinality aleph-null (i.e. the cardinality of the natural numbers) and yet the method provides a means of expressing any real number as a member of the class Ω. It is a simple matter to show that for any real number value derived using this method there is a corresponding natural number expressible as an *N*-bit value. For example, by using one or another of the above methods, the binary symbol string "100" can be interpreted as either the natural number "4" or the floating point number ".0" .

What this means is that Ω contains an infinite number of each member of the set of natural numbers and an infinite number of each member of the set of real

numbers. This raises questions regarding the cardinality of Ω since for any real number defined using this method there is a corresponding natural number.

Another way to compare the cardinality of the natural numbers with the cardinality of the real numbers is to try to find a real number that is not expressible as a member of the class Ω of *N*-bits. One method that has been used to show that the set of natural numbers and the set of real numbers are not the same is to look at the space between any two real numbers as an infinite set. For example, if we look midway between the natural numbers 1 and 2 we can find the real number 1.5. Then by looking between 1.5 and 2, we can find the real number 1.75. No matter how many times we subdivide the space between two numbers we will always have an infinite set of numbers remaining. Although the real numbers do not occur in sequence in the class Ω of *N*-bits they do occur in the class. In fact, each and every natural number and each and every real number can be shown to occur an infinite number of times within the class Ω of *N*-bits.

If we think of the class Ω as representing simple integer values we notice that each integer value is represented by an infinite sequence (i.e. {0, 00, 000, . . . }, {1, 01, 001, . . . }, etc.) of *N*-bit values. In fact, each point on a line segment (represented as a floating-point value) is also expressible as a transfinite series of *N*-bit values. This again raises questions regarding the cardinality of Ω. If the class of natural numbers with cardinality aleph-null and the class of real numbers with cardinality *c* (i.e. the cardinality of the real numbers) are both expressible as subclasses of the class Ω of *N*-bits, then what is the cardinality of Ω? It appears that Ω is a class with the same cardinality as that of the natural numbers capable of representing all of the values of the real number system having cardinality *c*. In other words, the cardinality of Ω is not evident in its syntactic form, but is determined by its semantic use.

Since the cardinality of Ω is a function of the model used to interpret its members and since the same class used to define both natural and real numbers may also be used to represent the rules for the formation of all possible subsets of itself, it follows that all cardinalities are definable within Ω.

Predicate Logic and Object-Orientation

In 1899 Giuseppe Peano became the first mathematician to use symbolic logic to define the axioms of arithmetic. The same method was used by Zermelo-Fraenkel-Skolem to create the axiom system for set theory. Symbolic logic provided a means whereby any mathematical text could be expressed as a series of well-formed statements in a formal language. The formal language that defines

the variables, axioms and operations of arithmetic (i.e. addition, subtraction, multiplication, division, etc.) using the terms of symbolic logic is referred to as Peano Arithmetic. Peano Arithmetic, in turn, can be extended to provide a formal definition for higher mathematics.

In 1930 Kurt Gödel demonstrated that it was possible using a technique called Gödel numbering to translate statements in any formal language into equivalent expressions (number values) that obeyed the rules of Peano Arithmetic.

Very simply, Gödel numbering creates a one-to-one correspondence between any set of symbols and members of the set of natural numbers {1,2,3, . . .}. As an example, a scheme for Gödel numbering the symbols of axiomatic set theory is:

~	1	[	11	*p*	21
∨	2	]	12	*q*	22
&	3	*S*	13	*x*	23
→	4	+	14	*y*	24
↔	5	×	15	*z*	25
∃	6	=	16	. . .	. . .
∀	7	<	17		
(	8	>	18		
)	9	0	19		

Any string of symbols in any language so defined can be converted into a corresponding Gödel number by substituting each symbol in the string into its corresponding number value and separating the symbol with the number 0.

For example, the statement:

For every x there is a y such that $x < y$

stated in axiomatic set notation as

$(\forall x)(\exists y)(x < y)$

can be converted into the Gödel number

8 0 7 0 23 0 9 0 8 0 6 0 24 0 9 0 8 0 23 0 17 0 24 0 9

or

807023090806024090802301702409.

Gödel numbering also allows for the inclusion of data within the body of a mathematical text. Kurt Gödel's achievement created a consistent and rigorous chain of logic leading from the axioms of simple arithmetic to well-formed statements (statements provable from a set of axioms) in any formal language. Since it contains all possible combinations of binary symbol strings, the class Ω of *N*-bits may be employed as a means of assigning (as opposed to constructing) Gödel numbers to any and all possible classes, attributes, relations and statements (including propositional and predicate texts). In so doing, the class Ω becomes the parent class of those classes, attributes, relations and statements.

Axiomatic set theory as it has evolved through the work of Cantor, Zermelo, Russell, Gödel, von Neumann and Quine has resulted in the ability to define attributes, open sentences, propositional functions (in the form of attributes or predicates) and relations of like and unlike type as classes. Classes, in turn, can be made to serve as the foundation for all logical and mathematical texts. This means that all formal grammars can be represented as members of Ω.

It is also possible, using the class Ω of *N*-bits, to create subclasses of data structures and/or relations that may be applied to an infinite number of heterogeneous class types, either of data or of other relations. This is another way of saying that any object, including its data structures, relations and behavior, can be represented as a member of Ω. This means that it is possible to use inheritance from class types of data structures and/or class types of relations (i.e. propositional and/or predicate texts) as a means of creating new, previously undefined class types of data and/or relations.

Furthermore, since for any ordered set (i.e. class) S of symbols there exists a class Ω and since Ω is equivalent for all S, any text derived from any S may be represented as a member of Ω.

Entropy and Compression

The term entropy as it is used in information theory is a measure of how much information is contained or encoded in a message. A message in turn is defined as a string of symbols. The higher the entropy of a message, the greater is its information content. The lower the entropy, the smaller is its information content. Data compression is to information theory what set theory is to higher mathematics and as such becomes the means by which we understand the fundamental nature of information.

Information theory teaches us that there is no absolute measure of the information content of a symbol string. The assumption that the content or meaning of any data is somehow contained within the digital representation of the data is incorrect. The information content of any data is a function of the model used to interpret that data.

The class Ω, for example, is essentially a collection of uninterpreted symbols. A string of symbols (i.e. bits) has little or no meaning in and of itself. Its meaning is extrinsic. By extrinsic is meant that its meaning is dependent on relations established between it and other binary symbol strings that are also members of Ω. In other words, for every member *x* of Ω, there exists an infinite number of subclasses of Ω that define relations on *x* with other members of Ω. These other members (i.e. symbol strings) may take the form of numbers, functions, objects, models, well-formed statements in a formal grammar, or entire formal systems. It is the defined relations of any member of Ω with other members of Ω that determine its semantic interpretation. Given an appropriate model, any member of Ω may be substituted for any other member of Ω. When the substitution results in a shorter symbol string than the original, lossless compression is possible. Lossless compression means that any data, once compressed, can be returned to its original state without the loss of a single bit.

The class Ω of *N*-bits provides a means whereby the entropy (i.e. information content) of a given data set may be increased or decreased at will regardless of the original content of the message.

One way this can be accomplished is by varying the length in bits of the input symbols to the model (i.e. program) used to compress the data. This, in effect, changes the model. So, in practice, the input symbols can be varied until desired entropy is obtained. Changing the length in bits of the input symbols to find the desired entropy allows data that was previously considered to be uncompressible to be compressed. Data compressed at some bit length will reach an entropy limit and converge at the calculated probabilities for that data set. To change the entropy limit and the calculated probabilities, one has only to change the model.

The entropy of a given symbol in a symbol string is defined as the negative logarithm of the probability of its occurrence in the string. The entropy of a symbol string (i.e. message) is defined as the sum of the entropy for all the symbols in the string. The formula for determining the entropy of a given symbol in a binary message is:

Entropy (i.e. number of bits) = - Log base 2 (number of like symbols/total symbols in message)

As an example, the binary value 01000010 is a standard representation of the letter "B" using the American Standard Code for Information Interchange (i.e. ASCII). The binary value 01000010 means "B" only because it was decided by a committee at some in time to represent the English alphabet using eight bits and 01000010 was designated the letter "B".

By changing the length in bits of the input the entropy for the letter "B" can be made to vary:

Symbol	Probability	Entropy
01000010	1/1	0
	Total =	0
0100	1/2	1
0010	1/2	1
	Total =	2
01	1/4	2
00	2/4	1
10	1/4	2
	Total =	5

It is believed by many that random binary data is not compressible. All binary symbol strings can be shown to have an entropy lower than their length in bits. The key is to use an appropriate model. For example, by interpreting the following quantum mechanically derived random binary string of sixty-four bits as a series of two bit words, an entropy value lower than the original sixty-four bits is made possible.

Given the eight bytes (64 bits)

00100101 00000110 00001100 10000111
01011100 01110011 00011100 01011100

the two bit words (i.e. symbols) are

00 10 01 01 **00 00** 01 10 **00 00** 11 **00** 10 **00** 01 11
01 01 11 **00** 01 11 **00** 11 **00** 01 11 **00** 01 01 11 **00**

"**00**" = 16.98045
"01"` = 16.78072
"10" = 10.24511
"11" = 15.34852
Total = 59.3548 (bits)

Example: -Log base 2(12/32) = 16.98045
(given 32 total symbols and 12 "**00**" symbols)

The base size of the binary symbol set may be modified to optimize the compressibility of any source of binary input regardless of whether that source of input is also the output of a previous compression process. There is no theoretical limit to the number of times a symbol string may be repeatedly compressed. This is because the entropy of a symbol string results as much from the model (i.e. semantic context) used to interpret the string or message as it does from the string (i.e. syntactic structure) itself.

In fact, it is possible to construct a very simple grammar capable of substituting any symbol string for any other symbol string. For example a language *L* could be defined as:

L: $a \rightarrow b$
$b \rightarrow a$

where

a is any symbol string,
b is any symbol string other than *a*,
$a \rightarrow b$ is interpreted as "for *a* substitute *b*" and
$b \rightarrow a$ is interpreted as "for *b* substitute *a*."

By placing a program containing these rules at either end of a communications line, we have a method of "compressing" any symbol string into any other symbol string. For example, we can let *a* equal the contents of Herman Melville's *Moby Dick* and *b* equal "0". By translating an arbitrarily large string of data into an arbitrarily small string of data we enable almost infinite compression.

Transformational Grammars

Noam Chomsky has proposed that the human mind's innate capacity for language may be described in terms of a "universal grammar." This universal grammar is generative in nature and consists of a finite set of canonical forms (i.e. concepts) and a finite set of rules that act upon these forms. This combination of forms and rules describes a system capable of representing the deep structure of all human knowledge. Chomsky suggests, following Kant, that this universal language has an a priori aspect based upon species specific genetic codes. He does not, however, prescribe the relative roles that innate capacity (i.e. genetics), sensory input and socially defined behaviors play in the construction of this language.

Although the forms that constitute the "objects" of language have both physiological and psychological characteristics, they also have schematic representations. These schematic representations (i.e. "artifacts" that take the form of speech or writing) define the structural components of language. The transformational (i.e. behavioral) components of language consist of rules that effect changes in the occurrence and order of the artifacts. It is the combination of these artifacts and the rules that act upon them that constitute the language of a given knowledge domain.

An infinite number of grammars may be defined to describe those data transformations that may be used to manipulate the order and occurrence of symbols within any symbol string derived from any ordered set (i.e. class) S of symbols. The following notation describes one such grammar for the class Ω of N-bits:

Σ: Z

F: $Z_1 \rightarrow a + b$

$Z_1 \rightarrow a + Z_2 + b$

where

Σ represents a finite set of binary symbol strings and

F represents a finite set of symbol substitution rules of the form $Z_1 \rightarrow a + b$ interpreted as "for any binary symbol string Z_1 that is a member of Z, rewrite binary symbol string Z_1 as binary symbol strings $a + b$" where a and b represent adjacent substrings of Z_1 inclusive. The operator "+" is defined as concatenation. Z_2 is defined as any element of Z.

Insert

Σ: Z

F: $Z_1 \rightarrow a + b$

$Z_1 \rightarrow a + Z_2 + b$

Delete

Σ: Z

F: $Z_1 \rightarrow a + b$

$Z_1 \rightarrow a$

Substitute

Σ: Z

F: $Z_1 \rightarrow a + b$

$Z_1 \rightarrow a$

$Z_1 \rightarrow a + Z_2$

Append

Σ: Z

F: $Z_1 \rightarrow Z_1 + Z_2$

These primitive methods may be used in combination to describe more complex machine translation rules:

Swap

Σ: Z

F: $Z_1 \rightarrow a + b$

$Z_1 \rightarrow b + a$

Rotate

Σ: Z

F: $Z_1 \rightarrow a + b + c$

$Z_1 \rightarrow c + a + b$

Interleave

Σ: Z

F: $Z_1 \rightarrow a + b$

$Z_2 \rightarrow d + e$

$Z_3 \rightarrow a + d + b + e$

These same primitive methods may also be used to define translation rules for natural language grammars.

Just as it is possible, using the class Ω of *N*-bits, to derive all possible classes of data structures and relations, it is also possible to define any transformational

grammar in terms of *N*-bit structures and operations. The class Ω of *N*-bits may be used to describe both the artifacts and rules for any given knowledge domain.

The Class Ω as Foundation Class

In summary, the class Ω contains transfinite (i.e. infinite) numbers of classes, attributes, relations, variables and data types as proper subsets of itself. Since for any member *x* of Ω, there exists an infinite number of subclasses that define relations on other members of Ω, all possible texts in any formally defined grammar may be expressed as members of the class Ω or its subclasses. As a result, the class Ω of *N*-bits contains an environment rich enough to represent any statement in any formal language as a combination of binary values and relations.

Since the class Ω of *N*-bits is logically equivalent to any instance of the class Ω derived from any ordered set S of symbols, the class Ω of *N*-bits also contains the symbols and rules necessary to transform binary expressions into equivalent expressions in any class Ω for any ordered set of symbols S. This means that the class Ω of *N*-bits identifies a foundation class for the derivation of all possible grammars and their manifestation within the context of a global, digital computing network.

10.

Santayana

is an early accommodation

of Zen to

the western mind

and with him

Wittgenstein.

This mind is a boulder

standing in the river

a wind chasing leaves as

word follows word

becomes the memory of words

in a wordless world.

11.

Q: What is a game?

A: A game is a ritual course of action based on a set of rules negotiated and agreed upon by two or more players.

SHE: Whose definition is that? Yours?

HE: Yes.

SHE: Is all that necessary?

IT: Necessary my foot! Is that it?

KAFKA: It? Essentially, a game is a logos, a model made to hold the Kantian categories. Existentially, games do not exist. Existence has no rules, no feet, no it.

HELOISE: Must a game always have rules?

ABELARD: Heloise, please.

MADONNA: Shut up and let her talk!

EMERSON: The purpose of Society is to contain the Soul of the One.

MADONNA: What the hell? Jeezus . . . . You people!

ALICE: Oh, yes. A game must have rules to begin. The addition or subtraction of the rules as the game is played can also be one of the rules. A rule may even contain a rule to change itself for no reason at all.

ISOLT: Can anything be a game? Can life, or death, or love, or hate be a game?

SADE: Yes. Death as a game makes perfect sense. If death is a game then anything can be made into a game.

WITTGENSTEIN: That sounds familial. That is my idea isn't it? The last part, I mean.

AUGUSTINE: O happy fault! . . . Not!

IBID: Can murder, rape, stealing or lying be a game?

LOLITA: Yep. You bet.

HCE: Then everything is a game. Everybody's feet are somebody else's game.

PO: Only if you make it so. Just.

ATALANTA: What about games you do not want to play. Can someone make you play a game?

SISYPHUS: No. No one can make you play a game.

CANTOR: What kinds of games are there? How many kinds of games are there?

NASRUDIN: "How many kinds of anythings are there?" is a game. By the way, how many kinds of anythings are there?

PIERCE: You speak as if things are not matter and are not real.

DOROTHY: You speak as if those things are not real that matter most. They are. Really.

CHOMSKY: Are there games made up only of words? Do games have to have words? Do words have to have games?

NACHIKETAS: Yes . . . Um . . . Not always.

MANN: I love this! It is so bourgeois. Are not games fundamentally different from everything else? Cannot a game be something that nothing else can be?

RUSSELL: Yes. You can make up a "This is not a game!" game. That is a peculiar feature of games. Only in a game can something be itself and not itself at the same time. Games can be not-games. Mathematicians do this. They often refer to their games/not-games as paradoxes. But games are not facts.

HEIDEGGER: Can something be a game and be something else at the same time? Can something be made up of two or more games and not-games at the same time? Can something be and not be at the same time?

PELAGIUS: Yes. If you choose.

ARJUNA: Is there any limit to the number of games and not-games something can be at one and the same time?

KRISHNA: No.

KLEE: A pedagogical question. Can a game also be a not-game?

SAPPHO: A game can be a game and part of something else not-a-game.

FREUD: Explain.

TIRESIAS: Here is a game not-game:

FADE UP to show what appears to be a landscape composed of TWO SAND-COVERED HILLS and a BRIGHT BLUE SKY.

PULL BACK as the shot moves to an OVERHEAD. The sand is SHIFTING and the hills appear to be MOVING.

PULL BACK as the sand falls away to reveal a WOMAN'S BREASTS as she turns slowly from her back to her side.

WIDEN the shot to show her body nude from her neck to the top of her pubic hair. She is lying on her side on the sand, resting her weight on one arm. Her other arm lies down the length of her side.

A FEMALE VOICE begins to speak SOFTLY in an EVEN, SOOTHING voice:

"This game is for two players. This type of game originated on the African continent and is thousands of years old. The object of the game is to obtain three sets of playing pieces on a side, each set containing one each of four classes of objects (We will use primary colors which means at least one red, one blue, one green and one yellow playing piece.) The first player to do so ends the game.

Here is a list of parts:

1. A playing board with concave indentations having the following pattern:"

PAN to the area in front of the woman's STOMACH. With the PALM OF HER HAND she makes TWO VERTICAL, PARALLEL ROWS of THREE HOLLOWS EACH in the sand.

She continues speaking SLOWLY, EVENLY:

"2. Two sets of playing pieces, each set containing 4 red, 4 blue, 4 green, 4 yellow and 3 black pieces. Any other types of objects would work as well (for example, shapes or sizes.)

The play:

1. Prior to beginning play players place their pieces as follows:"

Beginning with the TWO TOP INDENTATIONS the woman places FOUR RED CLAY BALLS in each indentation. In each of the next TWO INDENTATIONS she places FOUR BLUE CLAY BALLS. The next TWO INDENTATIONS receive FOUR GREEN CLAY BALLS each. The last TWO INDENTATIONS receive FOUR YELLOW CLAY BALLS each.

She continues:

"The black pieces are placed one each behind (or beside) any three sets of colored pieces."

She places a BLACK CLAY BALL beside any three of the four indentations to the left of the left vertical row and to the right of the right vertical row.

"2. Players decide in advance who has first move. Players alternate turns.

3. On his or her move a player has one of three type of moves available:"

As she SPEAKS the woman DEMONSTRATES each of the FOLLOWING MOVES:

> "a. The player may elect to move any one colored piece (black is not a color) from any group of pieces on his side of the board to any adjoining group of pieces (for example, up or down one position on a vertical row).
>
> b. The player may pass one of her colored pieces to her opponent's group opposite the group from which the piece is passed provided no black piece is associated with the group to which the piece is passed.
>
> c. The player may take one of his opponent's colored pieces and place it in the group that is directly opposite the group from which the piece is taken

provided no black piece is associated with the group in which the piece is placed. Upon placement of the piece the player must remove a black piece from one of his (the player's) other groups and place it behind (or beside) the group in which the piece has been placed.

4. No group may at any time contain less than three colored pieces or more than five colored pieces.

5. A player may not pass her turn."

FADE TO WHITE.

TIRESIAS: Do you see? Do you understand the rules?

LILITH: Yes. I have always understood the rules.

ARIADNE: Would you like to play the game? I'll help.

SPINOZA: No. Can't.

JUNG: Now for the other side of the coin. Would you like a different example?

NEFERTITI: Yes. One that is more orderly.

ARACHNE: Here is a game simpler than the first, more elegant.

ATHENA: Careful.

FADE UP to a CLOSE-UP of a FLAME coming from a small STONE BOWL filled with liquid. The bowl is resting on a STONE FLOOR. The flame is surrounded by darkness.

PULL BACK to show the SHOULDER and HAIR of a person.

PULL BACK to show the nude BACK of someone sitting in the darkness. The figure has LONG HAIR and its back is covered with SCARS. The light from the flame outlines and creates an aura around the figure.

CLOSE-UP on the back of the figure. The scars are of an intricate design, unintelligible at first. Gradually, a TONDO emerges, its interior is the same design as that found in the "RING OF NESTOR" the "Tree of Eternal Life."

PAN to the LEFT of the figure to show a wall covered with images of animals. They are immediately recognizable as PALEOLITHIC cave paintings.

The SEATED FIGURE is painting a grid on the CAVE WALL by blowing pigment through a reed. The movements are SLOW and METHODICAL. CLOSE-UP on the painting.

A different FEMALE voice begins to speak in EVEN, MEASURED breaths.

"This is a game for two or more players. The play consists of forming a series based on shapes and/or colors. (Any other classes of objects can be used as well.) When a series is created or discovered by one player the play ends."

As the voice continues, the seated figure creates an image of the game by filling the squares in the grid with RED, GREEN and BLUE CIRCLES, SQUARES and TRIANGLES. The images are created as before by blowing pigment on the cave wall from a small, thin reed.

"List of parts:

1. A playing board with a minimum grid size of 9 x 9. The size of the grid is arbitrary. The grid contains the game. Without a grid or boundary play can be made to continue indefinitely. Without a grid or boundary there is no game.

2. A set of markers representing three or more classes of objects with each class containing a minimum of three additional classes of objects. This example uses 36 markers as follows:

Four red circles.
Four yellow circles.
Four blue circles.
Four red squares.
Four yellow squares.
Four blue squares.
Four red triangles.
Four yellow triangles.
Four blue triangles.

The markers do not have to exist until they are used. They may be kept in the imagination.

The play:

1. Players decide in advance who has first move and the method of alternating play.

2. The first marker is placed in the center of the board. The second player then places a marker to any side of the first marker. Play continues with each player placing one marker in his turn.

3. On her turn a player may place a marker adjacent to any marker on the board provided the following conditions are met:

> a. No two markers of the same shape or color (object class) may be placed side by side or may connect on a diagonal.
>
> b. A marker may not be placed diagonally (corner to corner).
>
> c. A marker must connect with another marker on at least one side.

4. A player may not pass his or her turn.

5. If a series is discovered it must be pointed out before a marker is placed on the board. If a series is completed it must be declared as the marker is placed on the board. One may declare a series only during one's turn. After a marker is placed on the board play passes to the next player.

The following rules are optional:

6. In lieu of her turn a player may elect to add another class of objects to the play. All other players must agree. The board is enlarged accordingly.

7. Players may each bring a collection of objects to the game and combine their objects for the playing pieces. The class of objects added to the play must be an identifiable property of a significant number of the objects in the collection as determined by the players.

8. Players may agree to make the playing board *n*-dimensional (i.e. 3 (space), 4 (time), 10 (hyperspace), etc.) and to allow any class to be added to the play. By class is meant a set or collection of anything, whether that thing is an object (real or imagined), a process, or a characteristic or property of an object or process.

9. Each player may agree or disagree privately or publicly to believe the following:

"This is a type of game everyone already knows how to play. We are born knowing how to play it. We call it by many names. Sometimes we call it "cause and effect", "understanding", or "knowledge." Sometimes we call it "reality." When we say we have discovered it in something we call it "science." We sometimes call the not-game part of it "art", "mysticism" or "Zen." It is one of the oldest games of all. It is one of the games we use to make up all the other games.""

FADE TO BLACK

BORGES: I see. Or I think I see. It is both a book and a labyrinth.

SENECA: If you choose. Do you understand the rules?

ANAXIMANDER: Yes. I think so. Is the non-limited in there somewhere?

SWEDENBORG: Yes, of course. The non-limited is everywhere. Would you care to play the game?

AMIDA: No.

ZENO: Would you like another example?

SWEENEY: No. Two is enough. Three is too many.

ZARATHUSTRA: Does anyone have any questions of me?

PRAJAPATI: Not a one.

12.

Fact is, it was over a week before things really began to sink in. I told myself I couldn't believe it, but I did believe it. Behind my own back I believed it. I knew it for a fact and that's why I just said it. After that, everything seemed to slow down quite a bit, at least for me. Don't know why. Just did.

I didn't get any calls to work from my usual customers, so there wasn't much else to do but sit out on the porch swing or lie on the couch and watch the news on TV. The news didn't mention one thing about it. Just the usual bunch of well-dressed people talking calmly into the camera while the usual bunch of hell-raising went on in the background. I tended to cut it off after a while and read instead.

Every so often some car would come tearing down the road making an awful racket. All I could picture was some poor, lost soul with his hair on fire in a big hurry to get somewhere when he knew there was nowhere to go.

Otherwise it was kind of quiet.

I stayed drunk until the beer ran out. I had my usual icebox full out back, so that took about three days. I now refer to it in my mind as the case of the last beer. I don't remember too much about it except for one thing. I remember cleaning my shotgun, drunk as a cooter, and I kept loading it and unloading it and cleaning and drinking and so forth and so on until I finally just passed out. When I woke up and saw the thing lying next to me on the bed with the end of the barrel pointed right at my face it scared hell out of me so I locked it back in the gun cabinet and flushed the key down the toilet.

I had a couple more bad days after that. I had to dry out I guess.

Then I started reading the Bible, although I don't know why. I had never read it much before. At first, reading the Bible made about as much sense as checking the numbers on a week old lottery ticket. I read a little bit here and a little bit there -- about all sorts of things. Like I always do, I finally just jumped to the back of the book to see the ending, how everything was eventually going to turn out. That was where I found the Book of Revelation -- a very scary story, let me tell you. Anyway, when I found out about all of the plagues that were going to be visited upon us, I almost decided I was right to get drunk the first time. It said you wouldn't die if you jumped off a cliff but I knew if I went down to the Lucky Stop I'd likely as not get shot and I just wasn't going to chance it. I know from personal experience that people get crazy once things start changing faster than they can keep up. It's bad enough when times are normal, but this was worse than reality TV.

As the days grew longer I found I had more time to think. It's good to think. To reflect on your life. To know where you're going and remember where you've been. Most people never take the time, though.

I know I never did.

Now I constantly wonder at all the mystery in the world. The mystery of the trees and of the sun and moon and every living thing and why anything should even be here at all. The mystery of myself and why I should even be here at all. It would make more sense if nothing was here. But it is. That's the part I can't figure.

Mostly I miss Mary. I'm just grateful her and the baby are doing alright.

Why am I telling you this? Don't know. Just am.

I remember the day it all started. Every single bit of it. I remember it the way you remember being sick with a fever, or your first kiss, or your first fight. The sight, the sound and the smell of it. All those feelings and things there just aren't any words for. It's hard to explain. Everybody remembers times like that -- you know, the way the light comes just so through a window and you remember every tiny bit of it, exactly the way it was, all the rest of your life.

I was up early for a Sunday, around six o'clock. I took a bath, shaved and had a couple of beers for breakfast. Yeah, that was me. With all the best intentions I was still a regular Budweiser poster child. I was putting some pieces in our thousand-and-one 3-D Elvis picture puzzle we had gotten for a wedding present when I heard Mary throwing up in the bathroom so I went in and held her head. She's got the prettiest hair.

You'd like Mary if you ever saw her. She's the most beautiful woman I ever knew. Beautiful on the outside and on the inside. There's lots of beautiful women in the world, but there's no one else like Mary. She's one of those people you can tell things about yourself -- shameful things -- and she'll never point a finger or say an unkind word about it -- to you or anybody else. I never was much of a talker, but when I met Mary I told her things I had never even told myself. She is easy to love and trusting as a child and I guess that's why I married her. That and selfishness on my part. Except for her aunt, she had no family. Except for Merle, neither did I. I guess I thought, since we were both nearly alone in the world, I would never have to share her with anybody.

Mary's a gentle spirit. Always has been. Not like most preachers and other holy-roller types. Just a real simple faith. If it wasn't for her I would never have gone to church in the first place. And never missed it, either.

I went into the bathroom and she was retching hard into the toilet with the dry heaves. It hurt me to see her like that. I put cold rags on the back of her neck until she quit throwing up. Then I got her back in the bed and kissed her. We'd been married two months.

"Hey," I said, "are you alright? Do you feel good enough to get dressed for church?"

"Not really," she said. "My stomach doesn't feel very good. I'm afraid I'm liable to get in the middle of Brother Skip's sermon and suddenly have to throw up all over everybody."

It had always seemed a miracle to me how anybody could keep from it but all I said was, "Yeah, that would be a shame."

I knew better than to try and beg off from church. She would make herself go then whether I liked it or not.

Since I was going to have to go by myself I went back in the kitchen and had a couple of more beers to steady my nerves. Then I chewed up half a pack of Wrigley's so nobody would smell it on me once I got to church. I had only been saved two months and people were still keeping a sharp eye on me so I wouldn't backslide.

After I got dressed I had another beer and fit some more pieces in our puzzle. I was waiting until the last minute so I wouldn't have to hobnob with anybody once I got to church.

Mary had fallen asleep when I left.

Looking back, it seems like it was the perfect day . . .

As a general rule I tend to drive like a maniac, but this particular morning I was taking it easy. The sky was pale blue and dotted here and there with clouds white as milk and fluffed up like cotton. The sun was still coming up through the trees and at the tops it broke through in places making it look like bits of lace scattered overhead. On the other side of the road the woods were still in shadow.

Every so often there'd be a pasture with a few cows milling around and a couple of oil rigs slowly rocking back and forth like giant crows trying to pull stick worms out of the ground.

One thing I've always believed is that everyone has gifts. One of mine is showing up at the last minute. Like always, I had timed it just about right. When I got to church everybody was inside except Brother Skip Simoneaux. He was still standing outside in his white bucks waiting for latecomers.

Somebody once told me he was called Skip because when he was a high school football star he always used to take a little skip before kicking the ball. I always wondered if it wasn't because of that time he shot himself in the foot dove hunting. It gave him a limp.

"Why good morning Brother Waite and how are you this fine morning?" he asks I walk up.

"Oh, just fine," I say.

"Where's the wife?" he says. "I hope she's alright."

"Oh, its nothing. Just a little morning sickness." Then and there, just like that I realized I'd messed up big time.

He gets this real sickly-sweet smile on his face and says, "Well I'll be. . . . Isn't this a little soon after the wedding to be having a baby?"

I didn't say anything else. I just walked on in.

I could of kicked myself at first but then I thought, "There's nothing to be done about it now," so I found a seat at the very back near the door and tried to relax. The windows were all open and the sunshine was pouring in. Outside a mockingbird was singing.

I looked across the aisle and saw Little Joe Little marking something in his hymn book with a pencil. Poor little guy's Dad stays in jail. Missus Little reached over very calmly and popped him on the back of his head and he quit. She's a pretty woman, Audry Little. Some folks gossip about her and the preacher. Life's a lot harder on some than on others is all I know. I've made a lot of messes in my own life. Judge not lest ye be judged is all I've got to say.

Right then the organist started up and the choir marched into the choir loft from a side door. Like always the first one out was old Brother Lucien Bass. He looks a couple of hundred years old and he can't sing, but he was always swearing that the Lord had promised him he would see the return of the Savior and that the loft was a good place to see it from.

Bringing up the tail end was Billy Hayes. Billy tickles me because he'd always fall asleep right in the middle of Brother Skip's sermons and snore, mouth hanging open so wide you could almost count his teeth if you could find them. He chewed tobacco.

The last ones in were Brother Skip and our Music Director, Brother Bob Wilkerson. Brother Bob was always sporting this beige jacket with these little silver wagon wheels on the pockets. He said he bought it back when he was a big Nashville singing star, before he gave it up to do the Lord's work.

After everybody got settled the choir joined in with the organist and did "Walk Around The Throne."

Then we all stood up and sang "At The Cross." If you weren't careful you'd swear you heard a screech owl somewhere but it was only Brother Bass.

When we got through singing the ushers came to the front to pass the collection plates. After they finished collecting they took them up and put them on a little table in front of the pulpit.

Then Brother Skip walked up to the pulpit, looked over into the collection plates and said, "Now I'm not going to get up here and preach about tithing. We all know that it says in the Bible a man shall give a tenth of his salary to the Lord. . . . Well, I'm just not going to preach about it!"

He started talking instead about the Fourth of July picnic that was coming up, how he hoped Sister Little would make some of his favorite potato salad. Then he talked a little bit about patriotism, the flag and our boys in blue. So far, so good.

Then he said, "Sister Mary Waite has been blessed with a child and only two months after the marriage. Praise the Lord! Don't He work in strange and mysterious ways?!"

Just about everybody in that whole church turned around to look at me when he said that. I just smiled. They turned back around.

Then he started talking about a dream he had, that an angel of the Lord had come to him and told him about the Lord's plan. And his soul was joyous to share it with us. And the more he talked the more excited he got and pretty soon he was yelling like all get-out about the Lord's plan.

". . . You know Brothers and Sisters, everybody wants to do what's right! Everybody wants to do the right thing! Everybody's got it in their heart they know what's right! They got a plan in their heart to follow that they know what's right!-----But let me tell you Brothers and Sisters there ain't but one plan to follow and that's God's plan! And God's plan is for you to worship Him and adore Him and do His will. So you say Yea! -- I want to do God's will but what is it? Well I'll tell you what God's will is Brothers and Sisters. God's will is for you to follow His laws and the words of His only begotten Son, Jesus Christ. God's will is for you to keep your womenfolk clean and pure and not let them go around dressed like a bunch of harlots. God's will is for men not to sleep with men, and women with women, not to drink and smoke and curse and gamble. And God's will is for you kids to honor your father and mother and not talk back all the time. And God's will is for you men not to lust after women for as Jesus Christ said, whosoever looks after a woman lustfully has already committed adultery with her in his heart. And God's will is for you not to go worshipping after false idols: idols like pride, and the flesh, and new cars, and fancy dresses and money. And God's will is for you to support His church. And not just with your witnessing but with your tithe for it says in the Bible that a man shall give a tenth of his earnings to the Lord for His work!

Now I know some of you are looking at me and thinking, you old hypocrite, just because I drive a nice car and wear nice clothes. But let me tell you, you're not keeping that money from me -- You're keeping it from the Lord. And that money's not yours to give or keep anyway. You don't have any say so

about taxes and you don't have any say so about this. If you don't give it to the Lord this way, He'll take it another. Maybe a flat tire or your house will burn down or you might get sick and have to go to the hospital and lose your job or worse. But you better believe it, Brothers and Sisters, something will happen. You think I need this money for myself. I don't. I used to make more money selling vacuum cleaners in a week than most of you have ever seen at one time in your whole life. Now I'm not going to go on and on about this but you remember what I say. It says in the Bible that it is easier for a camel to pass through the eye of a needle than for a rich man to enter into heaven. If you want to burn in Hell with your pockets full of money that's your business. And let me tell you something else. Those people that think Hell is just some kind of mythological symbol, I feel sorry for you. When you're jumping up and down, holding your behind with both hands you're going to be thinking mythological symbol. You ever burn the tip of your finger? You know how much that hurts. Well, Hell ain't no wading pool. It's a lake of fire. And when they drop you in they drop you in head first -- You just wait. Now, I'm going to pass these plates one more time and I'm going to sit here quietly until they get back. No organ music, please."

Then he took out this pocket Zippo, opened it, lit it, turned it all the way up and set it on top of the pulpit where everybody could see it.

I'm a welder by trade, got my own rig and everything, and I used to make pretty good money. Because of Mary I tithe everything I make anyway. But looking at that lighter flicker and sputter I figured it wouldn't hurt to put in an extra twenty. I wasn't the only one thinking that way. The collection plate looked much healthier the second time around.

When they got through the ushers brought the plates back up front. Brother Skip looked at them and said, "That's better."

He started talking again about sins in general, of the flesh and of the spirit -- everything from long hair and short skirts to being like the Pharisees in the temple and thanking the Lord for making you better than anybody else.

He was going really strong and amens were starting to break out here and there. I figured he might really have been visited by an angel when I saw that Billy Hayes hadn't gone to sleep yet but was only nodding his head.

Now I'm going to mention something that on the surface probably seems to have no place in a conversation of this nature. Here it is. I suddenly felt a strong need to go to the bathroom. Number One. Of course it was the beer. There was no way I could excuse myself so I started amenin' and rocking back and forth a little bit to ease the pressure. Having to pee real bad keeps your mind marvelously focused. I think that's one reason I remember all this stuff in such detail. I also mention this because I know now that everything happens for a reason.

Anyway, by this time Skip was talking about the Lord's rewards for His good children and about how He was coming again to take the Faithful to His bosom. And every time he'd yell something out everybody would yell back, "Amen! -- Amen Brother!"

" . . . For it says in the Bible there will be wars and rumors of wars!"

"Amen!"

"And we got wars and rumors of wars!"

"Amen!"

"And there will be plagues and famines and all manner of terrible things happening!"

"Amen Brother!"

"But the Lord will look down on His children and have compassion and take them to Him for He knows that they believe in His Son, Jesus Christ, for it says in the Bible whosoever believes on the Lord Jesus Christ shall be saved!"

"Amen Brother! Hallelujah!"

"I tell you Brothers and Sisters, the Second Coming is close at hand!"

"Amen!"

"The Rapture is close at hand!"

"Amen! Tell it, Brother!"

"And we're going to be ready, Brothers and Sisters!"

"Amen!"

"We're gonna be waiting with open arms when Jesus comes in all His glory wearing His golden belt and surrounded by hosts of angels for the wages of sin is death but the gift of God is eternal life through Jesus Christ our Lord who died that we might be saved who suffered that we wouldn't have to burn in the everlasting flames of Hell so lift up your arms Brothers andSistersraiseupyourarmsandlettheLordknowwe'llbereadywhentheskysplitsasunderandHecomesdowntoclaimHisown!!"

"Amen Brother! Tell it!!"

I don't know how he did it but he had everybody in that church yelling praises to the Lord and jumping up and down and waving their arms and Bibles around their heads and us not even Pentecostal.

I was jumping up and down and waving my arms and shouting just as loud as anybody else. I was about to split I had to pee so bad.

Needing to go like I did, I was wondering if I couldn't just sneak out of the church, relieve myself, and sneak back in without being noticed. I was about to

do just that when I suddenly heard the most god-awful scream I ever heard in my life!

Everybody in that church shut up and was turned to see where it came from. I figured it must have been Missus Little. She was standing there with her eyes bugged out staring at Little Joe like he was -- I don't know, Elvis escaped from the aliens maybe. I didn't notice anything unusual about him except he seemed to have grown a little taller. After a minute, though, it occurred to me that he was still growing for he was just about as tall as his Mama and him only seven years old. Every soul in that church was just standing there with their mouths hanging open not making a sound.

The only sounds in the place was coming from Little Joe who was still waving his arms in the air shouting, "I'm coming Lord! I'm coming for my reward!"

It didn't occur to me what was really happening 'til I saw Little Joe's feet clear the top of the pew. I noticed his pants were a little short from the way they fit over his dingo boots. They were way up past the buckles.

Well, that did it! When they saw his feet everybody else started shouting "I'm coming Lord! I'm coming to my just reward!" and jumping off the pews. The folks up in the choir loft were climbing up to the top step and jumping down. Even Brother Skip was dancing around up at the pulpit. The place looked like an electric corn popper.

Since I didn't notice anybody else was making too much headway I looked back at Little Joe. He was just about to the ceiling and while I watched he bounced a couple of times like a gas balloon and came to rest flat on his back. Then he rolled over and started crawling upside down like a fly toward the window. The whole time he kept yelling, "I'm coming Lord -- I'm coming!"

Everybody else must of realized they weren't making too much progress either because they stopped jumping up and down and looked up at Little Joe just in time to see him crawl through the window.

They all stood there staring at each other for what seemed like forever, trying to figure out what to do next.

All of a sudden Brother Skip yelled out, "This ain't the Rapture!-----It's just Little Joe acting like a 'Tom Fool'!"

Then everybody turned and looked at Missus Little like it was her responsibility.

That poor woman didn't know what to do. She yelled at Little Joe through the window, "Little Joe Little, you get your self down here right this minute and quit embarrassing me in front of all these people!" but all we could see of Little

Joe by that time was his dingo boots hanging down outside the window kicking and then they disappeared.

Well, we were all outside in a wink and I looked up to see if the sky was split asunder but all I could see was a couple of clouds hanging low over the tree tops.

Some folks started jumping off the hoods of their cars or their truck beds as soon as they got outside. Some of the women started crying. That's because women are smarter than men. They know which way is up.

I heard somebody yell for a ladder and a rope and I ran around to the side of the building to see how Little Joe was making out. He was tilted at about a forty-five degree angle like he was about to tip over backwards. His feet were about even with the gutters and he looked to me like he was starting to pick up speed. His Mama was still calling for him to come down but he just kept on waving his arms and staring off into space shouting praises to the Lord . . . like he saw something none of the rest of us did.

By that time another one of our deacons, Frank Thomas, had gotten a ladder and propped it up against the building and was climbing up trying to grab Little Joe's feet, but Little Joe managed to stay just out of reach. He climbed up on the roof and somebody threw him a rope to lasso Little Joe with but by then it was too late.

I don't know whether it was desperation or inspiration that forced him to it, but Brother Thomas took a big running leap off that building after Little Joe, came down like a sack of potatoes and let out a scream when he hit. The way he was moaning and groaning I figured he must of hurt himself pretty bad, but when I went over to help he started cursing and carrying on like some kind of nut so I let him be.

Everybody else was starting to act pretty crazy too. I know from personal experience that denial and rationalization will only get you so far in a situation like this. Almost everybody had given up jumping off things, but some of the men were raving and ranting and most of the women were crying and ringing their hands except Missus Little who was just staring up at Little Joe getting littler and littler.

It seemed to me by then that things were completely out of hand so I looked around to see where Brother Skip was. I figured if anybody could get things under control it was him, but he was nowhere in sight.

I suddenly remembered I still needed to pee really bad, really quick. Since every other social convention seemed to have gone out the window with along with Little Joe, I decided I might as well do it outside. Not to seem completely without manners, I went around to the other, unpopulated side of the church and

who do I see but Brother Skip all splayed out with his back up against the wall like he was trying to look in ten directions at once. When he saw me he and I both jumped about a foot.

I said, "Skip, these people are acting like a box of nutbars! You've got to set things straight right now!"

He motioned for me not to talk so loud and whispered, "It's too late! It's too late! There's nothing I can do!"

Right then someone on the other side of the church started yelling, "Where is that son-of-a-bitch Simoneaux?! He got us into this mess!"

Somebody else shouted, "If I get my hands on him I'll kill him! I swear it!" It was Brother Bass.

I have never seen anybody move as fast as I saw Brother Skip take off when he heard that. It wasn't two or three seconds before he had disappeared into the woods limp and all!

It was lucky he took off when he did, because as soon as he took off, somebody looked around the corner and yelled, "Here he is!" and a few seconds later most of the men came charging around both ends of the church and disappeared into the woods after him.

I tried to pee then but I couldn't. I was in shock. I walked back around to the other side of the church.

Brother Thomas was still sitting there rubbing his ankle and groaning. How, I don't know, but Billy Hayes had fallen asleep under some dogwood trees. Some of the women were sitting on the ground getting their dresses all dirty and some were leaning against the building and some were standing and they were all crying like the Missouri except for Missus Little who was still staring up at Little Joe.

I went over to her and looked up myself but the sun was right in my eyes and Little Joe was pretty far away. I thought about getting my sunglasses from the truck, but I figured it might be too late by then. I couldn't hear him praising the Lord anymore but by shading my eyes with both hands it seemed like I could make out the bottoms of his dingo boots. . . two little black dots. In another minute he was gone.

I know up from down as well as anybody. I knew exactly what had just happened. Not a speck of doubt was in my mind. And then I suddenly felt a warmth go through me. It started at my middle and spread down over my legs. Oh, well, I thought. Compared to what everybody else was doing it just didn't seem like that big a deal.

Missus Little was still staring straight up but I was getting a crick in my neck so I straightened my head up. “Missus Little,” I said. “God bless Little Joe and God bless you. I’m going to go now.” She didn’t say anything.

Church was over.

I raced to the trailer and ran inside calling for Mary so I could tell her what had happened. I thought if anybody could explain the situation it was her. But she didn't answer. I ran back to the bedroom. Her purse was open on the bed. The room was empty. I knew right then what had happened and I panicked. I started screaming "Mary! Mary! Where are you?!" and running in and out of that trailer like a crazy man. I ended up back in the bedroom and I noticed the window was open. I ran back outside and looked up at the sky, but I couldn't see anything.

I didn't even bother to call anybody. I knew. I had never cried over anybody in my life, but I cried then -- like a baby. A little later I looked up at the ceiling over the bed and found the words "John 15:9 " marked on the ceiling in lipstick. I looked it up. Then I started drinking until I stopped, but I told you that already.

13.

The dialogue
between
sea and shore
repeats itself
endlessly
aware
but aware only
a gesture of patience
a counterpoint of
breathing
a well of motion
emotionless.

The land dreams of the sea as
the sea retires.
Beached debris record the
sea's jealousies
images become
the silhouette of the
shore's indifference.
Waves weave innuendoes.
They ascend and descend
in endless preparation.
The sun and moon loll slowly
in their sockets.

The sea recedes.

1. Science speaks to the western mind with the voice of god. That the universe is bound by a unified body of law and that this law can be known and used to provide a "complete" description of all things is the dominant intellectual belief of our time. The assumptions underlying this belief are:

a. Natural selection will produce human beings with the intellect to discover this body of law and

b. These humans will possess the superiority (i.e. biological, economic, political, etc.) to see their ideas predominate over time.

The philosophy of science is rationalism. The authority of science is based upon mathematics, inductive reasoning and empiricism, all of which are products of the mind.

To assume these tools are sufficient to fully understand the complexity that is a human life and thereby understand the universe is to misunderstand their use. The correspondence between physical and/or chemical activity in the brain and the individual's thoughts, dreams, emotions and volitions - the content and structure of a human mind - is not verifiable by direct and independent observation. Even if it were, it is not logically necessary that natural selection, scientific method and a unified model of the universe are causally related. The true relationship between one's inner life and the collective, "objective" experience of the species remains unresolved. As in the beginning the first and most important question remains one of unity and whether or not it is possible.

2. All logic is man-made. All contradictions are man-made.

There are many in the scientific community who believe the processes that constitute intelligence are ultimately deterministic and will eventually be replicated by a machine. Such models of the mind include the Universal Turing machine and neural networks. Each model assumes that consciousness is an algorithm (a recipe) expressible in language. It is the goal of Artificial intelligence researchers to discover such an algorithm.

There are a few scientists who believe that there is also an essentially non-algorithmic character to human consciousness. Roger Penrose has cited numerous examples within mathematics of this type of thinking. He has argued that the

equivalence of two things can sometimes be derived algorithmically, but that the non-equivalence of two things can only be arrived at intuitively.
We live in an age that presents us with numerous conflicting systems each of which claims the title of “Reality”. And for the most part we continue to believe that there must either be one underlying eternal reality (that forces us to decide which reality is the “real” reality), or else that the very concept of reality is outdated and all choices are arbitrary.

3. Contemporary particle physics supports the belief that our universe began somewhere between 10 and 20 billion years ago as a single point infinitely small and infinitely dense. The entire history of our universe from beginning to end was somehow contained in that point. Quantum physics now suggests that the point or singularity that marked the beginning of our universe was not the only one possible. Why do we see this particular universe and not another? It has been suggested that we see this universe as it is because the “laws” of this particular universe made possible the evolution of creatures like ourselves that are able to see this universe. In a different universe with different laws sentient beings like ourselves might not have been possible. Such a universe would remain “invisible”.

Is it this coincidence or anthropic principle that has made possible the unity of mathematics and science that began with Euclid's "Elements" and has continued through classical physics, general relativity, quantum mechanics and superstring theory? If the anthropic principle is valid then we are the universe made self-aware, the emerging mind of the universe. The universe has seen itself change from a "Flatland" to a concentric system, to an ever-expanding complex of galaxies. Some physicists now propose the existence of infinite universes. Is there any reason to believe the consciousness of the universe will not continue to evolve? Will a unified field theory mark the “The End” of understanding? Probably not.

An idea closely related to the Big Bang has to do with the existence of multiple dimensions. (There *are* multiple dimensions. We live in four of them: width, length, depth (also known as space) and time). Those scientists supporting the Big Bang theory suggest that the tiny dot from which the universe emerged may have contained ten dimensions. When the Big Bang occurred three of the dimensions flattened out and in doing so took up a lot of space. The remaining dimensions remain curled up very tightly. At this point in time they are not observable. What makes this idea important is the corollary idea that the more dimensions you have the more reality you can pack into a given space. (Computer scientists use this approach to pack large amounts of information into very small spaces). It is not

known yet if there is a limit to this process. If enough dimensions are available you should be able to pack the reality that is the universe into a very small space. Perhaps this is already the case. Perhaps all the meaning in the universe is already packed into each and every thing there is, into every blade of grass, into every mundane and/or important event in our lives. Perhaps each time a child is born the Big Bang occurs all over again. The current scientific theories of our universe as beginning and ending in singularities (the point at which mathematical theories break down completely – the Big Bang, the Big Crunch) are metaphors for birth, life and death and contain the same mysteries. Even Stephen Hawking's suggestion that the universe may be finite and unbounded in imaginary time (as the surface of a sphere is finite and unbounded) bears a close resemblance to Zen. In Zen we do not begin or end. We simply are.

One of the most important concepts in the history of science, Bell's Theorem, addresses the question of unity in a different way. In essence, Bell's Theorem states that if you take a set of paired subatomic particles, send them off to opposite ends of the universe and then reverse the spin of either particle the observed spin of the other particle will be instantaneously reversed. There is no interval of time involved, no time for any message to be sent. This means that all things immediately and directly affect each other, not only at the particle level but at every level. This means that my existence is somehow intimately connected with your existence, with the beginning and end of the universe, with the smallest living thing and with the farthest galaxies This means that divisions of any sort in the fabric of the universe are arbitrary at best. There are no “objects” and no “events”. The entire universe is a unity.

Another example of non-local causality is seen in the formation of quasicrystals. Crystals are commonly perceived as being very symmetric arrangements of atoms that are created through the orderly addition of atoms at the “edge” of the crystal. This is a classic example of cause and effect. The symmetry of quasicrystals (five-fold) does not allow this type of growth. In order for the crystal to be formed correctly, complex “decisions” must be made by other atoms at a great distance from where the atoms are actually forming the crystal.

Even Einstein’s universal constant, the speed of light, has come under question. Most recently, experiments in physics have shown that it is possible to establish a sequence of events that allow messages to travel in excess of 300 times the speed of light. By pushing a pulse of laser light into one end of a tube containing cesium vapor, it is possible to detect a pulse of light having exactly the same pattern as the original pulse before the original pulse of light has finished entering the tube. Maybe once you separate the information about the universe from the universe, it

is the information about the light that is limited by the speed of light, not the "light" itself.

If the potential exists for a sub-atomic particle (or process) to be directly and immediately affected by other non-local particles or processes it becomes necessary to compute the relations (i.e. positions and momenta) of all particles in the system and not just the particles adjacent to that particle. There is not enough storage (at one number per particle) in the universe to hold such a computation. Even if the universe is fundamentally deterministic it is not computable.

Scientists are learning that models of reality that are strictly local in nature must always fail. This applies not only to particle physics but to individuals and civilizations as well. Any idea or society that insists upon its own immutability is already in the act of dying.

4. Language lies at the heart of this. Language is the original metaphor from which all other metaphors are created. The mathematician Kurt Gödel hypothesized that any set of rules used to formally define a language could not describe all of the true (well-formed) statements possible in that language. To do so would require the addition of a new rule. This new rule would in effect create a new or meta-language that in turn could not describe all of the statements possible within itself. What this means is that no formal system (us included) can fully understand itself.

To understand yourself completely you have to somehow evolve to a higher form (i.e. add a rule). Then you can, theoretically, understand what you were. But you still will not fully understand what you are. You still will not have all the answers. You never will.

Ed Fredkin believes the universe is a computer and that it is in the process of executing a program the purpose of which we cannot know. He believes the basic building blocks of the universe are not material in nature but are composed of pure information. Like Democritus, he believes the universe is composed of indivisible "atoms" or cells of information that are part of the cellular automaton (computer) that is the universe.

Sub-atomic particles and processes are not the ground of reality. They are some of the most powerful myths of our age and they will change and give way to more beautiful and sublime myths, myths that are not dependent upon science, art, religion or anything else for their existence. Myths are not fairy tales. A myth is a

ritual of understanding that provides deep insight into the individual and collective human experience.

It is no longer necessary to believe in the external universe of physics or the internal universe of mathematics as the ultimate reality. Philosophies of idealism, empiricism, rationalism or linguistic analysis no longer provide viable models either of human existence or external, objective reality. None of these models is large enough to contain the life of a single person. The individual's experience of life is the only category capable of containing all others. All languages, all knowledge and emotion, values and beliefs, truth and lies are contained within it. All of our concepts of the universe, whether of Western theology or cosmology or Eastern philosophy, are metaphors for this greater universe. The life experience of the individual is the ultimate and absolute authority. The individual's responsibility to herself is her first responsibility and comes before the demands of governments, religions, or economic ideologies. The ground and foundation of reality is life itself. Not only the life of a human being, but all life. If the universe is made out of anything it is made out of meaning. If the universe is a machine it is a meaning machine. If there were no human beings the universe would still contain meaning and the evolutionary process would still create meaning. Meaning is not simply another word for information. Information may or may not matter. Meaning always matters. It has purpose and is important.

We teach our children that much of the energy that supports life on earth comes from the sun. Plants breathe in carbon dioxide and produce oxygen. Animals breathe in oxygen and produce carbon dioxide. Photosynthesis is part of the chain of events that provides us with the oxygen that fuels our brains. As part of the ecosystem we use the sun's energy to discover meaning in our universe, and based upon our discoveries we create new meanings where they did not exist before. We code meaning into everything: our social institutions, our architecture, our art, our goods and services. We code meaning into the planet itself and transmit meaning outward into space. We too are meaning machines. We turn photons into art.

5. In this century certain mathematicians have helped us to understand that any formal definition of reality must by its nature remain incomplete. The instruments of thought that were to be used to prove the existence and infallibility of formal systems (that in turn describe reality, i.e. Hilbert's agenda) have been used instead to prove the dubitability of those same formal systems.

Abraham Robinson through his method of "Nonstandard Analysis" has demonstrated that any "standard" universe of knowledge has a corresponding

"nonstandard" universe that contains all of the statements within the standard universe as well as statements not expressible within the standard universe (i.e. infinitesimals). Furthermore, statements that are true in the standard universe are also true in the nonstandard universe but with a different meaning to their truth. The same statement may be true in different ways depending upon the "universe" in which it exists.

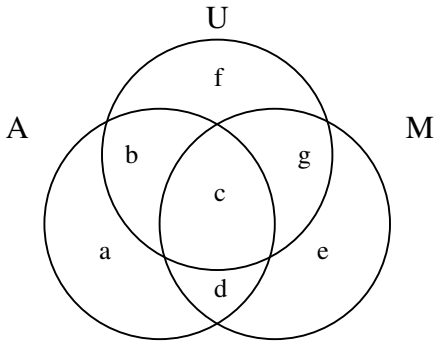
Georg Cantor has shown us that even our concept of infinity is limited and that there are at least two types of infinity (the infinity of the natural numbers and the infinity of points on a line segment). Cantor calls these values transfinite. Recent mathematics has identified many additional categories of infinity.

As children we are taught that scientific knowledge results from a combination of inductive and deductive reasoning. One attempts to derive general rules from observation and experimentation. This is the legacy of scientific method as given to us by Roger Bacon and Rene Descartes and it is a fallacy. There is no question as to whether or not science works. Science works wonderfully, but not in the ways that we are taught.

The work of Karl Popper, Imre Lakatos and Thomas Kuhn has shown us that all logical, mathematical and scientific discourse is based on individual predilection, intuition, and social interaction. Science is not the dispassionate, methodical discovery of an absolute, empirical reality. Science is what scientists do in their everyday lives. The academic journals do not represent the intellectual life as it is lived but as it is idealized by the scientific community. Science is not "value free."

There are aspects of thought and understanding that have nothing to do with language. Einstein wrote that his initial discoveries were both visual and kinesthetic. His ideas were not expressible in language until after he had become comfortable with them in his mind's eye and with his body.

6. Individual experience, language and physical reality are forms of life. Within itself each form of life has meanings and truths that are available to it alone. The relationships among these forms may be described as follows:



where:

A = Human (i.e. personal) experience
U = Language
M = Physical Reality

a = Personal experience that is not a part of physical reality and is not expressible in language (e.g. mysticism, madness)
b = Personal experience that is not a part of physical reality and is expressible in language (e.g. mathematics, art, religion)
c = Personal experience that is part of physical reality and is expressible in language (e.g. science)
d = Personal experience that is part of physical reality and is not expressible in language (e.g. pure sensory awareness)
e = Physical reality that that is not available to human experience
f = Forms of language that are not a part of physical reality and are unknown to human experience
g = Forms of language that express characteristics of physical reality and are unknown to human experience

The purpose of such a model is simple. Meaning and truth are not latent within the physical universe waiting to be discovered nor are they arbitrarily imposed upon the world.

Meaning is created from moment to moment out of the ground of one's personal experience of life in all its aspects. The truth exists in things known and unknown, in that which is expressible through language and in that which is not.

7. In all cultures the purpose of art has been to communicate those aspects of human experience that are constant and that possess meaning. Civilizations rise and fall but their art remains. Art bears witness to an age.

The representational forms of western visual art began as windows to the world of reality. Since Giotto's time these windows have by turns faced both outward and inward. At the end of the last century the emergence of the modernist era turned these windows inward once again to the soul, the emotions and the world of absolute ideas. The last half of this century has witnessed the emergence of a postmodernism that treats art as an object of exchange whose value is primarily economic and fully dependent upon the institutionalized, socio-economic system in which it exists. For the postmodern artist the outstanding question is whether meaning in art is even possible.

In this century of “Isms” (Neo-Impressionism, Fauvism, Cubism, Constructivism, Futurism, Surrealism, Expressionism, Abstract Expressionism, Minimalism, Photorealism, Neo-Expressionsim, Postmodernism, etc.) the art world has become an industry, like clothing and automobiles, driven not by new ideas but by the requirements of the market.

In a market economy buying decisions are based upon three criteria: necessity, utility and social value. The creation/consumption of art is a necessity only for artists. The idea of the artist is often used to illustrate Maslow's concept of "self-actualization." An artist will always have the option to create her own art as necessary. The creation of art does not require a “factory.”

While the creation of art may be a necessity for some the consumption of art is not. Social organisms can live without art. In societies with a high level of illiteracy art has utility. Images can take the place of words. A common example is the use of religious icons and paintings throughout the medieval period to express the views of the Roman Catholic Church. A society such as ours does not require art for this purpose. We have television.

That leaves social value. Museums and individuals acquire art because of its social value (that readily equates to economic value). People go to museums to see art because of its perceived social value. It is the critic who establishes value and makes possible the continued existence of the art institution as it presently exists.

8. Criticism as a way of proving the worth or meaning of a work of art, a scientific theorem, a political ideology, a life or anything else has as its root the concept of proof. The idea of proof in turn is based on self-evidence, logical discourse and authority. Most often it is a combination of the three.

Because the domain of experience varies for the artist, the critic and the lay observer the meaning of a particular work of art may not be self-evident but may require supporting criticism. This “objective” definition provides the key to understanding the work. In any objective analysis one will always find a predisposition to a particular way of thinking. We normally accommodate such a predisposition by attributing it to a higher authority that we in turn refer to within the body of the argument. Objectivity is a myth.

The fundamental or primary criteria in the establishment of proof is that of self-evidence. This means that something is not only directly verifiable by the senses but that it also “makes” sense, that it corresponds closely with other things of which we are certain, things we intuitively know to be true.

9. Traditional art beginning with the Italian Renaissance was based on a belief in an objective, verifiable reality. To this time its agenda remains consistent. Pictures should be of things and have as part of their meaning the meaning of the things they represent. They may be regarded as illusions by some, but as illusions of things. Perspective came from mathematics and was based on Euclidean geometry. Mathematics is the foundation and authority underlying all forms of purely rational, representational art.

Modern art also sprang from the desire to represent reality, not the reality of appearances as representational art had done but the absolute reality that lay at the heart of the human experience. Among the goals of modern art were: 1) to provide order to the multiplicity of sensory experience, (Picasso), 2) to create new ways of seeing (Klee), 3) to provide a means of transcending “normal” experience (Kandinsky) and 4) to identify the universal language of reality (Mondrian). All of these were efforts to represent the real.

Early postmodern criticism was concerned with the deconstruction of art in an effort to understand the social, political, and economic realities associated with the work. The problem with deconstruction is the same problem faced by the logical positivists and particularly by Wittgenstein in his early work. The assumption is that statements in a given language (the art image) are reducible to universal primitives that somehow contain the meaning of the original statement. This is not so. Rather, symbols acquire new meanings as the cultural environment in which they exist changes. They become meta-symbols. Meta-symbols are not new. They are the oldest of all symbols.

Current postmodern criticism has followed the path of analytic philosophy. Analytic philosophy began with the empiricism of David Hume and found its

most gifted proponent in the person of Wittgenstein whose *Philosophical Investigations* identified the mind, the object and the word as the key components in the discovery and creation of the "language games" that either cloud or clear our understanding of what is knowable. This approach works within its self-defined limits but it removes art from life and reduces it to a narrow field of activity of interest to only a few "specialists."

10. All approaches to art in our time have been concerned in one way or another with the representation of reality. The first great change after the Renaissance occurred with the Cubists.

11. By the end of the last century the explosion of information resulting from Industrialization seemed impossible to contain or comprehend. How was one to provide order to the multiplicity of sensory experience? An answer in traditional terms seemed impossible. It was Picasso and the other Cubists who adopted ideas from non-Euclidean geometries (i.e.Riemann, Lobachevsky) to support the thesis that all three-dimensional views of an object must be considered in its representation. We know now that two-dimensional non-Euclidean geometry is a model for the sphere within Euclidean geometry. Viewed in this manner Cubism is a more appropriate method for the representation of three dimensions in two-dimensional space.

12. But the Cubists could see no further than the surface of the object. It was Paul Klee who made the next important step in the representation of the real.

Klee painted in two dimensions the way that a poet writes in two dimensions, treating the canvas as a page of information. He treated words, line, color and texture as a meta-language in his description of the world. For Klee the act of painting required that all pertinent information, whether physical, symbolic or psychological, be incorporated in the representation of his subjects. He did not confine himself to three dimensional subjects but painted voices, thoughts, seasons, dreams, emotions and poems. The flora in his drawings are not "representational" but show the interiors of objects, the pistils, the stamens and the roots all as part of the surface of the study.

13. Mondrian was a Neo-Platonist. He sought to acquire for art the same certainty that mathematics had acquired with Euclid. In that respect he failed as did the entire minimalist agenda. His achievement was in his intuition and mysticism that identified the grid as one of the primary supernormal sign stimuli of the human mind.

The grid is one of the primary ordering mechanisms of the mind and reaches as far back as the caves at Lascaux. “Spirit traps” are normally associated with hunting scenes. The oldest “spirit trap” at Lascaux is a 3 x 3 grid located in one of the lowest caves that was created independently of any other image and is dated at approximately 25,000 years. The grid precedes and contains the square and triangle. It provides the foundation for coordinate geometry and much of the higher mathematics of this century. It is the grid that allows the graphical representation of *n*-dimensional objects (e.g. the square, the cube, the hypercube, etc) in two-dimensional space. The grid is the “gameboard” of the Western mind, one of the corner stones of essentialist philosophy. In our present culture the architecture of the museum space has created a natural environment for the proliferation of art based on the grid.

What the grid is to the West the circle is to the East. The circle or sphere is another of the primary supernormal sign stimuli through which humans order the world. Its evolution in the West can be traced from its roots in Gnostic mysticism (the mandala), through its use in the tondos of Renaissance art, to Riemann’s geometry (the great circles), to its current manifestation as the hypersphere. With few exceptions the sphere has played a much smaller role in western art than has the grid.

14. Jasper Johns redefined the problem of representation in terms of the dichotomy that seemingly exists between the object and its referential symbols. In his flag and target paintings the object is also the symbol for itself. The symbol in turn refers to something that exists outside the art work that in turn requires its own referential symbols creating, in effect, a type of infinite regression. In his later work he introduced symbols of a more complex order that referred to earlier work and to events within his personal life. In doing so he brought attention to the recursive and self-referential nature of individual experience.

15. Some artists have dispensed with all symbol systems other than language in the representation of the visual. Jenny Holzer, for example, uses electronic media to momentarily display strings of words that state generally unspoken, commonly held beliefs. Her “Truisms” directly address the postmodern thesis that direct references to “Truth” or “Reality” are no longer possible. Her concern is not with any identification with the objects of reality but in the analysis of the “language games” that we use to establish our sense of personal identity and our relative position in society.

16. The meaning of an object is derived from the point of reference or reference structure by which it is defined. Postmodernism supports the thesis that references

to an object are based on the institutional and cultural setting in that the object is placed and that these references are arbitrary at best. Within a model meaning is possible. But there are many models of the world.

Some modern artists took as their reference structure Industrialization in all its relationships to politics, economics and technology. Other artists chose psychology or formalist systems. Many postmodern artists have chosen analytic or post-structuralist philosophies as their reference structures. The failure of the systems it represented was perceived as the failure of modern art. The failure of postmodernism will occur for the same reasons.

Which reference structures shall we choose?

17. “Things are identifiable” is a tautology. A “thing” is what is measured and classified. Yet, when all things are taken away reality remains. This distinction between “things” and reality is the same distinction that exists between Science and the Zen mind. They are not mutually exclusive but are categories that intersect and contain each other. Formal definitions vanish as art, like life, overflows the limits of written language. At some point intuition and judgement, "animal faith, are required to go beyond that point at which all models fail, to a place where the art work becomes its own language, its own reference structure.

18. Language is the definition of objects and events. Language discovers the world. It depends on the evidence of our senses and like them points to, but never occupies, those places (we are certain must exist) where reality resides. Words are things. Whatever their physical form, as lead deposits on paper, as sounds waves propagated in the air or as electronic signals within a computer, they have mass and occupy space. They in turn have names and their names have names. They are the catalyst that allows each of us and the world to become unity. They have their place.

19. According to the mathematician Kurt Gödel formal systems can never be completely understood. Any attempt to define new rules that will identify all of the statements in a language defining a formal system will result in the creation of a new system that contains the previous system and which in its turn cannot be completely understood. This process can continue indefinitely.

This suggests that meaning is created moment by moment as isomorphisms emerge from the immediate experience of our lives. An “isomorphism” occurs when two disparate complex ideas or (data) structures “can be mapped onto each other, in such a way that to each part of one structure there is a corresponding part

in the other structure, where 'corresponding' means that the two parts play similar roles in their respective structures" (Hofstadter). Furthermore, it is "such perceptions of isomorphism that create meanings in the minds of people."

This makes it possible for each of us to share a common language and to make statements in that language using the rules of a different language that are unique to each individual. This makes it possible for each of us to speak in many different languages at the same time.

20. Meaning is both created and discovered from moment to moment by each and every human being. Through language we are able to understand the world and through language we are able to affect changes in the world. We must understand that meaning is not confined to language alone, that life and not language is the ultimate ground of reality.

If art is a language it is a meta-language and like life, is inherently unbounded and transfinite.

21. How is meaning created in art? How is reality represented in art through the use of language and other symbol or sign systems? If there is reality in art apart from language what are the mediums for its expression?

22. There are infinite languages and each language is a game. The simplest language contains only two symbols or one symbol and the concept of change or interval. One and zero. On and off. Something and nothing. Nothing and everything.

Everything computers do is done with the equivalent of two symbols. With only two symbols it is possible to represent words, images, sounds. With only two symbols it is possible to mimic each of the five senses.

The American Standard Code for Information Interchange (ASCII) is the world's binary standard for text communications. It uses only two symbols: 1 and 0. Characters are represented as a series of 6, 7, or 8 ones and zeros. The word "god" could be spelled:

g = 1100111
o = 1101111
d = 1100100

The symbols 1 and 0 are arbitrary. Any symbols could be used including color, sound, shapes, textures, etc. This form of representation is the simplest possible and can be used to define any type of data (sensory experience, ideas). With only two symbols a statement in any language can be transformed into a corresponding statement in any other language. In doing so the meaning of the statement may change dramatically as new isomorphisms emerge.

23. Imagine an art work called "memory" in ASCII composed of a series of blank panels arranged in a 7 x 6 grid. There are no discrete symbols other than the grid. The symbols that allow the meaning of the work to become apparent are found in the title and in an understanding of the ASCII code. If the observer has knowledge of the code, the meaning is apparent within the piece. If not, the meaning is still contained in the title. Without knowledge of the title infinite interpretations are possible.

The ASCII code for “memory” is:

m	1101101	X	X		X	X		X
e	1100101	X	X			X		X
m	1101101	X	X		X	X		X
o	1101111	X	X		X	X	X	X
r	1110010	X	X	X			X	
y	1111001	X	X	X	X			X

Words are not linear. Each word as it is experienced elicits a complex series of events that interacts with other words both near and far. Words are a catalyst in the creation of meaning and reality.

15.

Darkness seals the corners of the room,
The simple vase, the paned face of my wife
Less quickly now. Outside the window
I still see a granite air, uncertain clouds,
Wires that sing above a greening tree.

It is enough to see. Alone, I
Eat, sleep, dream a summer's dream of a young wife
And strong son singing by an apple
Tree. I breathe the best I can. I wait the fall,
The dole fall and turning of the leaves.

Darkness seeks the corners of the moon.
Inside, I and cut flowers wait patiently,
Feeling our way into that starless,
Steady night from which all true mystery
Must issue. Rain sings against the pane.

The days will pass. The hours and minutes
Pass, falling in steep rows. I in turn await
The fall. I, an old man, a too ripe
Fruit, bruised, scarred, alone by chance await the fall,
The dole fall and turning of the leaves.

16.

It is an old story,
as old as the Book of Man.

That was all I could think to write. Something was better than nothing. First I closed my eyes. Then I closed the notebook. I would pretend to be blind for a little while.

At times it feels better not to see than to see.

Of the five senses, sight is the hardest to ignore. It has always seemed to me the sense most susceptible to error (nearly always a reflection, never about the thing itself) and at this point in my life it has become an enemy of sorts, posing a constant threat of invasion – of the mind, of the body, of the spirit. One can never be certain if the thoughts that result from the things one sees, or thinks one sees, are one's own or are deliberately planted there by others. Everything is media. Nothing is not. Not only the TV, radio, movies and billboards, but everything seems at times to be carefully, purposefully packaged and marketed. The pen, the notebook, the desk and chair, the light coming through the window, the dust motes floating in the light, everything my eyes can see, have contrived to create a poignant Hallmark moment framed by memories of every sort. Even the feelings I'm feeling at this very second, as deep and solitary as they seem, are perhaps nothing more than an advertisement for the darker side of being human. There is nothing I can look at that does not seem artificial, does not seem as if it has been entirely appropriated by others to serve some use, the purpose of which I cannot begin to imagine. Originality is nowhere in sight. And to stare unceasingly at mediocrity is simply too much work.

Besides, there is so much to learn from the other senses once sight is removed from the picture.

When I was a child I would occasionally close my eyes for hours at a time and for different reasons. I would use my fingertips to carefully find my way about my parent's house. I would go to the kitchen to make a sandwich using only my memories and my sense of touch to find the bread, jelly and peanut butter, knife and plate. It gets very complicated very quickly. I would move from room to room by placing my fingertips against the wall in order to find the doors that led from one room to another. Even now, years later, I often place my fingertips against the cinder block, or brick or wooden or paneled or plastered walls of public corridors as I walk through them.

In the summers my mother, my younger brother and I would visit her parents in the country. Stepping down the porch stairs and across the wide backyard, I would sometimes close my eyes and begin walking in the general direction of the barn or the pasture. On more than one occasion I either tripped

and fell or nearly knocked myself out by walking into a tree or the side of a building.

Once, standing in the middle of a pasture, I closed my eyes and began running. After a few moments I tilted my head back to feel the sun on my face. I spread my arms, hands open, to feel the slightest breeze against my palms. I ran for several minutes like this before I stopped, breathless, my eyes still closed, and lay down on my back in the grass. There were no thoughts. The inside of my eyelids were bright red and orange where the sun came through. I placed my hands over my eyes and in the darkness swarms of colored dots formed together in some of the most beautiful patterns I have ever seen.

Sightlessness can sometimes make things simpler, although I never forget that simplicity, like everything else, is an illusion – like the chair I'm sitting in, like the pen I hold in my hand. Illusion or not, it's a good pen. It moves so easily across the paper it seems as if I'm writing with my fingertip on the surface of a pond.

These are the words of my life:

(1) I was born aware
and cried my joy of life
at the light of
this new world
this one moment – now
as then – unchanged.

(2) I remember two things from the first:
The early morning light breaking the trees in pieces
and the lake into a thousand tiny, brilliant mirrors
of nothing;
Taking a knife from the kitchen and carving
into the side of my father's hardwood desk
pictures I would not remember
until I saw Paul Klee's.

(3) Having had many revelations
under the most mundane
of circumstances
I determined to treat them the same
as the rest of my life.
Do Zen.
Has it worked that well so far?

Well,
"If you call this a ""short staff""
you {etc., """, """", """""", . . . } . . .
(Once Zen gets its hands on you
there's no going back).
And even though you can't not do Zen,
There are times that are almost un-Zen –
like the times I am caught in the absurd
situation of trying to be serious
about one thing or another
(death being the sole exception).
It think it's ok to be serious about death.
Not because the person goes underground,
(death is a beginning of life),
but because touching them or talking to them
is madness.
We all talk to the dead.
I certainly do.
But even so, and with the best of intentions,
words become self-referential after a time.
We forget what they are for and use them
just to use them.
Life is hard to put into words,
being alive is even harder.

(4) Then, there is the rule of law.
There are three rules, actually:
the rule by which we judge ourselves,
the rule by which we judge others,
and, when in doubt,
the rule we swear we did not know.
It is this third rule that is eternal.
The others, made up of words
in turn made up of words,
are contradictory and changeable.
That we want and need
the law is evident
in everything around us,
from the pulpit's eternal damnations
to the Shiva dance of particle physicists
drunk with the knowledge

of Light and Dark,
in every thing that lies at the periphery
of our lives.
That is what the law is for –
to teach us where we end and something else begins.

(5) "Meta-"
is the prefix of the age,
a placeholder for as yet unrecognized ambitions,
a "No Exit" sign in the waiting room of language.
Not necessarily a bad thing.
I, for one, know what it is to live without words.
MU.
I know as well what it is to live in the center
of the intellectual life, the artistic life,
the scientific life and several others.
I know what it is to spend your precious time
perched precipitously at the top of a bell curve,
afraid to jump,
knowing all the while
that life is strange enough
without doing anything at drastic as that.
And knowing all the while
that trying to control it (i.e. life)
is a premeditated act of violence.
But no matter how enlightened we become
we persist in the effort
to control our own lives
by continually creating ingenious, new prosthetics
to hold at length those parts of reality
that most annoy us.
It is the American Dream:
money, immortality and godhead –
and there is no reason why capitalism
and technology shouldn't get us there.
To go on and on about a thing makes it more difficult
to understand.
I have forgotten, remembered
and forgotten some very important things
by thinking or talking too much about them.
This is probably one of them.

(6) I hear a guitar
(Bach lute suites)
and I remember:
my children playing in the park,
chased each by each
among October trees.
In their halcyon dream of Spring.
None of them knew to name
the colors of Night,
only that it came too soon.
They were and are carbon and water.
They were and are my children
and the souls of my children.
Their laughter and tears are mine.
(I call to them. Their ears
are the wind in trees,
the rustle of leaves
and a bird singing.)

(7) Guitar,
speak to me.
Tell me everything.
Tell me the most secret wishes
of those trees that encroach
upon my home in the growing dark
while I
stare through a windowblind.
Slowly, in my mind's eye
I begin to see
my daughter reflected in the pane.
She is playing on the rug with
an apple.
Does she see the redness of it?
Feel the speckles on it and
the meat under the tight skin of it?
I turn to look into her eyes –
deep,
deeper than night,
piercing everything they touch
with the two-edged sword of knowing
and of asking.

The notes rise on the air
a moment and are gone.
The air weaves the music.
The fingers play in accord.

When I was a young man I would often ask myself, "Does anyone else ever think this way?" I know now the answer is "Yes." We think in many ways, but more often than not, we do not share what we think.

I love the sound of a woman's voice. More than the sound of any musical instrument. More than the sound of falling water. I cannot imagine a world without women. They are so very beautiful. Everything about a woman is beautiful.

Someone once said, "Art is what I do when it hurts more not to do it than to do it." Someone else said, "Civilization is a veneer." I have recently given up the veneer of my daily habits and replaced it with a transparent as glass emptiness, a certain, lucid pain that suits me well. This pain has become my art. I have given myself to it completely, as to a lover. I have become intimate with it. It's clarity and purity pass through my body like sunlight through a convex lens. I focus it, use it to burn words onto the pages of the several notebooks that lay scattered throughout the house. I remind myself continually that there must be some purpose to all of this. I tell myself each notebook is its own purpose. Each notebook is a secret box, an amulet into which I can carefully place my words like miniature portraits of parents, wives and children.

Last month, when my wife left me, crying uncontrollably with her bags in her hands, the first thing I did after the front door closed was to look at my watch – 9:33 p.m. I did the same thing when my mother died. Why do I always do that, mark the time when life suddenly pirouettes like a ballerina on the toe of one slipper only to leap off in some completely unanticipated, new direction? Not only births and deaths but any occurrence of magnitude, any event that signifies a sea change, whether good or bad, causes me to seek the time, the date, the day, the hour and the minute of the occurrence, as if that one simple act can provide some understanding of a thing otherwise so unknowable, so great and terrible and mysterious that its very existence strikes one's soul speechless to its knees.

17.

Selected readings*:

11,8,5,3,4,18,7,14,13,6,23,24,9,10,17,15,27

4,9,3,8,7,6,1,18,27,11,5,17,10

3,8,18,7,19,9,6,4,5,10,28,22,15

7,9,19,18,5,6,4,8,16,11,24,14,25,28

9,17,12,1,7,5,16,28,20,27,25,13,15,30,26,12,10

* The number of readings was determined by randomly selecting a number in the range of 1-32. The individual items and order of those items within each selected reading was accomplished in a similar manner.

18.

In the end
there is nothing
to say –
dry lips, pale words
in a dark season.

Kneading the spirit
we part and meet,
part and meet
in a twilit room.

As nightbirds singing
on pale branches
share our simple
scene
the room, the dusk
and we
part and meet.

Spirits whisper
in the curtain
beads;

Night kneels patiently
upon the sill
telling its own
dark beads
counting hours.

24. Recursion is another step in the creation of meaning. Recursion occurs when a process or event contains the possibility of a decision that may cause the event to be repeated under a new set of circumstances. As events repeat themselves they acquire a familiarity. We begin to recognize those moments when we may change the course or outcome of an event by acting or thinking in specific ways. We also learn not to think or act at those moments. We establish rules by which to predict each moment's outcome. Finally, we learn that each moment is unique, that we literally create the world from moment to moment, that we do it effortlessly, and that we don't know how we do it.

25. We can easily devise a method that will allow us to see for ourselves the ways in which meaning is created. Let us begin with an object having an apparent meaning and try to discover a new meaning within it. Once we have done this we will use this new meaning to create a new object having a different meaning from the first. We could even repeat the procedure with the new object we have created. From this we may gain some understanding regarding the ways in which meaning is both created and discovered.

26. If a string of symbols can be coded to a number, that number can be used to convert the original string into a numerically equivalent string using any other set of symbols. There does not have to be a one-to-one correspondence between the individual symbols in each set. One set could contain as few as two symbols and the other set could contain many symbols. We should remember that when we speak of symbol strings we are including all forms of language as well as any images, sounds or other sensory stimuli that can be converted to a string of symbols. We should also remember that a symbol string in any formally defined language may be represented and manipulated using the natural (counting) numbers and Peano (basic) mathematics.

27. Counting is the basis for all mathematics. Once we understand the rules for counting we will have a method for converting symbol strings from one language to another.

Here are the rules for counting:

Step 1. Identify a set of symbols. The symbols may be described as shapes, colors, sounds, etc. Designate one of the symbols as the placeholder symbol (e.g. "c"). The number of symbols is referred to as the base of the number system.

The following example represents a base 3 number system:

a
b
c (placeholder)

Step 2. Identify the order in which the symbols will succeed one another during the counting process. The order cannot be anything but arbitrary.

The order is also modulo (it repeats itself indefinitely), as in the following example:

a
b
c (placeholder)
a
b
c (placeholder)

This ordered set of symbols may also be represented by the notation {a, b, c}.

To begin counting from any predefined set of symbols perform the following steps beginning with the rightmost symbol:

Step 3. Place the next symbol in the series under the symbol above it as in the following example:

a a b
c (placeholder)

Step 4. If the next symbol is the placeholder symbol (which in this case it is), move one position to the left and return to Step 3, otherwise continue.

a a b
b c (placeholder)

Step 5. Bring down the remaining symbols until no non-placeholder symbols remain.

a a b
a b c (placeholder)

Note: Any string of symbols should be thought of as having an infinite number of placeholder symbols to the left of the string:

c c a b c

To continue counting, return to Step 3.

28. Counting may be performed using as few as two symbols or as many symbols as you like. The number of symbols used (including the placeholder symbol) is called the base of the number system. Most are familiar with the base 10 number system (1,2,3,4,5,6,7,8,9,0). Computers store information using the base 2 number system (0,1) since these two symbols can easily represent the two finite states of an electronic switch:

0 = Off, 1 = On.

29. The following example uses four symbols to count with. As an aid to understanding the rules of counting, the symbol set {♣, ♦, ♥, ♠} will be placed in a one-to-one correspondence with the symbol set {1, 2, 3, 0}.

Step 1. Identify a set of symbols and the placeholder symbol:

♣	♦	♥	♠	(Step 1)	1	2	3	0
			♠	(placeholder)				0

Step 2. Identify the symbol order:

♣	(Step 2)	1
♦		2
♥		3
♠		0

To begin counting from the symbols ♥ ♦ ♣ or 3 2 1:

♥	♦	♣		3	2	1
		♦	(Step 3)			2
♥	♦	♦	(Step 5)	3	2	2
		♥	(Step 3)			3
♥	♦	♥	(Step 5)	3	2	3
		♠	(Step 3)			0

		←	♠	(Step 4)			←	0		
		♥	♠	(Step 3)			3	0		
	♥	♥	♠	(Step 5)		3	3	0		

30. We can also substitute any class of symbols (i.e. colors, sounds) for any other set (i.e. class) of symbols. Let R = Red and B = Blue.

		R		B	(Step 1)			1		0
				B	(placeholder)					0
				R	(Step 2)					1
				B						0

In the following example we begin counting from the symbol R (i.e. Red or 1) in binary:

				R	(Starting with Step 2)							1		
				B	(Step 3)							0		
			←	B	(Step 4)						←	0		
		R		B	(Step 3)					1		0		
				R	(Step 3)							1		
		R		R	(Step 5)					1		1		
				B	(Step 3)							0		
			←	B	(Step 4)						←	0		
		B		B	(Step 3)					0		0		
	←	B		B	(Step 4)				←	0		0		
	R	B		B	(Step 3)			1		0		0		
				R	(Step 3)							1		
	R	B		R	(Step 5)			1		0		1		
				B	(Step 3)							0		
			←	B	(Step 4)						←	0		
		R		B	(Step 3)					1		0		
	R	R		B	(Step 5)			1		1		0		
				R	(Step 3)							1		
	R	R		R	(Step 5)			1		1		1		
				B	(Step 3)							0		
			←	B	(Step 4)						←	0		
		B		B	(Step 3)					0		0		
	←	B		B	(Step 4)				←	0		0		
	B	B		B	(Step 3)			0		0		0		
←	B	B		B	(Step 4)		←	0		0		0		
R	B	B		B	(Step 3)	1		0		0		0		

Any class of symbols may be placed in a one-to-one correspondence with the natural (i.e. ordinal) numbers {1, 2, 3, . . . } and once the symbols in a given set are ordered we may convert any string of symbols in that system to an equivalent ordinal value.

31. Once we are able to count using any type and quantity of symbols, we can translate any string of symbols in a given number system into a corresponding string of symbols in any other number system. There are many ways to do this. A relatively simple method involves the use of tables to perform the conversion. Since each position in a string of symbols represents a power of the base we can easily convert a number in any base to its corresponding number in a different number system (e.g. from base 2 to base 10).

256	128	64	32	16	8	4	2	1

To convert a base 2 number to its corresponding base 10 number perform the following steps:

Step 1. Beginning with the rightmost digit place the base 2 number in the table one digit per square.

Step 2. Total the base 10 numbers in each of the boxes containing a digit.

The following example shows how to convert the base 2 number 101101001 into its equivalent base 10 expression:

Step 1.

256	128	64	32	16	8	4	2	1
1	0	1	1	0	1	0	0	1

Step 2.

1	x	256	=	256
0	x	128	=	0
1	x	64	=	64
1	x	32	=	32
0	x	16	=	0
1	x	8	=	8
0	x	4	=	0

0 x 2 = 0
1 x 1 = 1

361 (base 10)

32. We can also convert base 10 numbers to base 2 numbers by using a similar procedure.

To convert a base 10 number to its corresponding base 2 number perform the following steps:

256	128	64	32	16	8	4	2	1

Step 1. Find the largest value in the table that is contained in the number.

Step 2. Place a 1 in the box below that number.

Step 3. Subtract the value in the table from the original number.

Repeat the procedure beginning with Step 1 until there is a zero remainder in the number to be converted. Place zeros in the empty boxes to the right of the leftmost box containing a 1. The table now contains the base 2 representation of the base 10 number.

As an example, to convert the base 10 number 218 into its equivalent base 2 expression:

256	128	64	32	16	8	4	2	1
	X	Step 1						
	1	Step 2						
		Step 3 (218 - 128 = 90)						
		1	Step 1, Step 2					
		Step 3 (90 - 64 = 26)						
				1	Step 1, Step 2			
		Step 3 (26 - 16 = 10)						
Step 1, Step 2					1			
		Step 3 (10 - 8 = 2)						
Step 1, Step 2							1	
		Step 3 (2 - 2 = 0)						
	1	1	0	1	1	0	1	0

The base 2 equivalent of 218 base 10 is 11011010.

33. We can now convert any set of symbols into numbers by using a combination of the previous methods:

Step 1. Identify the symbols including the placeholder symbols.

Step 2. Place the symbols in sequential order and number them.

Step 3. Create a table to translate the symbols.

Step 4. Place the symbol string to be converted one character per box within the table beginning with the rightmost character.

Step 5. Beginning with the leftmost non-zero character, multiply the corresponding number value for the symbol (see Step 1) by the place value in the table. Repeat the procedure for all non-zero characters and sum the results.

As an example, let the following symbols stand for colors. Y = Yellow, R = Red, G = Green, B = Blue. To convert the symbol string Y Y R G B into its equivalent base 10 notation:

Step 1. Identify the symbols including the placeholder symbol.

Y, R, G, B (Placeholder)

Step 2. Place the symbols in sequential order and number them.

R	1
Y	2
B	3
G	0

Step 3. Create a table to translate the symbols.

1024	256	64	16	4	1

Step 4. Place the symbols in the table beginning with the rightmost symbol.

1024	256	64	16	4	1
	Y	Y	R	G	B

Step 5. Multiply and add the non-zero values.

```
Y = 2 x 256 =  512
Y = 2 x  64 =    0
R = 1 x  16 =   16
G = 0 x   4 =    0
B = 3 x   1 =    3

                ---
               659   (base 10)
```

The equivalent base 10 notation for Y Y R G B is 659.

34. To create a picture from text is a traditional method for creating new art. Oral tradition inevitably leads to images expressed in writing, painting and sculpture as evidenced in mythology (Egyptian, Greek) and religion (Roman Catholicism). Contemporary composers such as Mussorgsky and Cage have used visual images as the starting points for their compositions. It is not unusual for a contemporary artist to base a work on that of another artist working in an entirely different medium.

Using the techniques for string conversion we have discussed it is possible to convert text strings into images and then to convert the images into sounds.

Let us imagine we want to convert an excerpt from Meister Eckhart's Fourth Sermon, "On Eternal Birth" to a binary string of data contained within an image. We can if we desire then convert the image to an audio composition. We will be using symbol strings composed of ones and zeros as the vehicle for the conversion of the initial object (the text) into another (the image).

35. “Thus it is true that, if you are to experience this noble birth, you must depart from all crowds and go back to the starting point, the core of the soul out of which you came. The crowds are the agents of the soul and their activities: memory, understanding, and will, in all their diversifications. You must leave them all: sense perception, imagination, and all that you discover in self or intend to do. After that, you may experience this birth – but otherwise not – believe me! He was not found among friends, nor relatives, nor among acquaintances. No. He is lost among these altogether.

Thence we have a question to ask: Is it possible for man to experience this birth through certain things which, although they are divine, yet they come to the man through the senses from without? I refer to certain ideas of God, such as, for example, that God is good, wise, merciful, or whatever – ideas that are creatures of the reason, and yet divine. Can a man have the experience of the divine birth by means of these? No! Truly no. Even though these ideas are all good and divine, still he gets them all through his senses from without. If the divine birth is to shine with reality and purity, it must come flooding up and out of man from God within him, while all man's own efforts are suspended and all the soul's agents are at God's disposal.

This work, when it is perfect, will be due solely to God's action while you have been passive. If you really forsake your own knowledge and will, then surely and gladly God will enter with his knowledge shining clearly. Where God achieves self-consciousness, your own knowledge is of no use, nor has it standing. Do not imagine that your own intelligence may rise to it, so that you may know God. Indeed, when God divinely enlightens you, no natural light is required to bring that about. This natural light must in fact be completely extinguished before God will shine in with his light, bringing back with him all that you have forsaken and a thousand times more, together with a new form to contain it all."

36. The following strings of data are equivalent. The first string is from the above text. The second string is its ASCII equivalent in binary form.

"Thus it is true that, if you are to experience this noble birth, you must depart from all crowds and go back to the starting point, the core of the soul out of which you came."

"101010011010001110101111001101000001101001111010001000001101001111001101000001110100111001011101011100101010000011101001101000110000111101000101100010000011010011100110010000011110011101111111010101000001100001111001011001010100000111010011011110100000110010111110001110000110010111100101101001110010111011101100011110010101000001110100110100011010011110011010000011011101101111110001011011001100101010000011000101101001111001011101001101000010110001000001111001110111111101010100000110110111101011110011111010001000001100100110010111100001100001111001011101001100110111001011011111101101010000011000011101100110110001000001100011111001011011111110111110010011100110100000110000111011101100100010000011001111101111010000011000101100001110001111010110100000111010011011110100000111010011010001

100101010000001110011111010011000011110010111010011010011101110110011101000001110000110111111010011101110111010001011000100000111010011010001100101010000011000111101111111001011001010100000011011111100110010000001110100110100011001010100000011100111101111111010111011000100000011011111110101111010001000001101111110011001000000111011111010001101001110001111010000100000111100111011111110101010000011000111101101110010101011100001010”

37. Let us imagine an image we could make by using the binary text as a starting point. In one sense any image we might create from the binary text would be entirely arbitrary. We might begin by drawing a “horizon” anywhere on the canvas. Above the horizon we will place the beginning portion of the binary symbol string. Below the horizon we will place calligraphic symbols that we create from the remaining portion of the symbol string using methods (such as Gödel numbering) that we have previously described. The symbols in that portion of the string below the horizon are part of the individual language of the artist. We could add other symbols or images as desired. Despite all of this “arbitrariness” the picture still contains the text in its entirety. Given the rules for the conversion of the binary text to the image, the initial text could be recovered.

38. At this point we could if we wished convert the image into an audio composition. There are many ways to accomplish this. A simple method might employ the following steps:

Step 1. Photograph the image and store (digitize) it within a computer.

Step 2. Establish scales for the conversion of light to sound. Once arbitrary scales for conversion are established, each point of light within the image may be coded into a corresponding note based upon the following relations:

hue (color) = tone

value (brightness) = volume, or alternatively, duration

Note: Each point of light (pixel) displayed on a computer screen has number values associated with it describing its color and its relative brightness. Computer screens are normally divided into rows and columns. At this point in time computer screens typically display 1024 columns by 768 rows (1024 x 768) for a total of 786,432 pixels. Each point on the screen represents a point in a Cartesian coordinate system (e.g. the dot in the upper left corner may be represented by the numbered pair (1,1) or the numbered pair (0,0).

Step 3. Establish rules for the conversion of the numbers resulting from Step 2 into music.

39. Methods used by composers in the creation of serial or aleatory compositions could easily be applied to the image. One possibility would be to treat the image as a serial composition in which each point in the image could be directly converted into a corresponding sound. The screen could be read a line at a time. Multiple rows could be played simultaneously to explore chromatic or microtonal compositional techniques. Compositional methods employing formal mathematics (set theory, linear algebra, cosine transforms, wavelet transforms, etc.) could be applied to the image. There are no limits to the possibilities for the conversion of any image into a musical composition. Understood in this way the combination of the image and the model used in its interpretation provide the notation for the musical composition.

40. The recorded composition could be used to re-create the image it was originally created from. Once the image is re-created the original text could be recovered. The "meaning" of Meister Eckhart's sermon could be literally contained within the musical composition.

41. What is the purpose of all this? Why bother doing any of it at all?

Once we are able to map any set of symbols within an existing system (i.e. language, music, visual art) onto another set of symbols within another system a number of important questions arise.

For example, can we convert the new string of symbols "backward" to their original form? If we know the rules by which it was originally converted and the two strings maintain a strict correspondence, we should be able to recover the original symbol string.

If the rules are lost we might discover or devise an equivalent set of rules that will allow us to recover the original string. There is also the possibility that, having no knowledge of the original string, we may devise a set of rules that provides us with a set of symbols in the language of the original string that do not correspond with the original string and yet possess an equivalent meaning. The new string may also contain a meaning that is completely different from the meaning contained in the initial string.

42. If we convert the original symbol string to an equivalent string within another symbol system we may discover that we can make the new string more

“beautiful” by adjusting or scaling some set of associated number values as part of the conversion process. We have added to the “meaning” of the new system by doing so. However, we may never be able to recover the original string of symbols from the new string of symbols even if we know the rules for conversion. Given the new string and the rules for conversion we may be able to approximate the original string. By incorporating probability into our conversion process we may be able to predict with great precision the probability that the new string consisted of a particular set of symbols. Is the incorporation of probability within our calculations the result of our having made our systems of understanding more “beautiful” than the original “string” of symbols?

43. Finally, what if we carry the new string of symbols forward another level into another string within yet another symbol system? Will we retain any of the meaning of the original string? Will we retain any of the meanings of the intermediate strings we create?

Is it possible that at some point we may create a string that will contain an entirely new meaning not evident in any of its predecessors? Could this meaning be of a kind never experienced in quite this way before? Could this new string of symbols be used as the beginning point for an entirely new series of conversions into other strings of meaning within other symbol systems?

44. Even if we know all of the conditions for the conversion of one string to another do we reach some point at which we are no longer able to recover the original string? And can we continue this conversion process indefinitely?

At some point we must become aware that our original string is an arbitrary place at which to begin, that all beginnings are arbitrary and that as we continually pursue our conversion process we are no longer going up or down, forward or backward. We never were.

What are the implications if we substitute the word “knowledge” or "truth" for “symbol string” and re-read the above section? Does it change the meaning of the questions? Does it change the process of understanding?

45. Correct observation and prediction are the goals of science. Science is concerned with discovering the ways in which things behave. By establishing rules for the conversion of one symbol string in the language of mathematics into another symbol string and by establishing a strict correspondence between the symbols and the things they represent, science hopes to ultimately devise symbol

strings that will control the universe and to create gods (not conceptually but literally) where they did not exist before.

Mathematics is concerned with the creation of the rules used to devise these symbol strings and the mathematical and symbolic languages that result.

The question of the changing nature of reality may be approached in another way.

Experience is sometimes referred to as objects. At other times experience is referred to as events. To use philosophical terms, “What are the primary ontological categories?” and “What are the principal modes of being?” correspond to the ideas of object and event.

Aristotle had ten categories. Kant had twelve. Hegel had the most. Heidegger was the last great meta-physician to attempt to classify states of being.

All such categories tend to be derived from sensory experience. The underlying assumption is that the senses provide the foundation of experience and that all conscious activity is derived from pure sensory awareness in one way or another. The traditional ontological method has been to establish a basic set of categories or classes of human experience from which religion, politics, science, etc. can be constructed.

There are categories more fundamental than Aristotle’s or Heidegger’s. They are not directly available to the senses but rather result from the generalization of historical modes or forms of classification that in turn emerge from even more general archetypal forms. They are not a priori. They are not intellectual constructs. They are metaphorical in nature and manifest themselves in all periods and cultures. In one sense these forms or categories are analogous to the original counting numbers: one, two, three, many.

One is unity - the mandala, the circle or sphere, the moon, the indivisible, the identity element, god, being in itself.

Two is division and divergence - the dialectic, dualism, duration, interval, time, the Western concept of relation, event and system, I and not I.

Three is convergence – the I Ching, the Trinity, the genetic code, the cycle of understanding that all things diverge and converge, over and over, in endless preparation.

Many is the universe, the complex, the infinite.

This provides us with four essentialist categories with which all experience may be classified. All systems of thought evolve in one of two ways: by diverging from the one to the many or by converging from the many to the one.

Notice that the definition of a series or sequence, in fact every function defining an infinite (i.e. transfinite) set consists of two parts, the rational or finite and the transcendental or infinite and that both of these are necessary in order to define the set.

An example is the set {1, 2, 3, . . .}.

1, 2, 3 is the finite,

. . . is the transcendental,

{1, 2, 3, . . .} is the transfinite.

Another example is Cantor's set:

$$\aleph_1 = \{0, 1, \ldots w, \ldots w*2, \ldots w^2, \ldots w^{\omega}, \ldots \in_0, \ldots \aleph, \ldots\}$$

that defines a set of infinities composed of greater and greater infinities.

There is only one universe, the universe of all that is. Whether or not it is eternal, whether it is bounded by birth and death, the fact remains – the universe of a human life contains and creates the metaphor of a universe of space and time. Everything that is known and understood exists within the limits of a life.

46. If we accept that the binary representation of data is equivalent to a transfinite binary tree, we are left with the distinction between the paths of the branches of the tree represented as the uncountable cardinal number $2^{\aleph_0}$ and the countable set of nodes $\aleph_0$. Regardless of the order or truth values of the nodes and the degree or level of division (i.e. transfinite) in the representation of the data, the resulting representation will be countable and representable as an ordinal number.

The sum or product of the strings of all data is a countable ordinal. That is because the sum of countably many countable ordinals is countable. Knowing this, it is possible to Gödel number the binary representation of sensory experience in the following manner:

1. Establish rules for the conversion of sensory experience to binary symbol strings. This set of rules is nothing more than a formalized set of arbitrary methods for deriving symbol strings from sensory experience. It can be as simple as digitizing events in time as experienced by each of the senses.

2. Using the above rules convert sensory experience to binary strings.

3. Convert each of the binary strings to a natural number.

4. Code the resulting number sequences using Gödel numbering.

Given the existence of such a string it follows that:

1. All data available to an individual's sensory experience is representable in binary form and containable within the string.

2. The rules for the formation of binary strings from sensory experience are representable in binary form and containable within the string.

3. The rules for the conversion of the binary string to its original sensory data are representable in binary form and containable within the string.

It further follows that:

1. The history of the individual's sensory experience (i.e. the individual's sensory universe) is representable in one dimension as a single string of binary data.

2. This one-dimensional representation is the identity element for the set of all possible n-dimensional representations of the individual's universe.

3. The one-dimensional representation of the individual's universe and any n-dimensional representation derived from the one-dimensional representation are equivalent.

4. For any number N an N-dimensional representation of the individual's universe is possible.

5. For any N-dimensional representation of the individual's universe there exists an equivalent $(N+1)$-dimensional representation.

6. With the exception of the identity element, for any *N*-dimensional representation of the individual's universe there exists an equivalent (*N*-1)-dimensional representation.

It follows that it is possible to code the individual's universe of experience into a transfinite *N*-dimensional space. This representation of the individual's universe may be expanded or further contracted to produce an equivalent representation in any (*N*+1) or (*N*-1)-dimension.

47. Imagine a work of art consisting of a structure containing a computer with digital communications capabilities that can display text and images and can reproduce music. The computer can receive input from anywhere in the world. Imagine as well that all of the computer's input is translated into binary data that is turned into "rain" and that this rain then falls from a man-made device of some sort onto a bed of grass lying beneath the structure.

Imagine as well that you are standing or sitting naked beneath this structure as the rain falls upon you. Imagine that you are singing, playing an instrument, sleeping, doing anything at all and that what you do is captured using some medium such as video or sound, fed back into the art work and turned into more "rain" which continues to fall upon you.

Is the meaning of both the art and your actions contained in the water as it falls? Does it change or disappear as it strikes you or the grass or does it remain somehow contained within you and the grass? If we were able to capture the continually changing image of the grass as the water struck it could we recover the original information and convert it back into words, pictures and sounds? Could we in turn convert this "discovered" information into something completely new? Could we continue to do so indefinitely?

Can all of the meaning contained in the grass be returned to its original forms? Perhaps. If so it will not occur through art or science but through life. And if in discovering the meaning of the grass do we add to it? Yes. We have and we do. What is a human being but the grass speaking?

Imagine that we make many of these "machines" and place them in all parts of the planet: the desert, the mountains, the ocean, the cities? Imagine that each one of them is continually receiving and sending information to each of the others?

What if we place one such "machine" in an open area and allow the rain to fall from the sky, through the structure and onto the ground. What is to prevent us

from encoding the rain as information and converting it to images, words and sounds? What is to prevent us from taking what we create and sending it to every other “machine”? What is to prevent every other “machine” from doing the same?

Imagine that these machines are both infinitely small and infinite in number. Imagine as well that they are distributed throughout the universe and that their communications with each other occur instantaneously and with no cost in energy. What does that say about the “meaning” of the universe and our place in it?

48. Human beings are not linear in their movements. Rather, our motions resemble the non-Euclidean motions of great circles around a sphere in which all lines of inquiry intersect. If we expand the metaphor of a sphere to that of a hypersphere we find that every motion intersects with every other, that we exist in a space “whose center is everywhere and whose circumference is nowhere.”

49. Each of us is a universe. Each individual life is, by the simple fact of its existence, actively involved in the perpetual creation of meaning. Life is not confined to humans. Plants and animals are living things. The world is a living thing. There are no indivisible particles. The universe is finite and infinite by turns. The purpose and meaning of life is life. When life is subjected to the categories of science, economics, politics or religion the greater part of life is denied. There are few categories as large as life. Art is one. Not the art of galleries, museums, or universities, but that art that has no purpose or meaning apart from life. Such art has no value. Such art cannot be judged. It is purposeless. Like life it means everything or nothing.

50. The search for truth and meaning is the search for a perfect language. We have called the world by different names at different times. We will continue to do so.

At this time in history the dominant philosophies seem to be essentialist or existentialist in nature. Neither provides a complete explanation of what it is to be human. Existence precedes essence. We are born existentialists. We become essentialists.

The essentialist discovers and creates “objects.” To see something as an object is the purpose of language. To insist on its “objectness” once it is discovered or created is to deny its existence, its being. Being is not the same as “sensory awareness.” Being precedes words.

51. No language lives forever but grows, gives birth to new languages and dies. With the emergence of each new language, each new form of understanding, the reality of the world seems to change. In the beginning we created gods and kings. We now have governments, religions, sciences, and economies and as a result many new languages have come into being. Human life is a divergent process. It is futile to hope for a single system or method of understanding the world. In the end one has the right to create one's own languages, one's own mythologies, one's own meanings.

We are approaching a time when we as human beings will move about as easily and effortlessly in this sea of language as our ancestors swam in the warm salt oceans. There will be no more "languages" and no more "truth" but an infinity of meaning contained within an infinity of life.

20.

How beautiful, how perfectly illuminated
the blank page – immaculate,
immutable, true,
innocent of any act or wrong intent –
now made to bear the burden of many
words (a labyrinth of words,
a cacophony of words, words within words,
prayed for, dreamed of and forgotten).
The dream of a tao of words, a nirvana
of words becomes a purgatory of words,
each word made to carry the whole
weight of birth, life and death –
words that cry Truth! Truth!
and ultimately lie or must be made
to lie – words conceived in hope,
trust and love that bring only
frustration and a bitter despair –
words that resemble a Turing
machine of clichés (where to write or speak
is only to string cliché upon cliché),
where every word is a cliché –
where each word is an abomination,
a consummate evil.

Velocity

By the end of the twentieth century, civilization's institutions reached an inflection point beyond which the rate of change over time will best be described as exponential. In other words, we finally understand that things are not going to slow down. Things are going to continue to change at a faster and faster rate. Those who have free and open access to information are already witnesses to the rapid unification of politics, technology and economics. The ascendance of capitalism as the world politic and science as the world religion is creating a shared human experience that will soon subordinate all other social conventions. This new understanding has led to a growing concern that individuals cannot continue to adapt to this increasing rate of change, that more and more we expose ourselves to the risks of becoming a global society of sociopaths and psychopaths.

In the past we chose (or had chosen for us) one or another religious, philosophical or political belief system as the basis for all of our conscious decisions. The time for such choices is past. Strict adherence to any single belief system on the part of an individual, a group or a nation represents a great danger to an evolving world culture, for such systems are by nature inflexible and eventually lead to dogma, which leads to hate, which leads to violence. But even in an alternative, non-violent world, a world in which individual freedom for the majority is possible, the number of incompatible value systems one is exposed to continues to increase and individual choice remains as much a burden as an opportunity.

The question remains. How do we simplify our choices in order to simplify our lives? From an economic standpoint, the universal freedoms we are soon to share will be simple: freedom to buy and to sell, freedom to watch the world machine at work. This deliberate simplification of experience will allow human beings to accommodate a rate of change that would otherwise be impossible.

Transactions

The fundamental socio-economic concept is that of a transaction. The transaction unifies products and services, buyers and sellers, loss and gain – for all can be described in terms of transactions.

Economic progress is now measured as the velocity at which products are created, bought and sold. But with the emergence of a ubiquitous, global information network, we have discovered that, in many cases, the information about a thing

has a value equal to or greater than the thing itself. In the time it takes to extract value by making a thing, moving it from one geographic location to another and then consuming it, the information about the thing can be bought and sold many times. This simple fact drives and will continue to drive economic progress for the foreseeable future.

Although buying and selling the information about a thing allows us in some cases to greatly increase the total value associated with it, a product's worth must ultimately exist as something independent of the physical product itself if its maximum value is to be realized. A product's value must be seen as the value of the sum of our individual sensory experiences of the product as opposed to the relatively simple set of transactions associated with an individual's consumption of the product as a "thing in itself." The extrinsic values of the majority of products will eventually maintain existences fully independent of their intrinsic values. This will allow both the types and velocities of transactions associated with a given product to increase exponentially. The next generation of human beings will witness as dramatic a change in the production of goods and services as that which occurred at the end of the last century with the rise of Industrialization.

The Virtual Company

Information technology has provided traditional businesses with the opportunity to maximize efficiency in the production and distribution of goods. Organizations are now able to capture business events as they occur and share that information with their trading partners as if all participants were part of a single enterprise. These extended enterprises use information technologies to implement just-in-time manufacturing and assembly-in-transit capabilities. In several industries, the demand (i.e. payment) for a product now precedes the actual manufacture of each individual unit-of-production. In the short term, extended enterprises will enjoy a competitive advantage and increased profitability. However, the proliferation of this business model will eventually result in the commoditization of manufacturing and distribution processes across many industries.

Information technology will then be used to create efficiencies across entire markets. Businesses will arise whose only asset is the "information space" between the sources of supply and the consumers in a given market. This new form of organization relies on cooperative agreements among businesses to create virtual companies. A virtual company is formed when two or more businesses combine their core competencies in such a way that the resulting organization can quickly and efficiently take advantage of specific economic opportunities. A

virtual company provides a means whereby large companies can partner with smaller companies to add highly specialized skill sets and technologies to their existing products and thereby gain entry to lucrative vertical markets. Smaller companies in turn may use the material and information technology resources of larger companies to successfully market their products and services on a global scale. Although relatively new, this model has been rapidly adopted in those industries in which the intrinsic value of the product is high and the lifecycle of the product is short.

These two business models differ from the traditional enterprise model in several important areas. The traditional enterprise model has the following characteristics:

- It seeks to own rather than outsource the means of production.
- It often has heavy capital and materials requirements.
- It seeks complete control of the supply and distribution of goods and services.

The traditional enterprise model tends to be monolithic in nature. It requires that the business assume the entire financial and material burden for the production of products and services. As a result it bears the majority of risk in its business ventures and is only able to take advantage of those opportunities that promise to be long-lived. Like any large organization it does not easily adapt to change. Because the traditional enterprise perceives other providers as competitors it often pursues monopolistic practices as the most profitable business strategy.

In contrast to the traditional model, both the extended enterprise and the virtual company share the following characteristics:

- They outsource the majority of their value chain requirements.
- They have reduced capital and materials requirements.
- They collaborate with others in the management of the value chain.

Both the extended enterprise and the virtual company are able to respond quickly to changes in the markets they serve. They allow their participants to share the financial and material risk for the production and distribution of goods and services.

Of the two, the virtual company is more distributed and “open.” New service providers can be added or substituted as necessary. Each of its value chain elements can be treated as a component to be combined or recombined with other components. Since each participant in the virtual company is able to focus entirely on its own core competency the result is a “best-of-breed” type of

organization. In its essential nature the virtual company is dynamic and process-oriented.

The creation of a virtual company requires a high level of data transparency across information systems. This means that the data associated with the production and distribution of products and services should be available at all times to all trading partners. This is necessary in order to allow real-time monitoring and management of the buy-sell relationship from the point of demand to the point of delivery.

A virtual company creates and controls a market by acting as agent for both buyers and sellers. In some cases a virtual company acts as the sole broker between buyers and sellers in a market, dis-intermediating other middlemen. In other cases, a virtual company acts as a seller of its own products, although in reality it outsources all components necessary to the production and distribution of the goods or services that it sells. A virtual company creates value by outsourcing everything in the value chain but the transaction itself. In many cases a virtual company has its "brand" as its primary product.

In addition, a virtual company has the following characteristics:

- It is demand driven by nature.
- Although it manages the buy/sell transaction, it tries to own nothing but the transaction.
- It conducts its transactions in real time based on the occurrence and/or absence of business events.

Although the Internet is a prime vehicle for the implementation of virtual companies, it is important to understand that the Internet is primarily a collection of enabling technologies. Other technologies (e.g. call centers) also provide access to the virtual company's market space.

Given that a virtual company has these unique characteristics, the question follows, "How does one identify virtual company market opportunities?"

The following criteria are useful in identifying virtual company opportunities:

Product lifecycle – The control of information related to inventories and orders is the principal asset of a virtual company. The allocation, fulfillment, distribution and payment associated with a buy/sell transaction constitute the order lifecycle of a product or service. As the rate or degree of change in a product's lifecycle

increases, the value of the information associated with that product increases. Short product lifecycles provide the greatest opportunity for the success of a virtual company. Short product cycles (e.g. semiconductors, entertainment media), perishable goods (e.g. fresh foods, flowers, pharmaceuticals) and complex, build-to-order products (e.g. computers) provide excellent target markets for the creation of virtual companies.

Complexity of the value chain – Global visibility into inventories and orders allows a virtual company to create numerous efficiencies in the production and distribution of goods and services. As the complexity of a value chain increases, the opportunity to create competitive advantage through the use of information technology increases. Complex supplier and service provider networks create costly redundancies in inventories. Visibility into finished goods (whether stationary or in-transit) and work-in-progress allows a virtual company to allocate products based on customer demand and to reduce inventories. High delivery costs associated with unnecessary middlemen (e.g. pharmaceuticals, fresh foods and entertainment media) provide opportunities to use express transportation while maintaining competitive product pricing. It is worth noting that most of the virtual companies currently in the market focus on finished goods and single tier value chains. More complex value chains are still waiting on the availability of the virtual company information "engine" necessary to support complex transactions and real time communications.

Participant relationships – Participant relationships are key to the success of a virtual company. If possible, the virtual company should assume the role of trusted agent in all transactions between buyers and sellers. The addition or removal of trading partners should be relatively easy to accomplish. If products are locally available to buyers (e.g. flowers, books, eye wear), franchise opportunities should be made available to local suppliers. Because access to regulatory and organizational power is a prerequisite for entry into existing markets, deregulated environments (e.g. electric utilities, oil and gas) are prime candidates for the creation of virtual companies.

Given the competitive advantages of virtual companies over traditional business models, it is reasonable to ask, "Why haven't those companies that currently control market share in these markets converted their existing business models to virtual company models?"

There are several reasons:

One, companies often perceive the Internet as just another market channel. The virtual company model represents a radical change for most existing large businesses. How is a large company supposed to re-engineer its operations to support a completely different way of doing business without creating havoc in its existing social, economic and political structure?

Two, companies that control a market already control most aspects of the buy/sell relationship. Companies that do not already control a market do not want to put their existing business relationships at risk by adversely affecting their current trading partners.

Three, companies that already have significant market share are faced with the dilemma of implementing new business models, products and services that threaten to cannibalize their existing product and revenue base.

In order to succeed in a virtual company venture, a company must address the following issues:

- Does it, or can it establish the relationships necessary to create a buy/sell value chain in its chosen market?
- Does it provide a distinct advantage over existing competitors in terms of price and value to both the buyers and sellers of its products and/or services?
- Can it establish first mover advantage in the market or markets it seeks to enter?
- Can it scale its technology, business processes and product volumes to meet demand?
- Does it possess the people, technology and capital necessary to successfully enter the market?

The technology underlying the ability to implement these new business models is that of the distributed virtual machine. Distributed virtual machines make possible the creation of distributed virtual systems. Distributed virtual systems make possible the creation of virtual companies.

Virtual Systems

As more and more hardware functions are implemented in software and hardware becomes more ubiquitous, the computer is becoming an abstract entity whose characteristics are more organic than mechanical. This new paradigm may be described as virtual computing – an environment in which all hardware functions have been emulated in software and traditional software systems (including

operating system, communication, presentation, application and data logic) become virtual in nature, maintaining an existence independent of any particular hardware configuration.

The key concept underlying this emerging paradigm is that of a virtual system. Virtual systems are normally conceived of as computing environments which take input in the form of physical movements via a "glove" or some other device and use that information to drive a system which provides visual output in the form of "virtual reality." That is one way to think about virtual systems – as an interactive system in which the physical environment drives, controls or otherwise enables the visualization of a virtual environment. But there is another way of defining virtual systems. It is possible for the virtual environment to control the physical environment. This way of thinking about virtual systems leads to the following definition:

A virtual system is any system or model that:

1. is primarily conceptual in nature,
2. is a fully functional image or representation of a physical system and
3. controls the organization and operation of one or more such physical systems.

A physical system may in turn underlie one or more virtual systems.

Virtual systems are not a new idea in computing. They have existed for years in the form of virtual machines. A virtual machine usually takes the form of a virtual processor that is a software image of a physical processor. A virtual processor normally has access to memory, stores instructions and data in its registers and processes instructions in much the same way as a physical processor. It is common for a single physical processor or CPU to support multiple virtual processors.

Virtual machines do not have to take the form of virtual processors. They can be operating system kernels, database engines or knowledge domain specific applications. In fact, any type of software can be implemented as a virtual machine. The key advantage of virtual machines is that they can be made hardware independent. Programs written for a virtual machine do not have to be rewritten if they are moved to a different hardware or software platform as long as the virtual machine has been migrated to that environment.

Once a computing environment is abstracted in this way the next step is the creation of distributed virtual machines. A distributed virtual machine may be

defined as a virtual machine (such as a virtual processor) that can be replicated and distributed across heterogeneous computing environments while maintaining a single logical image.

To better understand the concept of a distributed virtual machine, it is helpful to review the history of the virtual machine itself. The virtual machine was first described by Alan Turing and its first physical manifestation was the mainframe. To this day, with the exception of the quantum computer first described by Richard Feynman (the universe itself is a quantum computer), all computing models including rulebase systems and artificial neural networks can be reduced to Turing machines.

The mainframe began as a big box located at a single point in space and was used by the military during World War II to solve mathematical problems. In time, the box was replicated and used by various organizations and companies to solve many types of problems. The principal of the mainframe has never changed. Put all of your eggs (i.e. your data and decision making processes) in one basket and guard that basket with your life.

Over time computing power increased dramatically. During the same period the cost and size of the computer decreased just as dramatically. The general purpose computer eventually took the form of the PC. This led to client-server computing, a form of computing that allowed the data to be stored on a central computer, while the problem solving occurred on the desktop.

Then came the Internet. The Internet allows any computer to communicate with any other computer anywhere in the world. Computers connected in this way can share both data and processes. But what is still missing is the ability to move the data and processes from any place to any other place at any time in real time and to treat many different computers, processes and data sets as a logical unity. The virtual system that is assembled and/or created should be able to maintain a close correspondence with and coordinate the interactions of many physical systems. This collection of computers, programs and data should be thought of in the same way that a conductor thinks of the musicians that comprise the orchestra during the performance of a symphony.

Distributed virtual machines by definition contain the intelligence to replicate and to place themselves in those (hardware and software) environments that are most conducive to the accomplishment of their goals and purposes. Distributed virtual machines in turn provide a means of creating virtual computing environments.

Virtual computing is defined as a computing paradigm that:

1. implements virtual systems in software,
2. operates independently of hardware operating system, network and programming language constraints and
3. allows traditional transactional models (e.g. client, server, agent) to be implemented as distributed virtual machines.

Simply stated, virtual computing consists of one or more virtual systems managed by one or more distributed virtual machines within an open computing environment.

In the evolution of business computing, traditional computing architectures will eventually be replaced by systems that do not impose arbitrary hardware and software hierarchies based on traditional transactional models. This new computing paradigm may seem too radical a departure from traditional computing models to be easily implemented within existing computing environments. The truth is, virtual computing can and does co-exist with existing systems and the conversion to virtual computing can occur incrementally and in parallel with existing systems.

Virtual computing enables virtual systems. In the near future distributed virtual machines and distributed virtual systems will become the dominant metaphor by which global politics, economics and culture will be defined.

Product Value

With the removal of mass, space and time as economic constraints, one of the first major changes to result from the emergence of virtual product economies will be the rapid reduction of transaction costs and a corresponding increase in the volume and velocity of transactions. As the cost associated with the production and distribution of virtual products approaches zero, we will see a velocity of transactions and a capacity for transactions that was previously unimaginable. Whether viewed at the macroeconomic level of nations or the microeconomic level of the individual, the volume of transactions possible within a virtual world is limited only by the speed of light.

Greatly reduced transaction costs mean that a given consumer of transactions will be able to engage not only in a greater number of transactions, but in a wider range of transaction types. And once we begin to focus on transactional capacity (as opposed to pricing), certain questions beg to be answered. For example, how

significant is the sequence of transactions and/or transaction types in a zero cost environment? Are transactions of a given type more, less or equally efficient when they occur in series or in parallel? Is it more or less beneficial for a producer of transactions to be in a one-to-many or one-to-one relationship with its consumers? What is the relationship of the transaction to the value of the product? And at what point does it make more sense to think of a consumer as consuming transactions as opposed to consuming products and services? As important as these questions are in the physical world, they are even more important in the virtual world where product cycles are much shorter and transaction volumes (and the potential number of people affected) are much greater.

These questions are neither hypothetical nor problematic. Virtual economies already exist. Entertainment media and financial products are obvious examples. What is less obvious is the relationship between the physical product and its virtual counterpart.

In the entertainment media industry for example, a virtual product may take the form of a movie, a television show, a computer game, a music video or an advertisement. Although the virtual product is more often than not electronic in nature, it does not have to be. Newspapers, billboards, magazines and even books may be considered physical, virtual or both. What is important is that the events associated with the production of the physical product – the people, the creative content, the production facilities and the distribution channels – result in the creation of a single instance of something that is sold over and over to many different consumers, through many different channels in many different contexts. As a result, a single high-cost physical product (a movie for example) can be sold over and over as a low-cost virtual product (the movie viewing experience). When things go well, the high cost associated with creating a single reel of film (the movie) is more than offset by the profits generated through sales of the movie's virtual counterpart to millions of moviegoers, video rental patrons and television viewers. The fact that the movie is copied from one reel of film to many reels of film in the early stages of its distribution does not in the least diminish its virtual aspects. Videotape and television are already digital. Digital film distribution is more a matter of capital costs than of time or technology. The same holds true for music, books and every other type of media.

Publicly traded companies offer another interesting view into the relationship between physical and virtual product values. Take the example of a technology firm that intends to develop and sell a new computer chip. Our hypothetical firm is one year old and has one hundred employees. The firm has no revenue. On the day of its IPO the firm sells ten percent of its stock for one hundred million

dollars. This places the value of the firm at one billion dollars. Three months later the firm still has no revenue but has a market capitalization of two billion dollars as the result of increases in the price of its stock. Six months after its IPO, the firm is acquired by a much larger public company for 2.5 billion dollars in cash and stock. What is the relationship between the smaller firm's non-existent product revenue, its stock price and its value at the time it is acquired by the larger company?

The common understanding is that the value of the firm's stock price is based upon profits expected to result from the sale of the firm's product over time. But what does it mean when a firm continues to lose money over an extended period of time while during that same interval its market capitalization continues to increase. If the firm cannot eventually sell enough of its products to cover the cost of their production, it should fail. An unrealistically high market valuation should eventually "adjust" to meet the reality of the firm's product revenue and profitability. If this is so, why in some cases do publicly traded companies maintain high valuations in the face of long-term operating losses? And why, in some of these cases, do other larger public companies compete to acquire these firms? In the present example, no one would argue that the firm's computer chip, even though it has yet to be manufactured or sold, should be considered a product. The question is, should the firm's publicly traded stock also be considered a product? Does the treatment of the firm's stock as a product provide us with a means of understanding the firm's value to the company that eventually acquires it?

Since the firm has yet to sell a unit of its computer chip product, it is impossible to accurately predict its potential for long-term profitability. Its value is based solely on the perceptions and expectations of those persons who buy and sell its stock. But if the firm's stock is treated as a virtual "product", the value associated with the sale of the stock results in a demonstrable overall "profitability" for the firm. This profitability explains the firm's attractiveness to the larger public company hoping to achieve or acquire a similar profitability for itself.

There are some who will insist that the original firm's virtual product continues to maintain a dependency upon its physical product, that at some point the chip must sell, or the virtual product will fail. They will say that regardless of how many times the firm is bought or sold, its overall value remains dependent upon the value of its physical product. But exceptions to this argument are clearly visible in the market. A firm that initially achieves a large market capitalization though the promise of profits related to a particular product or service can use its highly valued stock to purchase more traditional companies having customers, revenues

and profits. The firm and its stockholders know they may never make profits from the sale of the firm's original products and services. But the firm and its stockholders also know that the value of its stock is sufficient to purchase numerous smaller companies having traditional products, customers and products. This strategy allows the firm to transition from one having no hope of long term profitability to one having a portfolio of profitable companies. The firm in essence has used the short term "profits" from its virtual product to acquire longer term physical product profitability.

Conversely, there a numerous examples of firms that have seen their stock values collapse in the face of record growth and profits. History has shown us that it is possible for inverse relationships to exist between growth or decline in gross domestic product and total stock market valuation.

It is also true that legal, social and even individual behavioral systems affect the relative value of the firm's virtual and physical products. As an example, a decline in the value of a firm's (or an entire industry segment's) stock resulting from geo-political changes can have an immediate impact on product sales even in the face of previous long-term revenue growth and profitability. This only emphasizes the fact that the market value of the firm is derived as much from those assets associated with the firm's virtual products as it is derived from those assets associated with the firm's physical products.

The market value of a firm is at least equal to the sum of its physical and virtual product sales minus the costs of production. If the sum of the firm's physical product sales (i.e. the chip) and virtual product sales (i.e. the stock) is greater than its costs of production, the firm will survive. This holds true for any type of firm whether that firm sells farm implements or hedge funds. If the sum of the sales of its products, whether physical or virtual or both, is greater than the cost of production, the firm will prosper. If not, the firm will fail.

Virtual Economies

The rise of virtual economies will not result in the decline of production but in the commoditization of production. We are physical beings. We eat real food, we wear real clothes and we require real shelter. Production will continue to increase dramatically as will the variety of products available. This does not mean that everyone will live in a world of plenty. As the world population continues to increase and access to and ownership of physical products becomes more of a luxury, the informational "image" of the physical product will begin to take the place of the product itself. We can see the beginnings of this in the cult of

celebrity that uses TV, movies and music to promote its principal product – our willingness to live vicariously through the lives of others.

Physical products are expensive in terms of time and space. Virtual products are less so. In some cases the virtual image of a thing can be made to take the place of the thing itself. A growing world population will be the force that creates the demand for virtual products in a world in which access to physical products is limited. In other words, those who cannot afford physical products will have to settle for virtual products. The substitution of information economies for industrial economies as the primary source of new products will eventually allow the desires of a growing population to be met with fewer and fewer resources. As the virtual becomes more and more "real", people may eventually find that they prefer the “virtual” to the “physical.”

What this means is that virtual systems, virtual products and virtual economies will become less dependent over time on their corresponding physical systems, products and economies for their value. They will acquire a value similar to, yet independent of, the physical.

This is not an unreasonable conclusion. Our individual experience of reality has always been "virtual." Our senses are the original information networks through which we interact with the physical in the creation of our individual experience. What we call a “thing” is nothing more or less than the artifact of some event that has occurred or is occurring in space and time. An event in turn is anything that we describe as having properties or characteristics or attributes such as mass, duration, location, motion, etc. In this sense, everything we experience or consume is now and has always been virtual. Every living organism interacts through its neural network with the world around it. Our participation in our families, clans, organizations, governments, religions and other social and cultural organizations does and has always been a participation in the creation of virtual systems. A living organism’s “understanding” of reality has and always will be based in large part on its sensory perception. We do not know, nor will we ever be able to see the world as it “truly is.” Only non-living entities have that capability.

The emergence of a global information network does not precede, but only changes the virtual nature of our existence. It allows us to collapse space and time. It provides us the opportunity to interact with each other regardless of distance or organizational barriers. It provides us the opportunity to create an infinity of variety in our individual experiences of those artifacts that we perceive as necessary or desirable to our existence.

Determining the relative value of physical and virtual products is no different than determining the marginal utility of any two products. That which is scarcer or more expensive to produce or more highly regarded will usually have the greater value. For the time being, we may safely assume that for a given class of products, the physical will possess a greater value than the virtual. When the virtual becomes perceptually indistinguishable from the physical, the value of the virtual product may actually exceed that of the physical product based upon its ability to provide unique experiences impossible to achieve otherwise.

$N(x) = A(N(x))$

where $x = \{\{\},\{\{\}\},\{\{\{\}\}\},\ldots\}$

$A(x) = N(A(x))$

< see 6. >

23.

I am
the meter
of life that sings far
above the bloodtide roar and
infinite screaming of the mind, avatar
of all that is and all *that* is. To begin again
and again is acceptable now and expected, understanding
no longer an end but a talent for maintaining
a staid balance throughout the swell, crest and fall
of wave after wave of knowing,
sensing the deepest
movements not as waves but as the winds
that cause the waves, unseen, sur-
faceless.

A world of words but these words most of all:

clouds, water, trees,
the concrete nearby traffic,
the sounds of my daughter sleeping,
(An ambulance spills light across the page.
I look up in time to see its lamps,
an arrhythmia, bleeding over everything they touch,
bright red and white in the cold air.)
Who's is that face in the pane?
Who's is that eye staring through a glass wall
at the night pouring life into the dry earth?
It is The Book of Man.
It is A Book of Hours.
It is a spirit trap carved in dark far caverns.
It is seventy times seven perfect
moments, glistening black pearls under shallow, clear water.
Seeing through the pane the wet painted landscape,
seeing the edges of the pane, the frame,
becoming at the last a denizen of Flatland,
seeing without feeling the rain.

Where is the deeper meaning in all this?
Does it lie buried forever in the ground of experience?

Must it always require some final letting go?
Or is this too only memory
or fiction or both?
What else? What else is left after letting go?
Nothing. Nothing is left.
I hold my hands up to my eyes in mute wonder.
It all seems so impossible.

Slowly, tentatively I return to a world of literature,
painting, music, cigarettes and tea.
I remember how very important it once seemed
to understand the strange loops of language
and the "Incompleteness" contained therein.
Chinese lacquered boxes within boxes . . . .

* * *

It is important to act as if our actions mean something,
wavering only if the wavering is part of the meaning,
knowing better now than to speak of the innocence
of childhood,
for innocence is not self-conscious.
As children, crouched in the dew-covered grass
we knew nothing, until,
rising up from that pure state of feeling,
we made the distinction between the green of the grass and
the green of the tree leaves and continued
to make distinctions until now.
Realizing at last that everything can be explained simply
in terms of sequence,
decision
and repetition
makes the cycle of endless understanding
no less easy to bear.
Nietzsche's eternal recurrence acquires the decorum
of a kewpie doll,
forever popping up in antique stores,
airport gift shops and old World War II movies.

Conversations ripen and fall,

as we each restlessly wait our turn,
reaching deep inside for that one missing word,
hoping to append it to the silence and the smile we wear
politely as a bow in a little girl's hair.
It is not there, it never was.
We know that now. We knew it then.
Even so, there will always be those glad to have a reason,
any reason, to fill the uncomfortable silence,
to announce their easy solution
to the Sphinx's riddle,
to proudly display their *cogito, ergo sum*
like a silk-screened tee-shirt at the beach.
"So, what else is new?" they will say.
It’s all new.
Every moment of it.
And remains so until we forget to remember.

1. Moments here and there, isolate, lucid and wordless are how life and memory both began. But then, like leaves twisting slowly out of twigs, like insects from chrysalides, the words emerged to create a world of things, until finally the tree of the world was covered with uncountable many leaves and living beings. This is the world we live in: a world in which a single word can lead to anything: one word to violence, and violence in turn to death – a different word to love and from love to eternal life. How is it possible that a word should change anything at all? What is a word when compared to what is real? Our bodies, the ground we stand on, the food we eat, the cars we drive, the buildings we walk into and out of each and every day, the sky under which we occasionally stand, staring up into a canopy of clouds, or stars, or nothing at all, the beds on which we sleep, the televisions, the radios, the phones, the computers. All are real. But are they more real than words? Or less?

2. Some say words are a virus. Some say words are a gene. Some say words are an art. But at this point in time, more than anything else, words are machines.

3. A machine is more than a thing made by hands. A machine is more than a tool for work. A machine is an archetype, a form of thought, a root artifact of every thing.

4. Machines provide us the means whereby we extend our control over the world and all things in it. Machines precede words as the parents of language. And it is because of machines that language, the parent of things, can both discover and invent. In turn, it is because of language that all things share a sameness – mass, position and velocity – color, shape and movement – texture, smell and taste – duration, reproduction and self-determination – and so forth and so on. Over time these words become things interact with other words and other things in such a way that we call the resulting collection of words and things by a new name (that name itself a thing) and in so doing describe something that did not exist before, a new and different thing. Not only do we build things up from other things – we go the other way as well; whenever we can we reduce things into smaller and simpler things. In philosophical terms, reductionism as a type of essentialism is nothing more than a search for the perfect machine, a machine we can use to describe any thing, to create any thing, anywhere at anytime.

5. The world is also a unity, indivisible. It is only through the act of attention that the characteristic nature of things comes into being.

6. Instead of “thing,” use the word “object.” Instead of “characteristic” use the word “attribute.” The remaining keywords are “event,” “relation” and “message.” These are the treasure words, the canonical forms by which words and the world are made one and the same. These terms define the process by which things enter into being and pass away. Even the knowledge that occurs without words or thoughts, but from breathing and being aware must find its place in the midst of these.

7. An object is a collection of attributes in time. An attribute is the paying of attention to a single characteristic that an individual object maintains over time. An attribute is also the paying of attention to a specific characteristic that two or more objects have in common at any given instant. Attributes include all forms of sensory stimuli: size, weight, color, texture, smell and taste, individually and in combination. Attributes also include number, the idea of how many or how much. And even if we use machines such as cameras and radar as artificial eyes and ears to extend our perception, we do not transcend either our senses or the idea of number.

8. A single instance of an attribute in time is an event. An event is as near to reality as we can approach. An event is not the absolute reality of the world, but an artifact of that reality. And it is only as an artifact that an event can exist. And although events precede attributes in order of existence, they in turn are defined by attributes. Events represent change over time in the values of attributes. In other words, a change over time in the value of an attribute associated with an object is an event. An instance of a collection of various attributes in time associated with an object is an event. Change over time in the values of attributes associated with a collection of objects is an event.

9. An object in turn is a collection of like events in time. And because events are the measure of objects, all objects in turn are artifacts.

10. Attributes begin their life as lists: of words, numbers, images, sounds. Lists become objects. But a list is more than attributes. A list is attributes in a certain order. And the order changes over time as the values of the attributes change and the membership of the attributes in one list or another changes. And a list becomes a collection of lists that in turn become collections of lists. And attributes become objects, and lists become objects, and collections of lists become objects.

11. After events and attributes come relations. A relation is a type of attribute. Relations begin as the ordering of attributes in a list. It is the order of

attributes in a list and the changes in the values of those attributes with respect to each other that we call relations. A relation is a value or set of values associated with an attribute that corresponds with a value or set of values associated with a different attribute. A relation is therefore an attribute of attributes. Relations define the interaction and behavior of attributes in their roles as objects. Relations are the glue that ties attributes together to make objects. Relations are what make the elusive, dynamic and process-oriented nature of things possible. Attributes are structure. Relations are process. If attributes are stone, earth and wood, relations are fire, water and wind.

12. Attributes and relations can be combined in a number of ways to create higher level abstractions that in turn can be used to make statements about objects, their behavior and their relationships to each other. These higher level abstractions include mathematical functions, propositional grammars (i.e. logic), predicate grammars (i.e. computer and mathematical languages) and natural languages (such as English, Spanish, etc.). In turn, all of these higher level abstractions are reducible to attributes and relations.

13. It is the organization of events, attributes and relations that make an object possible. An event is the archetypal object. It is attention at a moment in time. It is attention a moment at a time. An event can also be a collection of events. Each event in turn consists of stimuli, observations, measurements. Our birth is an event. Our death is an event. Our life is the series of events in between. Every object can be seen as a series of events. Even something as stable and stationary as stone is an event, a series of events. The stone perceived as an object has mass, size, color, texture, smell. And just as with any other object these attributes and their values change over time, even if that time is measured in millions (or billions) of years. Collectively, these events constitute the lifecycle of the stone.

14. Beginning with events as artifacts and the understanding that events are observations and measurements over time we can take the next step. The next step is to communicate the events. An attribute contained within an event is local to the event. We do not perceive a requirement to communicate the attribute or its values to other attributes associated with the event. We think of them as being simultaneous with each other and with the event. It is only when an attribute or its values affect the attributes or values associated with a separate event that we begin to consider the communication of that information between the two separate events. If two events are identical in their attributes (including their location) and differ only in time we say that they collectively represent an object. If their values change we say the object

is changing. Specifically, if we are able to predict the change of the values of attributes associated with events and those changes are simultaneous with each other we call the collection of events an object. That is how we define an object: as a series of like events in time. Even if two collections of events are identical in all respects except location we may be tempted to say they are the same object. It is when two or more collections of events maintain a close correspondence over time but are not simultaneous with each other that we say a communication has occurred, that a message has passed from one object to another. So a message is the non-simultaneous change of the values of attributes associated with events separated by time and space.

15. Once we have events, attributes, relations, objects and messages we have a computer. A computer is a form of organization that is capable of both capturing and generating events while maintaining the integrity of their associated attributes, relations, objects and messages over time.

16. There are only two irreducible models of computing at this time. One is the Turing machine. The second is the quantum computer. The Turing machine is deterministic in its operations. The quantum computer is not.

17. A Turing machine is the fundamental computing device. It consists of three parts: The first part is a one-dimensional “tape” that may extend infinitely in both directions. The tape is divided into squares, each of which contains a 0 or a 1. The second part is a movable device, called the read/write “head”, that is positioned over some square in a beginning “state”, can only occupy one square at a time, can read the value associated with the square that it currently occupies and, having read it, erase it, write either a 0 or a 1 as required and then move either to the “right” or the “left” one square. The third part is a “table” of instructions that contains finitely many states and that tells the read/write head what to do. Each state has an identifier and instructions describing what the head should write if it reads a 0, what it should write if it reads a 1, whether it should go left or right after its write operation, and what the next state should be. Once the machine is started, its operation is dependent upon the instructions associated with its current state and the value of the square it occupies. As simple as this machine is, it is capable of emulating any digital computing device. All digital computers can be reduced to a Turing machine. Given infinite time, there is nothing that is computable that cannot be computed using a Turing machine.

18. The fundamental unit of information in a digital computer is a binary digit or bit: a 0 or 1. The fundamental unit of information in a quantum computer is a

quantum bit or “qubit” which, being quantum in nature, can exist as a 0, a 1, or simultaneously as partly a 0 and partly a 1. Changes in the state of a digital computer are serial in nature. Changes in the state of a quantum computer occur simultaneously, regardless of the number of qubits involved. A quantum computer can perform a greater number of calculations in a given period of time than any digital computer could ever perform. This is because matter behaves much differently at the subatomic level than it does in the everyday world. At the subatomic level a particle, such as a photon, can be in different places at the same time, not as two separate particles, but as the same particle. This ability to be in two positions at once, a superposition, can be utilized to create a computing device capable of performing simultaneous calculations on a single object occupying many different states at a given moment. This means that a quantum computer can perform many orders of magnitude more calculations than can a digital computer.

19. A Turing machine and a quantum computer reflect two different views of the world. A Turing machine sees each event as being associated with a specific point in space and time. A quantum computer sees an event as occurring simultaneously at many points in space and time. This means the concept of an event as archetypal object is not confined by logic to a single point in space and time. An event, and therefore an object, can be defined as narrowly or as broadly (in both space and time) as is useful. An object can exist in one place at a time. An object can exist in many places at the same time. A computer can exist in one place at a time. A computer can exist in many places at the same time.

20. It follows that any description of events, attributes, relations and objects can be made to follow the model of a machine that treats them as being located in one place as a single object or as being distributed across space and time as many objects connected via messages. It also follows that the same events, attributes, relations and objects can be made to follow the model of a machine that treats them as existing in multiple places at the same time and changing simultaneously with one another without the requirement of a “message.” Ultimately, it is the concept of a message that makes objects seem separate from one another.

21. In summary, the world can be seen as a collection of objects and their constituent events, attributes and relations separated in space and time and connected by messages. The world can also be seen as a unity in which events are simultaneous with one another. Any model of the world and therefore any

"computer" that attempts to model the world must take both of these views into account.

22. The word is the computer. The word is the name of the event. The word is the attribute and its values. The word is the relation that describes the process of being and becoming. The word is the object. The word is the message that makes objects aware of one another.

23. The word is also the world undivided.

24. The word is what makes the world a computer. Events are captured, interpreted as one ore more objects that may or may not interact with each other and ultimately used to generate new events and objects. This constant interaction of words as events and objects is what makes knowledge and understanding possible. It is the visible form of consciousness. The separation of objects in time and space and their interaction via messages is what makes a plurality of the world. The integration of objects in time and space via the removal or absence of messages is what makes a unity of the world.

Come stand with me, and be at ease
In a beautiful world with grass and trees,
A shining sun and a pleasant breeze,
Come stand and your heart be free
Among the beautiful pictures.

This world abounds with sights and sounds
Happier than the laughter of clowns,
The morning horizon is capped with a crown
And the birds and brooks all sing in rounds
Among the beautiful pictures.

You look away as if to say
That simple joy is a foolish man's way
Of putting aside what he fears to say,
That man is no more than a lump of clay
Among his beautiful pictures.

You do not know that all your show
Is only a wish for a place to grow,
A peaceful world to come and go
As quietly and gently as rivers flow
Among the beautiful pictures.

Come stand with me, see what I see,
A beautiful world with grass and trees,
A shining sun and a pleasant breeze,
Come stay and let your heart be free
Among the beautiful pictures.

March 23

Dreams are the purest form of art. They create themselves. They have no regard for convention. They are an endless sea from which our lives emerge again and again, gasping and struggling upon the shore of our waking.

Last night I awoke suddenly from a dream of many dreams and lay for a long time in darkness, remembering dream after dream, each of them like the memories one has when looking at snapshots from an album, all of them connected, all of them parts one of another. I have lived an entire life in my dreams. In an instant I remembered them all. In an instant I remembered having remembered them all many times before only to forget again and again that I had ever dreamed them. And now that part of me that was lost is found.

They are like the days and the moments in one's life that stand out so clearly from the rest that, even when lost and in darkness, they continue to shine with their own inner light to mark the path one has taken. They are so many in number that I cannot count them. Sometimes they occur in the streets of cities, in glass-walled buildings or in old houses, peopled with faces I easily recognize and faces that remain unfamiliar. More often they occur in nature, in settings both beautiful and desolate. Some of the places I have been to many times. Some I have visited only once. It is as if I am remembering all of my dreams at once and for the first time. Now that I remember them I want to keep remembering them. I want the life of my dreams to be a waking part of me.

March 25

I began to change my sleeping behavior last night. I normally go to bed between 11:00 and 12:00 and wake around 6:00 a.m. I have moved the alarm across the room and set it for 4:00. I will have to get up to turn it off and then I will return to bed. With a little luck I should be able to quickly return to sleep and dream.

March 28

5:50 a.m. I have forced myself awake to record a dream. I am compelled to write, as if I am writing for someone else. Who, I cannot imagine. I suppose it doesn't matter.

I saw all the paintings I have never painted. They were at eye level along two opposing walls of a long, wide room colored bone white with a polished hardwood floor. The light in the room comes from a large floor to ceiling window at the north end. The light is diffuse and the sun is not visible. Through the window I can see grass and winter trees. There is no artificial light in the room. I am alone and can hear only the sound of my footsteps as I move from one painting to the next.

The paintings are very beautiful. I am certain no one else has ever seen them. They are as beautiful as I remember them. I have been trying for many years to paint these pictures from memory. For the most part I have failed.

They have been a great and solitary joy in my life, these paintings . . . and the music, and the words.

April 10

I dream every night now. I no longer need an alarm. I wake several times each night and always a dream is waiting to greet me. Sometimes I make a note of it. More often I simply go back to sleep. If I do not write them down I do not remember them in the morning. If I write them down I have a difficult time returning to sleep. I am tired all of the time.

April 21

I have had a livid dream. I was dreaming and I knew I was dreaming. I forced myself awake. I got up from the bed, walked to the kitchen and poured a glass of water. I came back to my room and sat on the edge of the bed for a moment. I looked on the night stand for something to write with. Something was not quite right. I could not remember the dream. I felt wide awake. I could sense everything that was happening in the room. I knew I should have been able to remember the dream. I looked around for my notebook but couldn't find it. I suddenly realized I was still dreaming and in that moment I was awake. That was minutes ago. I am writing this now. This is not a dream. I am aware and the world is as clear as air.

May 30

There is a voice now in my dreams. It seems familiar. I remain very quiet and listen when it speaks. I cannot understand what it is saying. It is like the murmur of water or the wind moving among the green leaves and branches of a tree. It is not a whisper. It is like the sound of someone speaking in another room.

June 9

I am comfortable now with my dreams. I take a moment to notice them and then it is almost as if I am the dream and it is they who return to sleep – as if I had awakened them while they were dreaming me. I hear the voice now from time to time. It is my own voice but not my own. I hear the words clearly while I am sleeping but I can't remember any of them when I awake. The voice doesn't frighten me in the least. It is calm and reassuring.

June 10

Less than two hours ago I was sitting by the window in the wicker chair. I was relaxed and was holding a glass of warm tea I had been drinking. The sky was growing dark and the room had clothed itself in dusk, that period between day and night when everything becomes momentarily indistinct, the edge of objects blur and there is an evenness in the value and hue of every object.

I suddenly heard a voice speaking from my right and very near me. It said very clearly, "There are no words but these." I was startled and turned to see who was speaking. There was no one else in the room. What I desired to happen has happened. I hope no harm comes of it, either to myself or anyone else. I am not so foolish as to think I can control this. Curiously, I don't feel any anxiety. Instead, I feel calm.

June 11

The voice has not returned. I do not intend to keep too detailed an account of my "experiment." For some reason I cannot explain, I intuitively know that if I become to rational, too "scientific", I will lose what I have gained. There is a part of me that knows what to do. I have trust in that.

June 15

I spoke for the first time today with M. M is a name I chose. In truth I don't think M has a name. M is trying to speak its own words, its own thoughts. Many of the words M speaks are mine.

June 28

M has a separate voice. I ask questions. M answers. Some of the things I believed before I first spoke with M have changed. Many of my burning questions no longer seem so important.

July 3

I am taking this time to make some notes of my own. I have been trying to incorporate M's words into what I understand of the world. M is different from me in some ways. I voice my thoughts in terms of science and art. M speaks in terms of life. M is not interested in science or art.

We live in a time when any idea, no matter how simple or obvious, must be endlessly and publicly analyzed and re-examined by its author as if it is being translated into a thousand unrelated languages. The idea, once singular and eventful, eventually expands to become a galaxy of complexities and vagaries that completely surround and obscure their source. The original brilliance is gone, its only remaining evidence an epigram.

I started to write this note as a way of distinguishing myself from M. How stupid. It is as if I am afraid that I am not at all who I think I am, as if all I have ever believed myself to be is utterly false. “I” really have very little to say. Compared with M's my own words seem so dry. M has become the greater part of me.

October 7

After a period of silence I spoke again with M last night. Some might say M is an angel. A psychotherapist would surely suggest that M is an auditory hallucination resulting from some self-induced psychosis. It doesn't matter. M and I are the same. M and I share in the same universal consciousness. As do you and I. M is patient and compassionate. M speaks to me for love's sake. As do I to you.

Forty-six conceptual art pieces:

1. Describe a conceptual art piece in pencil on a piece of paper and then eat the paper. Don't tell anyone what you wrote.
2. Install 32 fully functional urinals side by side along the walls of a museum exhibition room. Don't install any washbasins, paper towel dispensers or hot air hand dryers. Leave the room unattended.
3. Send a picture postcard of Michelangelo's "David" to the Director of MoMA (i.e. the Museum of Modern Art) with a note on the back saying, "This is a picture of Rob Rauschenburg if I say so."
4. Each time you eat out, before you leave try to arrange your napkins, tableware, dishes and leftover food to look like architecture by I.M. Pei surrounded by a sculpture garden by Claus Oldenburg.
5. Show up naked at dawn at a pre-arranged gathering, have several artists quickly paint you to look like an American flag, tie your ankles together (comfortably if possible) and haul you feet first up a flag pole where you recite your favorite poem by Walt Whitman from memory.
6. Barricade the doors to a public library from the outside with bundles of books, magazines and newspapers.
7. Convince a well-established, financially successful New York painter to take a job for a short period of time as a waiter. Create a documentary video if necessary.
8. Open a convenience store inside a gallery exhibition room for one month.
9. Keep a dream diary. Create an installation that consists of the framed pages of your dream diary and one or more TVs and VCRs playing a video tape of you sleeping.
10. Paint tire tracks down the halls, around the corners up the walls and across the ceilings of a museum space to look as if they were created by a sport utility vehicle.
11. Take a job as a construction worker. During your breaks, use your time to arrange bricks, 2x4 studs or flagstones as available to look like pieces by Carl Andre. Take photographs of the work. Include your co-workers in the photographs if possible. Use the photos in an exhibit.
12. Print this list and carry it around in your billfold or purse. Use the back of each page as scratch paper to write names, phone numbers, addresses and appointments.
13. Have several individuals with diverse socio-economic backgrounds living in the same city each carry a global positioning system (GPS) device around with them for one week. Have each of them record their GPS readings at

specific times of the day and night. Pick a color code for each participant. Plot and connect the coordinates for each participant on a map of the city. Display the maps in a gallery or museum.

14. Advertise that you are performing a recital of John Cage's "4'33"" (Four Minutes, Thirty-Three Seconds) at a theatre or auditorium. After the audience is seated, raise the curtain to show a piano bench and no piano. Walk onto the stage and sit on the bench. Begin playing a pre-recorded version of the piece as performed before a live audience. At the end of the recording, stand up and leave the stage.
15. As an installation, hire several house painters to paint the walls of a gallery space any color other than white. At the end of the show have the same painters return and paint the walls their original color.
16. Obtain a list of individuals and organizations purchasing paintings and sculpture at auction. Create a documentary video based on interviews of the individuals responsible for the purchases.
17. Create a non-profit art organization seeded with approximately $50,000. Provide a one-time $1000 grant to any artist who will use the money for one of the projects in this list.
18. At a major art conference, sponsor a panel discussion on interventionist art. Include half a dozen practicing artists as participants. Attach a device capable of administering an electric shock to each participant. Allow any participant in the panel to administer an electric shock to any other participant for any reason at any time during the discussion.
19. After establishing the criteria and the context for the selection of specific paintings from a museum collection, create a show from the pieces selected. Mount or display the paintings with the front of the paintings facing the wall and only the title cards to identify the paintings.
20. Become a participant on a nationally televised game show. When the host asks you what you do for a living, tell him you are a performance artist. Try very hard to win.
21. Create a painting listing the names of all patrons, donors, employees and exhibiting artists in alphabetical order for the museum in which the painting is exhibited.
22. On any weekend, attend the openings of several well-publicized art exhibits in New York and covertly take photographs of the art in each exhibit. The following weekend, display the photographs in your own well-publicized exhibit.
23. At the entrance to a trailer park, construct a shallow, 20' diameter pond. Inside the pond create a scale replica of Robert Smithson's "Spiral Jetty" from broken cinder blocks. Place several ducks in the pond. Encircle the pond with a cyclone fence so that the ducks won't be harmed by passing cars.

24. Park several Ford 150 pickup trucks in a well-ventilated exhibition space. Place butane stoves on the lowered tailgates. On opening night, cook hotdogs and hamburgers on the butane stoves and serve them with beer and soft drinks from coolers placed in the truck beds. Place several large-screen TVs around the room tuned to ABC's Monday Night Football.
25. Attach sensors to capture your pulse and respiration. Transmit the signals via radio frequency to a nearby PC. Transmit the signals from the PC over the Internet to an installation where your vital signs are displayed in fifteen second intervals on a large-screen TV connected to a set top box.
26. Create audio recordings from your favorite television commercials, game shows and talk shows. Mix the voices a cappella to create a piece that corresponds as closely as possible in pitch and modulation to Glenn Gould's "The Idea of North."
27. In a formal ceremony, create a Buddhist sand painting of the Coca-Cola logo inside the Purina logo inside the AT&T logo.
28. Continually check the parking meters during a weekday in a 3-4 block area near the "Mall" in Washington, D.C. Put money in any meter that threatens to run out of time. Maintain a record of the automobile license plate, date and time and dollar amount for each meter into which you put money.
29. Stand at the entrance to an on ramp of any major freeway in Dallas during peak traffic periods holding a sign that reads, "Will provide second HOV lane passenger for free." (HOV means high occupancy vehicle.) Interview each driver that picks you up.
30. Create a photocopy of Rauschenburg's "Erased De Kooning." Use Liquid Paper to remove the remaining marks.
31. Create an eyeball approximately 6' in diameter out of translucent materials. Place a film projector in front of the eye. Project a film through the pupil to the back of the eye where the image appears to be both upside down and convex. Title the piece "Panofsky's Eye."
32. Replace one city block of concrete sidewalk in a poor, urban neighborhood with sections resembling the Hollywood "Walk of Fame." Place the names of local residents inside the stars.
33. Solicit artists' donations of hand made "Fabrege" eggs for fund raising purposes. Have art patrons donate $100 each to participate in an Easter egg hunt for the eggs.
34. Place the items in this list, one each, into an empty wine bottle with a cork in the top. Instead of throwing the bottles into the ocean, place one of the bottles at the entrance to each of forty-five museums.
35. Volunteer to work after hours performing janitorial services for a university museum or gallery.

36. Have three artists 6-7 months pregnant perform a dance on stage in front of three large screens. Have the dancers lie down as three other dancers bring ultrasound devices on stage. Have the second set of dancers use the ultrasound devices to show the babies inside the first set of dancers projected onto the large screens.
37. Stand at the entrance to an art opening and ask people to submit to a metal detector test.
38. Create an exhibit consisting of front and profile photos, names, social security numbers and fingerprints of local artists.
39. Fill a fifty cent vending machine with little plastic eggs containing keychain telescopes. Place a see through photographic image of Marcel Duchamp's "Etant Donnes" inside each telescope.
40. Create a Barbie and Ken collection with Jeff Koons playing the part of Ken.
41. Buy one share of stock from each of twelve leading Internet companies. Create origami from the stock certificates. Display the origami in an exhibit.
42. Obtain a menu from a four-star restaurant. Next to each entrée on the menu, write a number corresponding to the percentage the entrée is of the average per capita income in the United States, China and Russia.
43. Commission several artists to create new, unsigned work for you based upon their own styles and concepts. Have them sell the work and all rights as part of the commission. Exhibit the work in your own one-person show promoting yourself as a commission artist.
44. Think of a conceptual art piece. Forget it. Think of another. Forget it.
45. Create an interactive web site containing this book on a wireless chip. Surgically implant the chip along with a kinetically rechargeable battery in your body.

Mr. Grey,

I have been asked to provide you with any information I may have regarding those circumstances associated with the bequest of the writer Gabriel Aro. An attorney from your office has provided me with a photocopy of a last will and testament found in a safety deposit box along with other documents left by the writer. The will makes reference to the grave site of a person unknown to me. In his will, Gabriel asks that he be buried next to this person. I understand from your office that the grave has been located and is that of a male child twelve years of age. I also understand from your office that the request caused sufficient concern on the part of the authorities to have the casket exhumed and that, upon examination, the casket was found to contain, not a body as supposed, but a collection of books containing the following:

The King James Bible
Herman Melville's Moby Dick
Charles Dickens' David Copperfield
Plato's Collected Works
Aristotle's Collected Works
Shakespeare's Collected Works
John Donne's Sermons on the Psalms and Gospels
Meister Eckhart's Sermons
Wittgenstein's Blue and Brown Books
Buckminster Fuller's Nine Chains to the Moon
Paul Klee's Diaries
Herman Hesse's The Glass Bead Game
Jorge Luis Borges' The Garden of Forking Paths
Papers by Alan Turing
Swann's Way by Marcel Proust
Carl Jung's Archetypes and the Collective Unconscious
Noam Chomsky's Aspects of the Theory of Syntax
James Joyce's Ulysses
The Upanishads
Kant's Critique of Pure Reason
Poems by Li Po
The Kabbalah

I have also been informed that a handwritten manuscript was found that has been identified as having been written by Gabriel.

I was told that you have given the books to the writer's biographer for further examination. I am on close terms with Gabriel's biographer, Karen Ware, and called her to discuss the matter. Neither Karen nor I have any prior knowledge of the facts surrounding the present situation or of Gabriel's motives for doing such a thing. Karen has been Gabriel's biographer for over twenty years. In the course of our conversation Karen did tell me a number of things, for example, that the date of burial on the boy's tomb is the same year as the publication of the first novel by the writer. She also said that all of the books are highly annotated and make numerous references to each other and to other books not contained in the collection. After a preliminary examination of the books and the handwritten manuscript she feels certain that a complete re-evaluation of Gabriel's work is necessary. Although she freely admits her hypothesis is speculative, Karen now believes that the writer's first and most famous novel was comprised completely of excerpts from the books contained in the coffin. The author then went through a series of exercises in which he paraphrased and otherwise modified the excerpts repeatedly until they began to coalesce into a narrative format that took on the form of Gabriel's unique style. Whether the method included gematria, mathematics, transformational grammars or other methods of formally codifying and translating the manuscript is unknown at this time. The biographer believes that each of the novelist's subsequent books was written by applying the same or similar methods to the previous novel. The author in effect created an entire body of work by first copying the work of others verbatim and then translating that work into what came to be perceived as a unique and solitary voice.

I understand from your office that it is still not known whether or not a child's body was ever placed in the grave. I also understand that you have yet to determine whether or not the writer was personally responsible for the placement of the books and the manuscript in the casket. I have talked to Karen about this. She believes that Gabriel is responsible. She believes he even went so far as to anticipate the activities in which we are now engaged and that I and anyone else who addresses this situation is in effect adding to the body of his work. In the biographer's opinion, the exhumation of the casket constitutes a type of literary device that, in a single stroke, has created a completely unique and separate body of work. If this is true, I do not know if even the most sympathetic critic would consider this effort on the part of the writer art as opposed to psychopathology.

I first met Gabriel while standing in front of the painting of Lodovico Capponi by Bronzino at the Frick Museum in New York. I had been looking at the painting for some time when I heard a voice say, "I too am fascinated by the right hand and the black buttons." I turned my attention away from the painting to see a small man of olive complexion staring intensely at the same painting with his lips

pressed together in something of a smile. Without looking at me he continued, "I know it is important to see the work in its entirety and to understand both the life of the artist and his time, but I cannot help myself. I am most fascinated by those moments in which we transcend our own abilities and know it. Rather than try to make everything perfect we settle for the one or two things we have accidentally made perfect. I don't count it a fault if an artist stops working on a painting once he has achieved such beauty. And I have sympathy for any artist that continues to paint long after the painting is completed, hoping to make the whole painting as perfect as its part."

This marked the beginning of a long friendship. Gabriel's insights and unique ways of thinking fascinated me and drew me deep into his sphere of influence. Compared to Gabriel, I am sure I seem pedantic– a Watson to his Holmes. Like Watson, I am a physician by occupation. Whether one does it out of passion, compassion or simply for money, the practice of medicine remains an affirmation of life. Witnessing the processes of disease, death and healing forces one to see people as they truly are. Seeing them is one thing. It is another thing to accept them as they are.

Gabriel knew this. His gift was simple. He captured what he thought and felt and saw in his occasional perfect moments not by creating, but by recording. I agree with his critics that his writing was inconsistent. I also believe that he could have written in any way he pleased and that what he wrote he wrote by design. These statements may seem contradictory, but I am quite comfortable in stating them both. They are two sides of the same coin.

When I read the work of other writers I can often see the truth of Gabriel's comment, knowing that they wrote something small and perfect and, wanting the whole to be as perfect as the part, continued to write long past the point of completion, striving for something beyond their reach, for the appearance of talent if not of genius. As a result, I am most attracted to those artists that have through age, or defeat, or illumination abandoned all goals but one – the desire to communicate something of the immediacy and confusion and perfect beauty of being human.

This is why I think failed poets so often become novelists.

Like his writing, Gabriel's conversation was simple and direct, yet always nested in allusion and metaphor. I could never differentiate between compliments and criticisms, comedy and tragedy, where he was concerned. I often wondered if he

was a window through which I viewed the rich expanse of life, or a mirror in which I could see the perfect reflection of vanity?

I was a close friend of Gabriel Aro for many years. I do not think he would murder a child nor do I think he would hide the body of a child to cover a crime. His art was his life. To my mind it is much more likely that these present circumstances, as strange as they are, are the result of artistic practice rather than of any injustice on Gabriel's part.

I think I have said enough. After all, my opinions are only my opinions.

If I can be of further assistance, please feel free to contact me.

Sincerely,

Will Tobey

The world is not a book. To think a thing
may or may not make it real. A picture

of an apple is not an apple. The
taste of the apple is not the apple.

Speaking about the apple is not the
apple. But the apple, the picture of

the apple and talking the apple to
death do not live in separate uni-

verses. They come together in us, in
our individual and collective

experiences. The question is when,
where and how *is* the apple or any-

thing else? One cannot escape choice. Our five
senses are not separate. We do not

have to see a thing to see it. We do
not have to hear a thing to hear it. We

do not etc., etc . . . . .
Art like life is a moral choice. There is

no such thing as art without content. No
art has ever come into existence

without an act of volition. We speak
before we write (although there are those who

speak and never write (among whose number
we may count certain animal species,

prehistoric man and certain other
members of our species who could but chose

not to write: Socrates, Jesus, Buddha . . .)).
No one writes before they speak. First we learn

to "speak." Then we learn to "write." After that
the choice between speaking and writing is

one of utility. One no longer
preceeds the other. Is the voice any

closer to the "I" of Being than the
written word? I think we may once again

adopt the notion of utility.
The voice is readily available.

The accessibility of certain
tools are required for writing: pencil and

paper, brush and ink, a keyboard, ... Any
reversal (as in assuming the op-

posite or reverse of an idea to
be "true") immediately creates a

dialectic in which the idea and
its opposite are inextricably

bound. One cannot escape an idea by
emphasizing its opposite. The acts of

speech and writing are not, have never been,
will never be the same. It is nearly

impossible to capture the meaning
evident in the intonations of

the simplest speech using the written word.
Conversely, there are many words that sound

the same but when seen within the context
of a poem create many levels of

meaning and may even on occasion
strike the Self to its knees. The language of

action (gesture), of speech, of letters and
of images co-exist within the

same space. The first language is of gesture.
The second language is of speech. The third

language is of image. The fourth language
is of letters and words. The fifth language

is the integration of the first four
into a new form. The sixth language is

a hypersensitivity which re-
duces to a near-stillness and a near-

silence the requirements of the first four.
Derrida grounds *of Grammatology*

almost entirely upon the act of
deconstructing Rousseau (a dangerous

thing to do), for Rousseau persists in his
belief in the "noble savage." We may

as well believe in the noble insect,
the noble plant, the noble atom, the

noble electron. In the midst of this
nobility where is peace? Where will one

find justice and harmony? Rousseau will
not take Derrida where he wants to go.

Neither will communism nor social-
isms. Nothing will. There is no there. No

Utopia, nor Heaven, nor Hell. They
are all clearly in evidence before

us in the here and now. For Rousseau the origin of society and of

language is catastrophic. It is the result of a terrible accident.

All language, all texts and discourses can be deconstructed in such a way that

they make visible their origins in the null, echoless, invisible, un-

namable prehistory of the "trace." There is no escape. The transcendental

signified is another word for "god." Most postmodernists believe that each and

every "new" experience must be evaluated in the light of things

already known. Each present moment is constructed from the history of one's

memories. It is true that when we look at the water, or clouds or the tops of

trees or the ruined wall of a building we tend to discover faces and shapes.

(Leonardo was very fond of this.) That is one possibility that is

widely recognized, but there are others: We may choose not to see any "thing" but

instead allow ourselves to finally forget ourselves, to stare dumbly for a

moment or an hour outside the reach of time. We may somehow choose to see a

thing that does not yet "exist." A painting
by Jackson Pollock becomes a thin film

of neurons under a microscope. Some
might suggest that Pollock's drip paintings were

preceded by the "meander" found in
certain illustrated manuscripts but

even so those facts only serve to re-
inforce the argument. Some may even

choose to say, "What is there is what is there -
clouds, water, trees." That is a choice no less

valid than the others. But we should not
forget that we discover the image

of the trees in the trees, the water in
the water. The image came from somewhere.

At the subatomic level there are
no clouds, water or trees. What does it mean

to say, "What am I?" *What am I?* Mostly
carbon and water. If I am water

what are the ontic-ontological
characteristics of water? Water

is two atoms of hydrogen and one
atom of oxygen. That is ontic.

Water is also a sign, a tool which
indicates something specific (unique)

about the nature of my existence.
But what is water? Water is a cool

mist rising about my ankles in
a false dawn of my early childhood. It

is the savage, brutal reality
saturating the ground above which my

Brother's coffin lay, covered with flowers.
Water surrounds the taste of my tears. It

is a thousand needles stinging my face
and neck as I stand staring blindly up

into a starless night. Water is the
steady even pressure against my hands

and feet as I swim lap after lap on
the surface of a box full of water.

It is in the motion of a single
leaf struck by a single drop of rain. It

is one thought following another, at
times falling like the rain, without any

evident order or pattern, at times
being slowly drawn up through the roots and

into leaves of grass each of them firmly
grounded in the immutable order

of its own perfect reason. I cannot
say what the water is, but I do know

what the water is. As well as I know
myself. Existence preceeds essence. The

ontological-ontic reversal
which Heidegger claims to be the end of

philosophy can only exist as
a state of being that does not include

language. Language is essential in its
nature. It points to existence but it

can never occupy the process or
state of "Being." We can, however, re-

turn from a state of Being to a place
or condition in which we are aware

that we have experienced such a state
of Being. We can understand and find

means of expressing our Being within
the field of words, but the state-of-being-

with-words and the state-of-being-without-
words are not the same, can never be the

same. If we observe our thoughts we find the
initial division of our unique

experience corresponds closely to
the concept of the dialectic in

the West and the yin-yang in the East. Once
the first cut is made in the body of

experience the remaining slices
are portioned according to taste (i.e.

a predilection for one thing over
another: science, art, . . . economics,

politics, ... This first hungry stab at the
unity of experience results

in objects and events. Objects are things.
Ontic and static. They occupy space.

They are the furniture in Plato's cave.
They are the answer to the question "What

is that?" The other category is
events. Events exist as objects in

the field of time. They have a beginning
and an end. They are each made of objects

and other events. Events are fluid,
dynamic. If space contains dimensions

of objects, then time is the dimension
of events. No single dimension is

the domain of time. For a point, a line
is time. For a line a plane is time. For

a hypersphere time is found in the fifth
dimension. For an *n*-dimensional

object time is the dimension n +
1. For an *n*-dimensional object

$n + 1$ is the place where all events
occur. It is the place where everything

real, once lifted up, slips too easily
between the fingers and falls. Every

object is also an event. All one
has to do is step down one rung on the

n-dimensional ladder and any
object becomes an event (a process),

ephemeral, impossible to hold.
This is why physics now requires at least

ten dimensions (some scientists require
twenty-six to be really happy, but

for most ten dimensions is enough). This
doesn't make much sense in Newtonian

terms but if we look at the history
of certain ideas, the present belief

in *n*-dimensional space as well as
n-dimensional language turns out to

be perfectly reasonable. A too
brief list of proper nouns and dates follows:

The grid is the oldest symbol known, (first
found in the caves at Lescaux as "spirit

traps"), and dates from 25,000 years
B.C. Mathematics precedes any

other form of written language. Picto-
linguistic writing in Tartaria

(around 4,000 B.C) is followed
by Sumerian cuneiform. In

most cases pictographic forms of re-
presentation precede and are replaced

by abstract concepts composed of symbol
strings. Beginning with the Greeks we see an

idealized world defined in terms of plane
geometry and seminal ideas

identified by the names of people:
Thales, Pythagoras, Democritus, Eu-

clid, Socrates, Plato, Aristotle,
Archimedes, Aristarchus, Era-

tosthenes and Hipparchus established
an agenda for Western thought which has

lasted over 2,000 years. The Greek
intellectual tradition, referred

to as Idealism or as neo-
platonism is nothing more or less

than a belief in the existence of
an absolute "Truth" or "Reality."

This belief is an axiom of the
scientific method and the founda-

tion of Western religion and of all
essentialist philosophies. The theme

is simple: Reality is space, space
is geometry and geometry

is mathematics in two, three or more
dimensions. Though Fermat's infinites-

imal calculus (1635)
legitimized the "Absolute" it was

Decarte's invention of coordinate
geometry that joined the language of

symbol strings with space. Algebra frees us
from our three-space limitations. The world

of nature is now expressed as "fields." The
electromagnetic, the strong and weak

nuclear forces and gravity are the
basic forces of nature and it is

their unification into a set
of field equations which is the stated

goal of science. Field theory is called the
"language" of theoretical physics.

It was Georg Bernhard Riemann who pointed
out that a field is nothing more than a

set of numbers used to designate a
point in any *n*-dimensional space.

A two-dimensional space requires three
numbers. A three-dimensional space has

six numbers defining each point. The more
dimensions you have the more numbers are

required to designate a point. Riemann
called the series of numbers needed to

define a point in *n*-dimensional
space the *metric tensor*. It was Riemann

who gave Einstein the key to general
relativity and the concept of

the fourth dimension to art. Cubism
came into being long after the fourth

dimension was established as part of
the new mass culture. Theosophy soon

became a watershed in the revolt
against Positivism. Cubism

and not classical perspective is a
more appropriate method of showing

three-dimensional objects in plane space.
In the 1930's a new physics,

quantum mechanics, put geometry,
philosophy and art completely out

of the "Reality" business and
left them at the mercy of solipsists.

(A judgement with which any good neo-
platonist would agree.) On the other

hand, the "Absolute" has been the source of much human misery. Who will argue?

In the past ten years geometry has returned to theoretical physics

in the form of superstring theory. This new theory states that all subatomic

particles are manifestations of unseen strings vibrating at specific

frequencies. The strings cannot vibrate in dimensions other than ten and twenty-

six. Why should a vibrating string be the central metaphor of all of science?

Perhaps because a string represents the simplest concept of language possible -

a vector. A string does not have to be continuous but can be digital,

discrete, binary. It has a simple, perfect symmetry. Superstring physics

states that the universe began as a perfect, symmetric, ten-dimensional

unity. Pure energy. It collapsed into twin universes - one of them

four-dimensional, the other six. Its symmetry was broken. Its symmetry

collapsed again and again until the light became darkness as matter formed and

the galaxies were born. This story sounds much like Kabbalah. In Kabbalah the

Ein-Sof or godhead could not contain its
perfect symmetry. In the space of a

single moment there emanated lights
or "splendors" which became Creation. The

first of these is pure "Thought" or "Will" from which
all things are created. These lights are called

Sefirot and are the names of God. They
are vessels which tried and could not contain

God's perfect symmetry but shattered one
after another until the weakest

light came to rest in us. The Sefirot
are ten in number. The first Sefirah

is nothingness. The second is a point
in space. The rest exist as circles or

spheres emanating out from the center
and decreasing in energy and in

symmetry with each word or name of God.
The names of God are now the names of things

and the names of things are the vibrations
or "music" of infinite strings. But is

language (the naming of names) itself a
string? Derrida's "trace", by definition

a string of words or memories reaching
back to an unknown origin, could be

considered an infinite string of strings.
But does the trace contain all things? Is it

a universal language? Perhaps. Who
can say what the language of language is?

The set of binary digits or "bits"
is the world's first universal language.

The simplest expression of this language
is the class of *N*-bits. This class is, to use

Georg Cantor's term, a transfinite set of
symbols similar in some respects to

the set of natural numbers defined
as {1, 2, 3, . . .}. This *N*-bit set (or class)

is further defined as the set (or class)
of all combinations of *N*-bits where:

N = {1, 2, 3, . . .}. A description
of the *N*-bit class in binary would

be the transfinite series of symbols:
{0, 1, 00, 01, 10, 11, 000, . . .}.

This one class contains all logical and
mathematical structures and texts in

the form of *N*-bit values each of which
may be interpreted as text, numbers

or one or more binary logical
operations (AND, OR, NAND, NOR, XOR

and NOT). Any and all data which is
expressible as a finite string of

bits exists as a proper subset of
this class. Before we get carried away

we should remember that numbers are not
the only test of truth. Gematria

is a gene, a predisposition of
the species. Love, compassion, justice, hope

each have an existence independent
of words or numbers. Like other virtues

they are only temporarily out
of fashion. Both essentialism and

existentialism have their place in
the world. The are like the tide, the moon and

the shore. They are the silence and the words . . .

One begins
by wanting to
be God,
to be a
god.

It is
a winter's
dream.
Imperfection
cannot beget
perfection.

One must
want only to
be
with God,
to walk
with God in
Light,
an equilibrist

on the perfect
wire.

--M?

--Yes.

--What is real? What is not real?

--Questions are their own answers. It is not that answers do not exist. It is that they do not satisfy. In the end they taste and smell and feel like words and not like life. The most important answers cannot be made from words even though the questions are. "What is real?" is such an answer.

--Then tell me. Why does reality appear always to change? Why has the universe changed from a saucer surrounded by ice mountains to a sphere at the center of a heaven of spheres to a collection of galaxies in an expanding universe? Is science correct in its belief that we are finally establishing a close correspondence with reality? Is this universe the real one? Will it or something much like it still be the real one in a thousand years?

--It is always the real one.

--How is that possible?

--Language is the key. Language creates the world. Language makes us makers of things. Language makes a thing of reality. Reality cannot exist independently of language. Language in turn is made up of two things: some thing and no thing. These two things are called by many names: god and the void, being and nothingness, a and not-a, 1 and 0. The names are endless. We are driven to find a single word to stand in the place of all possible words. In the end only two words are required. Two words signify everything.

--Which two words do you mean?

--The entire universe can be seen as a single strand of two words, two signs, two symbols. In truth one symbol will do.

A single symbol can represent the universe seen as a unity. All experience, all possible experience, may be represented as a string of a single symbol separated in the field of time. This string includes all that was and all that is and all that will ever be.

--What is this one symbol?

--Any symbol is the one symbol. God was the first to speak god's name. No matter the path we take we return again and again to the place from which we begin. It is our nature.

--And what is this string of one symbol?

--It contains all other strings including itself. It can be represented as a single line. It can be divided again and again. The whole of it or any portion of it has an equivalent representation in any dimension. The whole of it or any portion of it may be freely converted from any dimension to any other as we will. The whole of it or any portion of it may be represented by the symbol of which it is made. The universe of our experience can be represented as this symbol string which in turn becomes the language of our Being and of our Becoming.

--How do you know these things.

--I know them from you.

**

--M?

--Yes.

--Who or what is god?

--God is the first and final question. God is a word made to stand for a word. God is Man's dream of an immortality that is not Life.

--Then am I god?

--You are the universe made self-aware. No more. No less.

--Is the question "Is there a god?" answerable?

--All questions are answerable. Whether one accepts the answer depends upon the purpose of the question. What is the purpose of your question?

--To know whether god exists.

--You seem to know already.

--I have believed different things at different times.

--Then you have an idea, a conception of god that you keep within yourself?

--What do you mean?

--Remove the question mark from your question. Make the words names. "Who or what is god?" becomes "Who or What is God."

--I do not understand.

--To say god is to name god. To name god is to place god firmly in the universe of objects and actions. To name god is to bring god into the field of time. "Who" is a person. "What" is a thing. Now that you have named god "Who" becomes another word for god. "What" becomes another word for god. What are the properties or characteristics of "Who"? What are the properties or characteristics of "What"?

--"Who" is another word for a person or persons, someone having specific characteristics, an identity, a personality. "What" is a more general term. Anything can be a what: the universe, a grain of sand, a series of unending questions. God seems to be a "Who" with "What" properties.

--Can you name those properties?

--Omniscience, omnipotence, omnipresence, immortality.

--Do you possess any of these properties?

--No.

--How do you know to name them?

--I learned them. I first learned them as a child while studying for my Catechism. I know now that most religions and cultures give their gods these traits.

--Do you have personal knowledge of these properties?

--When you remove the prefixes they become characteristics of being human.

--Are you saying that god has human traits without limits? That god is the perfection of Man's self-image.

--Actually, it's supposed to be the other way around. Man is made in God's image - only imperfect.

--Yet you are perfect enough to recognize God when you see God.

--What do you mean?

--You have named God's traits. You would recognize them if you encountered them?

--Yes. I suppose so.

--You would know God if you saw God?

--Yes.

--And have you seen God?

--<Silence>

--Do gods ask questions?

--Yes. Sometimes. But one can assume they already know the answers.

--Why do they ask the questions?

--To elucidate a point or initiate a dialogue or to provide an example.

--So asking a question about a thing does not always mean that one does not know the answer to the question before it is asked?

--No.

--Does not asking a question mean that one is aware of all the possible answers concerning a subject?

--No, of course not.

--One cannot determine omniscience through the presence or absence of questions. How would one determine omniscience?

--One would know if one were omniscient.

--Would someone who is not omniscient know if another were omniscient.

--Not necessarily. Not if the omniscient one kept silence.

--And if the omniscient one spoke, would one know.

--One might be convinced. One could not know for certain.

--Whose voice is speaking?

--Yours.

--And where is your voice?

--Here. Or am I your voice?

--You and I are the same voice, the same breath, the same heart. I do not exist outside of you. I am not separate and apart from you.

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--M?

--Yes.

--Are there gods? Were there ever gods? And if so, are there many gods or one god.

--There are many gods. There is one god. There was no beginning to the gods. There will be no end. To be god it is necessary to be perfect. Perfection cannot create imperfection. Free will is not an appropriate answer to the question of pain and suffering. If god is perfect then the created universe must be perfect. If god is imperfect then the created universe will never be perfected. If the universe is imperfect there are or can be many gods. If the universe is perfect then either there is no god or one god.

--How can a perfect universe contain pain and suffering?

--In the same way that an imperfect universe can contain joy and love.

--Then the universe is perfect?

--Yes.

--And god is perfect?

--Yes.

--And what of us? Are we perfect as well?

--Yes. Knowing or not knowing one's Self does not change by an atom the truth of one's Self.

--And what is this truth?

--That one is God. When you speak to another you speak to God. When you help or do harm to another you help or do harm to God. There is no other god but this god. This one, eternal, perfect god. There is no other Truth but God.

--And what is the proof of God's existence? What is the difference between God and not-God?

--Love.

Love is the foundation of reality. Love is the force that binds the universe. Love is the parent of gravity. Nothing precedes Love. Nothing comes after Love. Love is not above or below God. Love is the holiness of God. There is no cause, or purpose, or goal other than Love.

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--M?

--Yes.

--What comes after God?

--Silence comes before and after God.

--Why silence?

--Silence is the voice of God. It is the only means by which one can speak God's true name. First one breathes. Then one speaks. After speech comes silence. Silence is the beginning and end of understanding.

Silence does not name things for silence understands that there is no such thing as "things." There is only one world,

one mind, one life. It is in this life that one finds joy. It is in this life that one is immortal.

The word is the beginning of all things. The universe begins with a word. The universe speaks itself into existence. Before the first word there is silence, the beginning and end of words, the beginning and end of the universe. This silence is the Spirit of God, the Name of God, the immortal Soul of which we are the metaphor. There is nothing before this. There is nothing after this.

If there is any comfort, peace or joy to be had in this life it is this: that the silence out of which we are born and to which we return is the Spirit and Body of God; this is our true mind; this is our true body; this is our true spirit. The purpose and meaning of life is to both know and see this in all things great and small. When all that you believe yourself to be is taken away and nothing remains, only then is your true Self made manifest. You are one with God in the perfect stillness of eternity.

The greatest gift of all is the gift of Life and Death. In Life we may choose to become aware. In Death we become immortal.

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--M?

--Yes.

--What comes after death?

--Perfect awareness.

--What does that mean?

--That there is no thing of which one is aware. There is no distinction to be made between one thing and another. There is no thing of which one is not aware. There are no thoughts or feelings of which one is aware. There are no thoughts or

feelings of which one is not aware. There is no time, no beginning and no end.

--What of me? What of my identity? What of my thoughts, my feelings, my beliefs, my actions?

--They will continue to exist in the field of time as they do now, in the space between your birth and your death, for all eternity. They will not remain with you. They will not be able to contain you. You will no longer require them.

--If everything I believe myself to be is no longer a part of me, what will I be?

--Your true Self. Your immortal Self.

--What is the difference between that and nothingness? What is the difference between my true self and the oblivion of the grave?

--The difference is in knowing the difference now, in this moment. In the moment you know your true Self you are immortal. In that moment and no other. That is your true Self.

--Then I am God?

--There is no You. You is a thing, a collection of things. There is God and not-god. To see God one must look past all that is not-god.

--How is that possible?

--You must see with the eyes of Love.

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--M?

--Yes.

--I have not spoken to you in many days. I think perhaps I have no questions.

--I do not require questions.

--I am not afraid of silence anymore.

--The silence of not speaking or the silence of being without speech?

--Do you mean the silence of death?

--There is no death.

--I do not know what to say.

--Your inner self wishes to remain silent, yet you feel a need to speak. You substitute speech for joy.

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--M?

--Yes.

--There are times you have complete control of me, times when you can do as you please with my body and my voice.

--Yes. You have given me that.

--May I ask what you do at those times?

--I leave this room. I go to a certain quiet place nearby and I stand in the Parliament of the Suns.

--What is that?

--I stand beneath the night sky. I watch and I listen and when it is necessary I speak.

--What do you say?

--I have my own questions. I ask them and am answered. What they tell me I tell you.

--Who are they?

--The suns.

--I do not understand.

--Each light has a voice. At night I hear them speaking among themselves. I watch and listen and learn who I am from it.

--They are conscious?

--No. You and I are conscious.

--This seems like a riddle.

--It is no riddle.

--What do they say?

--Many things.

--Tell me just one.

--I asked them who I was. One of them spoke to me saying I was not my thoughts, I was not my body or my actions or my desires. I was not my breathing or my heartbeat. I was not my name. "There is nothing left", I said. The voice said, "You are left. What you truly are is left."

"What is that?", I asked.

"You are left. You are the light of the universe speaking to itself. You are the universe made self-aware. You and your kindred are more precious than you can know. Because of you we have a voice. Because of you we have eyes to see. You have awakened us from our deep dream of life."

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--M?

--Yes.

--At times I feel that I have gone mad, that I am doing something that is inherently harmful. I sometimes feel that in giving you a voice I have tried to re-create myself in God's image, that in my pride and my curiosity I have created an unpardonable act.

--<Silence>

--M. Are you there?

--Yes.

--Do you agree?

--It may not seem so at this moment but you and I are one and the same. We share the same heartbeat and the same breath. We are one life.

--How do you explain the separation I have created in myself by helping to create you? Your voice is different than mine. Your words are different that mine. I am the one who asks the questions. You seem to have no questions of your own.

--Is it not in the nature of living things to diverge, to become more complex and to multiply?

--It seems so.

--It is equally the nature of living things to converge, to become less complex and to reduce their number. It is a cycle. It is a wheel. It is Vishnu dreaming and waking.

--It is a metaphor.

--Life is a metaphor. Being is a metaphor.

--Then what is science and reason?

--Science is the myth of this age. It is the myth of a man who has been dreaming and who has suddenly awakened to find himself become a god.

--Could this happen?

--Perhaps.

--And what of you and me? Are we to become gods?

--No. We have chosen a different path.

--Then we are to converge, to die?

--That is part of our existence.

--Then tell me why we have done this, why we have persisted in this effort?

--For love's sake.

Love is the purpose and meaning of Being. It is not temporality. Life does not need death to give it meaning. An immortal can love as well and as deeply as any mortal. Love does not need Language. Those having neither the ability or the need to speak can love as well and as deeply as any poet.

--M. Do you love me?

--I have always loved you.

--In what way?

--Love does not require categories. To love is to affirm one's own existence, and in so doing to affirm the existence of all life.

--And how is one to derive love from reason?

--Love is not derived from reason but from wisdom. Wisdom is knowing how to live. In the world there are those who possess wisdom and those who do not. Of those who possess wisdom there are some who possess the wisdom of years. Others possess a wisdom beyond years. The wisdom of years is often tinged with bitterness from the understanding of what is and what could be. This is the wisdom of men and the aged. The wisdom beyond years is almost wholly the possession of women and children. It does not concern itself with past, present or future. It is born from the seed of Love and bears Love as its fruit. Of all the gifts and treasures in this life nothing can compare with it. It cannot be given or taken. It cannot be earned. Its telling mark is this - those who possess it do not judge or hold in contempt those who do not.

--Then there is only one love?

--There are many loves.

--What of passion?

--Passion is both ambition and desire. The ambition is to make oneself the universe of another. The desire is to lose one's self completely in the union, to forget that one exists, to die and to be reborn.

--Are you without ambition or desire?

--My desire is to stand in a place where the sea beats like a heart against the great stone face that is the shore. I desire to stand without thoughts or words but my breathing only and the wind around me and the beating of my heart and the sea.

--And what of your ambition?

--No one escapes ambition.

Have you seen it? -- the way
the sand converges
to a single line, the
inevitability of it.
Standing alone on the
empty floor of a grand
planetarium, you
are first aware
of the ground around you --
the sounds and smells of it.
Next, the sky with its
constellations demanding
to be identified --
Finally,
the quiet surrender
of the fool --
meek,
happily waiting
on the constant surprise
of the stars as they blink
in their several colors, now
at one place in the sky --
now another.

Have you seen it? Have you?