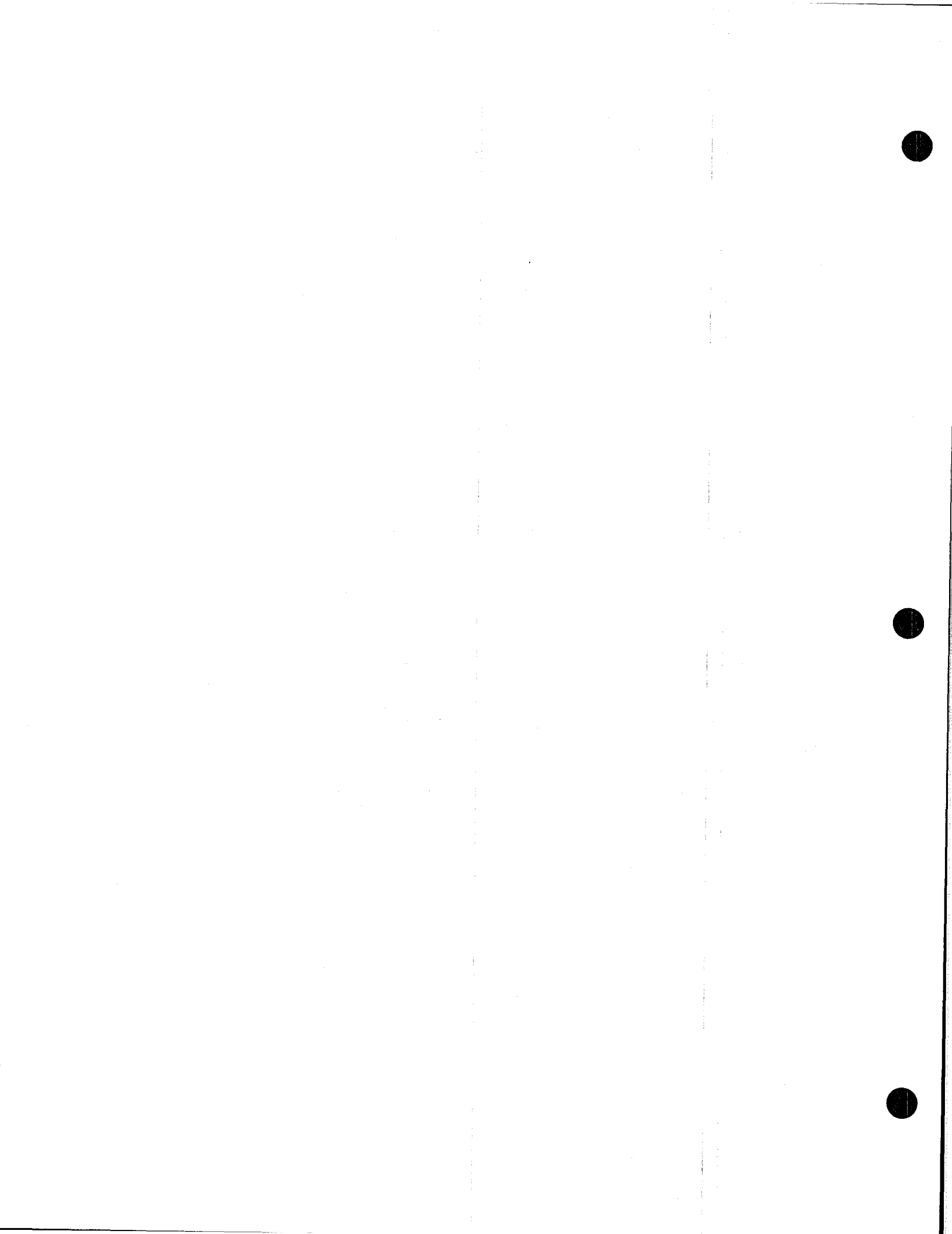


**THE LAST
PISCESIAN:
REFLECTIONS AND
BIOGRAPHY**



THE LAST PISCAN

SPECIAL EVENTS

- 1933 *deja Vu* Replica of the Governors Palace at URMAL, Chicago World's Fair
- Dec 13, 1952, Presence of Mother at Mortuary in Pasadena [Hazel Straw Wilson Nov 19, 1892
Dec 11, 1952]
1956. Vajra in forest on Mars Hill
- Jan 1960 Mahabalapuram
- Dec 14, 1975 Denver: St. John's Cathedral Ghost Tonang
- June 1998 Presence of Donna - with Art 2nd with quakes
- Oct 2000 Presence of Robim - candle
- Dec 21, 2001 ^{strong} Presence of ~~Robim~~ - Edinburgh - call from IT

Include: Climbing ~~Empty~~ Peak as boy scout
In different contexts, different people prevail

Favorite Stories

Sabbath Candles

Einstein - Gödel "disagrees with me"

Yevtushenko "worthy to say"

Gandhi "Not our teachers" w/ fit for tat

M-SEQUENCE

MSEQ01.MCD

2001-12-20

c := 10.476821 G := -7.175705 re := -12.550068 mp := -23.776602 n := 300000000
m := -300000000

$$A(n) := \frac{n \cdot c + (3 - n) \cdot re - (G + mp)}{2 - n}$$

$$B(m) := \frac{m \cdot c + (3 - m) \cdot re - (G + mp)}{2 - m}$$

A(n) = -23.026889131 n = $3 \cdot 10^8$ B(m) = -23.026888869 m = $-3 \cdot 10^8$

$$= \frac{r_e}{c}$$

Washington! Nothing crown
Lincoln: Bond up words
William the Silent: persist without help

LAST PISCAN FILES
SCRAPS, SUBSCRAPS, OTHER

Great Discoveries:

4 year old - Houston The Stars
8 years old - Denver The earth is a sphere
5th grade - Teller School Myths
8th grade - Nevada Algebra
1935 - GSD 10th KPACHUK
1936 Elbert ↳ EOMEGA
Sacred Places
Palomar The Stars
MARS HILL The VAERA
DONNA
MAHABALIPURAM LORD SHIVA

Retirement Chronicle

Rice Gymnastics
Gatesville Cemetery
Spider Web on the Poudelha Path
The Stag at Whitehorn
Dads 100th Birthday

O. M.

M-SEQUENCE

MSEQ01.MCD

2001-12-20

c := 10.476821

G := -7.175705

re := -12.550068

mp := 15.579278

n := 3..22

m := -18..1

$$A(n) := \frac{n \cdot c + (3 - n) \cdot re - (G + mp)}{2 - n}$$

$$B(m) := \frac{m \cdot c + (3 - m) \cdot re - (G + mp)}{2 - m}$$

A(n) =

-23.02689
-23.0268895
-23.026889333
-23.02688925
-23.0268892
-23.026889167
-23.026889143
-23.026889125
-23.026889111
-23.0268891
-23.026889091
-23.026889083
-23.026889077
-23.026889071
-23.026889067
-23.026889063
-23.026889059
-23.026889056
-23.026889053
-23.02688905

n =

3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

B(m) =

-23.02688895
-23.026888947
-23.026888944
-23.026888941
-23.026888938
-23.026888933
-23.026888929
-23.026888923
-23.026888917
-23.026888909
-23.0268889
-23.026888889
-23.026888875
-23.026888857
-23.026888833
-23.0268888
-23.02688875
-23.026888667
-23.0268885
-23.026888

m =

-18
-17
-16
-15
-14
-13
-12
-11
-10
-9
-8
-7
-6
-5
-4
-3
-2
-1
0
1

ANOMOLOUS EXPERIENCES

The ghosts at Palomar

Space Inversions

2 Earthquakes

The MARS HILL CLEARING - VAJRA

The Gift of Shiva

The Monk at Hiroshima

[Maruyama's story]

~~TOPHOE MOPE~~

The Topanga Ghost

Dec 6, 1941 - West Bridge roof

The Spider Web

The 7327 Ghosts

The Face on the Cliff

Fry Canyon

Strange Threads

ST. MARTIN'S CHAPEL

STAN

Mother & Math

Chicago WF 1933 - Chichen Itza - Uxmal

Chormoge Morge

Movie NEW MOON
YOPHOE MOPE

The Meditation Path

Herr Schmidt 2^o grade - self discipline

48" Schmidt Palomar Mt. - The Heavens

Pledge of Kwan Yin

Gold Ridge Ganga

THE LAST PISCAN : *An Autobiography of My Journey in this place*

1. THE DENVER TRAMWAY *Highlanders + Boy Scouts*
 - 1.1.KINDERGARTEN COSMOLOGY
 - 1.2.HARDWARE AND SOFTWARE
 - 1.3.THE CENTURY OF PROGRESS
 - 1.3.1.ON FIRST ENTERING A PLANETARIUM
 - 1.3.2.KUKULCAN
2. THE GARRETT GRAVE
 - 2.1.THE ORIGIN AT McGREGOR CROSSTRACKS
 - 2.2.TEXAS TOMBSTONES
 - 2.3.A SMALL BOY'S QUESTION
 - 2.4.THE RULES OF SILENCE
3. TEACHERS *"Remarkable Men"*
 - 3.1.THE CHALLENGER

On Tuesday, January 28,1986 the shuttle, Challenger exploded 73 seconds after launch killing the crew of 5 men and 2 women who chose to explore another frontier for humankind. "Reach for the stars--I'll be there."
Christa McAuliffe
 - 3.2.FROM "60" *+8 and -8 supernovae*
4. THE MONASTERY
 - 4.1.THE SPECTROSCOPIST
 - 4.2.GLARIANUS I AND II
 - 4.2.1.THE MISSING MODES
 - 4.2.2.GENERALIZATION AND ARTICULATION
5. THE ASPEN FOREST
6. THE BIRCH FOREST
7. CHORNOYE MORYE *YOPHOE MORFE*
8. THE GINKGO LEAF
 - 8.1.PART I FROM "60"
 - 8.2.PART II THE CIA
9. THE NIZAM'S NAVY
 - 9.1.TSUSHIMA TO BANDUNG
 - 9.2.THE DEBATE:GOVERNORS ANDRA PRADESH AND UTTAR PRADESH
10. THE CHAIRMAN'S TEARS
 - 10.1.NICHOLAS ROERICH
 - 10.2.THE EXHIBIT AT DELHI
11. THE GIFT OF SHIVA
 - 11.1.FROM "60"
 - 11.2.MONKEYS <100 AND>100
12. THE PINE FOREST
 - 12.1.THE DESCENT FROM HEISAN
13. THE NINE PLUMES AT KIOWA
14. THE 61 CYGNI QUESTION

*January 16, 1991
A war to acquire a
military base in the
Persian Gulf*

*TH City
The Forest,
The Sky*

OUTLNLP.CWP1

DISK: IDEACONTROL OUTLINE
THE LAST PISCEAN

3/25/87

INTRODUCTION

THE CITY

- 1. THE DENVER TRAMWAY
 - 1.1. KINDERGARTEN COSMOLOGY
 - 1.2 EXPERIENCING A CITY
 - 1.3 HIGHLANDERS AND BOY SCOUTS
 - 1.4 THE CENTURY OF PROGRESS
 - 1.4.1 ON FIRST ENTERING A PLANETARIUM
 - 1.4.2 KUKULCAN

- 2. TEACHERS *WETA SCHMIDT*
 - 2.1 FROM "60"
 - 2.2 THE CHALLENGER

On Tuesday, January 28, 1986 the shuttle, Challenger exploded 73 seconds after launch killing the crew of 5 men and 2 women who chose to explore another frontier for humankind. "Reach for the stars--I'll be there."
Christa McAuliffe

- 3. THE DEBATE: ANDRA PRADESH AND UTTAR PRADESH
 - 3.1 THE CHAIRMAN'S TEARS

THE EARTH

- 1. THE GIFT OF SIVA
- 2. THE GARRETT GRAVE
 - 2.1. THE ORIGIN AT MCGREGOR CROSSTRACKS
 - 2.2. TEXAS TOMBSTONES
 - 2.3. A SMALL BOY'S QUESTION
 - 2.4. THE RULES OF SILENCE
- 3. THE GINKGO LEAF
 - 3.1 FROM "60"
 - 3.2 THE CIA
- 4. THE NINE PLUMES AT KIOWA

*ORIGINS COLFAK & BROADWAY
CLIFFS*

- 1. THE FACE OF THE CHIEF
- 2. The Face of the Eigerwand

THE SEA

- 1. THE NIZAM'S NAVY
 - 1.1 TSUSHIMA TO BANDUNG
 - 1.2 CHORNOYE MORYE
- 2. THE MAGNETRON

The Prinz Eugen

THE SKY

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THE FOREST

- 1. THE ASPEN FOREST
- 2. THE PINE FOREST
 - 2.1 THE DESCENT FROM HEISAN
- 3. THE BIRCH FOREST
- 4. THE REDWOOD GROVE

Mr Tabor

EPILOGUE: THE 61 CYGNI QUESTION

OUTLINE.WP1
5000 CONTROL 0182

THE LAST PISCAN

I THE CITY

- 1. THE DENVER TRAMWAY *HIGHLANDERS & BOY SCOUTS*
 - 1.1.KINDERGARTEN COSMOLOGY
 - 1.2.HARDWARE AND SOFTWARE
 - 1.3.THE CENTURY OF PROGRESS
 - 1.3.1.ON FIRST ENTERING A PLANETARIUM
 - 1.3.2.KUKULCAN

- I* 2. THE GARRETT GRAVE
 - 2.1.THE ORIGIN AT McGREGOR CROSSTRACKS
 - 2.2.TEXAS TOMBSTONES
 - 2.3.A SMALL BOY'S QUESTION
 - 2.4.THE RULES OF SILENCE

V THE EARTH

- 3. TEACHERS
 - 3.1.THE CHALLENGER

On Tuesday, January 28,1986 the shuttle, Challenger exploded 73 seconds after launch killing the crew of 5 men and 2 women who chose to explore another frontier for humankind. "Reach for the stars--I'll be there."
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Feynman +
The ontological
question

→ III

- 3.2.FROM "60"
- II* 4. THE MONASTERY
 - 4.1.THE SPECTROSCOPIST
 - 4.2.GLARIANUS I AND II *+ S and -S Supernova*
 - 4.2.1.THE MISSING MODES
 - 4.2.2.GENERALIZATION AND ARTICULATION

II THE FOREST

- 5. THE ASPEN FOREST
- 6. THE BIRCH FOREST
- IV* 7. CHORNOYE MORYE
- 8. THE GINKGO LEAF
 - 8.1.PART I FROM "60"
 - 8.2.PART II THE CIA
- IV* 9. THE NIZAM'S NAVY
 - 9.1.TSUSHIMA TO BANDUNG
 - 9.2.THE DEBATE:GOVERNORS ANDRA PRADESH AND UTTAR PRADESH
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IV THE SEA

→ I

- 11. THE GIFT OF SHIVA
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 - 11.2.MONKEYS <100 AND>100

THE EARTH

→ III

- 12. THE PINE FOREST
 - 12.1.THE DESCENT FROM HEISAN

THE CITY

- II* 13. THE NINE PLUMES AT KIOWA
- III* 14. THE 61 CYGNI QUESTION

THE SKY

THE SEA

II THE REDWOOD GROVE

THE FOREST

III THE SKY

Albert George Wilson

Albert George Wilson was born on July 28, 1918 in Houston, Texas. His higher education began at the Rice Institute, where he received his B.S. degree in 1941. He continued on to the California Institute of Technology, where he worked as a fellow from 1941 to 1944 and from 1946 to 1947. Here, he received his M.S. in 1942 and his Ph.D (in mathematics) in 1947. Wilson then served as a resident fellow of astrophysics at the California Institute of Technology from 1947 until 1949, at which time he accepted a job with Palomar and Mt. Wilson observatories. Here, he was the astronomer in charge of the observatories for the National Geographic-Palomar Observatory Sky Survey until 1953.

Wilson came to Lowell Observatory in 1953 as the assistant director, and became the director in 1954. He held this post until 1957. While at Lowell, Wilson did much to invigorate the institution. For example, the "Mars Expedition" of 1954, in which Lowell Observatory staff traveled to Pretoria, South Africa in order to observe the Mars opposition of that year, occurred under his directorship. Also during his tenure, Lowell personnel began applying for National Science Foundation grants in order to augment Lowell's own financial resources.

After Wilson left his post as the director of Lowell Observatory, he became a senior member of the research staff of the Rand Corporation, where he worked from 1957 until 1966. In 1962, he was the founding editor of the astronomical magazine *Icarus*. In 1966, he accepted the position of associate director of Douglas Advanced Research Labs, which he held from 1966 until 1972, when he became a member of the staff for research program studies. At this juncture, Lowell Observatory's information about Albert Wilson unfortunately ends.



[For an image of Albert Wilson, click here.](#)

Archive Contents for Albert
Wilson



Left: Albert Wilson Right: V.M. Slipher



[Return to Biography](#)

A DRAFT INTRODUCTION

No one born and brought up in a given culture can achieve a full state of detachment from that culture. Only aliens from some other world could view earth's cultures from outside. While those of us indoctrinated here cannot achieve detachment, we can seek to stand by our own experiences making them the yardstick with which we measure the traditions and doctrines of our culture. etic

Culture represents the **intersect** [1] of human experience, not the **union** [2]. It is the least common denominator of those experiences shared, if not by all, then by the great majority. This being the case, it discounts what obtains outside the intersect. However, until humanity is willing to include and scrutinize what lies throughout the union of human experience, it imposes a severe limit on reaching an understanding of who we really are.

This needs be said in introducing this set of essays, many of which definitely lie outside the cultural intersect. Even before reaching the age of ten, I found that some of my experiences were not shared ~~by~~ or sharable with others. I became a 'loner' until later in life I found that many things I had experienced were basic parts of traditions in Eastern and Amerindian cultures. Feeling affirmed, I became a crusader against intersect perceptions and proscriptions, be they in politics, art, science or religion. Restricting to the intersect may be the key to what is considered important, but it is certainly not the key to discovering what is valid.

These essays, then, will not always reflect the latest intersect (or internet) thinking. They are based on personal experience and personal thinking. They may be right, they may be wrong, or as Pauli would say, they may not even be wrong. It might seem foolish to display thinking that is not up to the cutting edge in some fields. However, while not adhering to the party line may brand one as a heretic, maverick thinking might also lead to alternative perspectives. And after all that is really what I am about, the pursuit of alternatives. I am not seeking agreement, I am not proselyting, only hoping to open the door to alternate ways of viewing the world.

[1] Please forgive the mathematical terminology. These terms are used in the Boolean sense. The **intersect** of a set of sets consists of those elements common to or contained in all of the sets. This is what the term "public" sometimes means.

[2] The **union** of a set of sets consists of all elements contained in any set. This would include the public domain and the totality of all private domains.

THE PISCEAN AGE

Some things come and go,
others come and stay.
Some come so softly that we are unaware of them
unless we can think back to a time
they were not here.
And some fade slowly away
like the evening twilight.

Tonight we come together
to echo some fading tones
that will probably never be ^{recorded} history ^{remembered}
except ~~to~~ those of us who have lived them personally.

But it is not the public, the official record,
so called recorded history,
that constitutes the essence of
the human adventure.
It is in the totality of the private records of
each individual that human wisdom lies
and in which human aspiration lives.

So tonight is a Summit Meeting,
attended by the chairmen--chairpersons
of the most important superpowers of all:
Living, free, open-ended individual human beings.

I think of it as the "Piscean Summit",
named in honor of an age now ending.
And if you will, attended not only by those of us
here physically present,
but by all of those, past or present,
renowned or unheralded, whose commitment
has been beyond self, beyond tribe, beyond homeland,
beyond ideology,
whose commitment has been to the Ages.

In a very real sense all these are indeed present,
for they live in each of us through
the inspiration we have received from their
lives and their thoughts.

And now as the pipers enter the hall
and we sing Auld Lang Syne,
we celebrate not the ending of an age,
we celebrate its placement in Eternity.

After I die:

**I shall cease to be a figure
that I may rejoin the Ground
I shall be released by Chronos
that I may embrace Kairos
I shall no longer dwell just here
that I may be present in every place
I shall no longer be separated
that I may find a home in every heart
I shall no longer need to sleep
that I may refresh those who weary
I shall no longer fear pain
that I may bring healing to all who hurt
I shall be filled with peace
that I may share it
with all who struggle in life.**

I shall lead the bee to the flower

I shall lead the bird to the sky

I shall lead the child to the garden

I shall lead the maiden to her lover

I shall lead the knight to the grail

I shall lead the sage to the mountain

I shall lead humankind to the stars

**I shall come before the Highest
who receives and returns
Life, Love, and Light to all below.**

SOME NOTES ABOUT MYSELF

School was always painful for me. I had an unconscious resistance to inculcation into the mores of the culture. I felt I was being educated to fit, to fit the form, or ОПРАЗОВАНИЕ, as education is called in Russian. Schooling would have been impossible for me except that I discovered a refuge, of all places, in the subject matter itself, especially in mathematics and in the abstract and generalized aspects of all subjects. Math, science, history, Latin, all allowed escape from the current synchronic viewpoints that I have always been very uncomfortable with.

From time to time I won awards, but I was always fearful of success, and sought anonymity. I have tried to psychoanalyze this fear. Was it a fear, in having attracted attention to myself, of generating envy and hostility in others? Or was it wishing to have time for privacy of thought? Or was it wanting to be detached from a culture that at some level I felt to be hypocritical and seriously flawed? I finally came to the conclusion that everything from human understanding to the cosmos itself was unfinished and I wanted to be on the side of openness to continue. I was basically a searcher, repulsed by all dogmas, and found that cutting as many associations with the prevailing ideas of the existing order facilitated the search. But, of course, in practice this is impossible and no one can fully escape the box. But,

Anonymity enhances Autonomy

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FEBRUARY 4, 1986

THE LAST PISCAN

Most of our lives are lived out of focus. Only rarely do our senses, our feelings and our thoughts come to a focus sufficiently sharp to write in the record we call memory. After a span of years we can recall only those events that somehow succeeded in awakening us from our habitual soporific states of mind. We save in our records only those events that came into focus or upon which we consciously decided to focus beforehand. In either case our records are highly selective. This is why the annals of war play such a major role in human history. It is only in battle or in the looming presence of great danger that most men can become present, awake and in focus. The vibrant and exultant feelings of being fully awake and in focus serve to remind us of the psychic levels to which we may attain and of the energies we are capable of using. It is no wonder that many recall their experiences in battle as the greatest of their lives. And perhaps until we can find focus and full wakefulness in activities other than battle, our needs and our histories will be that of battles.

But there are other paths toward a focused mind and of release from our stupors. These may be investigated by collecting those events that stand the test of time stored only in memory. Such events carry clues to the circumstances that effect focusing and awakening and provide us with a glimpse of who we really are. This book assumes our long-term memories to be potent significators recalling in each of us what we have held most significant in our lives. The present book is a collection of such memories, or rather a dialog between those memories and the interpretations I am wont to give them late in life. This dialog is part of the process sometimes called integration, without which life remains undigested and unassimilatable. This process is not only a personal one for each of us, it is also a public process. It is how we choose the portions of history that we record and pass on to our children. It is how we select the experiences of life from which we weave the web we call reality. Finally, it sets the direction we take as we move into the future. When successfully done the end product of this process has sometimes been called Wisdom.

I have not been in battle, so cannot comment on the relative intensities of battle experience compared with other experience. I find that the recollections that come into my mind after the lapse of years are not the tense moments of danger--although there have been quite a few--but the moments when some great revelation seemed imminent. There is the glimpse of another world, very near but not quite in focus. The recognition of some archetypal event, very familiar but not quite identifiable. The receipt of an important message, very salutary but not quite decodable. The whole experience immanently felt, but somehow beyond articulation.

I mention here two personal examples of such experiences:

1944

A cold clear crisp Christmas Eve in Brunswick, Maine. The Bowdoin College chapel in the snow illuminated in the fading afternoon light. The voices of the choir singing in English and in French "Angels We Have Heard On High", drifting down the hill to where I was standing watch part of a Naval Unit in World War II.

1959

The silent gloaming as the heat of day subsides, Hyderabad, Deccan. The tombs of the kings of Golconda disappearing into the shadows. The glories of a sequence of long forgotten reigns built into a succession of individual tombs. Each mausoleum grander than its predecessor until the last pathetic effort of two final tombs to maintain a no longer supportable tradition as the dynastic curtain falls.

The world of 1987 is not the world of the future that I dreamed as a child would be the world of my old age. Perhaps that dream world, of universal growth in understanding, in compassion and in self knowledge may yet come to pass and it has only been my time table that has been wrong. But the world has clearly moved away from the world of my dream, distancing itself much further than it was in the 20's, when I first began to reflect on such things. The American spiritual climate in my early years, the climate that shaped me and my visions of the future, was still idealistic, perhaps somewhat bruised but not disillusioned by the experience of World War I. There was still belief in progress, in honesty, and in God. While progress was for the most part measured by material yardsticks, materialism and consumerism were not the central themes of life. Playing the game well and by the rules was more important than winning. Individualism was balanced by collective concern for one another. We really seemed to understand that America had a mission and it was different from that of all other countries. These were simple unsophisticated people, but people who in many senses were highly developed spiritually. But their weakness was in projecting their ^{own} trustworthiness on everyone else. This was the breach through which the Trojan Horse of their manipulatability was led.

If I do not speak of the persons who are closest and dearest to me, it is because this book is about **egregious** moments. It is certainly no disparagement of our dear ones that we rarely experience great dangers or great revelations within our relationships. Indeed, the very purpose of these relationships is to give us the security, the peace of mind, and the support that will enable us to help each other continue our journeys to higher planes of wakefulness.

+ stability

THE CITY

DENTRAM.WP1
4, 1986

LASTPISCEAN DISK

IBM-PC

FEBRUARY

THE DENVER TRAMWAY

First
2 9/10
to end

And finally

A bright day in early May. The mountains loomed clear through the library windows, the vestiges of the winter snow had retreated to the highest summits. The air had that crystal quality for which Colorado was once famous. I had encountered my friend Seymour in the library. We were to graduate from East High in three weeks. We had been together in school since the second grade at ~~Teller Elementary School~~ and the time was approaching when we would take our common roots in different directions and test them in different soils. The occasion called for a moment of reflection or perhaps for a rite of passage. We sat down and viewed the mountains which through the years had given us a bridge to the world which was permanent, while we discussed the world which was about to change. We shared our view of the American Dream, our particular version, nurtured where the majesty of the purple mountains met the fruited plain. How different was that dream from what is called the American Dream today.

The impact of crossing the endless plains and suddenly coming upon the snow created desire

In the fall Seymour was to go to Dartmouth and pursue a career in medicine. After graduation I was headed for Houston, somewhat reluctantly, for I wasn't quite sure what I wanted to do. Perhaps that is why I can remember ~~this~~ ^{that} day so clearly. Two youths ~~and together~~ with a whole world moving into the future.

One firm ^{sees firm on a goal} in intent and commitment to a traditional ^{and its long} well established ^{traditions} institution, the other a dreamer steeped in fantasies such as flights to the moon, with a commitment to institutions that did not yet exist nor ^{had} even been articulated. ^{yet somehow it was} How symbiotic! One going forth to preserve and continue, the other going forth to explore and ^{develop, create} risk.

Seymour, I was ^{happy later} to learn, carried out his share of the venture exceedingly well. He became a successful pediatrician contributing much to the medical services of Denver. I confess that my path of exploration and ^{innovation} risk did not meet my share of that venture. ^{took} The direction the world ^{took} has taken since 1936 has ^{been} quite antithetical to my visions of that day and to the quiet and lonely path I have pursued since. True, we did go to the moon-- and much sooner than any in 1936 would have imagined. But the alabaster cities ^{have} become polluted and ^{everywhere} the view ^{has} dimmed by human tears and human fears. ^{How} did the lapse occur? ^{At least, that} whatever went wrong, I believe that there is something of splendor yet to flower from that generation whose roots were nurtured in those idealistic ^{years} decades between the wars.

I am still
struggling to
find the cause

Denver was a very special city and those were golden times, times that matched the gilded dome of the state's majestic capitol building. ^{Or} Denver was more than a city, it was a community. It gave a ^{patronymic} answer to that need we each have for identity. Like ^{an} the ancient polis, ^{an} some Athens or Corinth, ^{Denver} it could sustain ^{it with} in us both a sense of belonging and a sense of possession. Every park and municipal service was a matter of pride, every problem and issue a matter of concern. Denver was its citizens and each citizen was

9/7/11/26

Up until the eighth grade, we were a homogeneous group

Then a critical life-shaping decision was made.

We had to choose which foreign language to study.

Out of this choice came our first awareness of ~~the~~ ^{creeping} prejudices ~~that~~ ^{absent in} ~~creep~~ into us, ~~from which~~ ^{something that is} ~~we~~ ^{are} totally ~~are~~ children.

Those of us who chose Latin acquired a ~~bit~~ of feeling of superiority over those ^{of our} ~~who~~ ^{classmate} made other choices. Whether this was because it was well known by all that Latin was the hardest course, ~~of all~~ or whether there was some residual snobbery dating back to the middle ages that only those who knew Latin were the real scholars, the real aristocracy. ~~This~~ snobbery, a virus, implicit in Latin itself infected otherwise innocent students.

dating from the age when Rome ruled all the ^{Mediterranean} Western World

How things have subsequently changed. He who studies Latin today is a weirdo - impractical out of touch with reality. - An utter waste of time.

The torch of snobbery has been passed from the scholar to the techie - the one who understands CDMA, Google Basins, and C++ OS, and whether ablatives, absolutes or contravariant tensors ^{mentally demanding} whether ~~it~~ is difficult contains the virus of snobbery

phages

Capitalism has made an all out effort to substitute possession of greenbacks for any other measure of human worth - scholarship, artistry, eloquence, --- compassion character. ^{courage}

It has succeeded in great part ~~in~~ the area of sports, entertainment, etc. with its invention of the concept of "celebrity" It has assaulted science with Nobel Prize, -- Winner take all

Denver. If Denver was our tribe, then it contained many clans, all living symbiotically. In those days minorities were viewed as a seasoning which ^{flavor} enriched and flavored the whole. That is not to say everything was fair and equal, but everyone ^{did} have a role ~~with meaning~~ ^{and this gave us each our meaning.}

Denver was not a city intoxicated with growth (that disease came later), there was a zoning restriction that prohibited buildings over 12 stories. ^{high} It was important to keep sunshine on the streets and to keep the air fresh. Denver had quality of life consciousness long before the Silent Spring and ecological values entered the national scene. It was not growth, it was living that intoxicated Denver. ^{of} And at no time more than at Christmas, did the essence of community become so vivid. The Civic Center, and Denver's had all of the mystique and power of any Agoura or Forum, was decorated each year in a ^{vision} tradition and a beauty that reminded of the eternal continuity of this primordial feast. The Civic Center was a place at Christmas where each of us could find the spiritual fire with which to light our own hearths. Yes, living in Denver one could understand Athens. There are ^{magic} moments in history where place and time and ^{vision} heaven meet. The Camelots. I was fortunate to have lived during one of those ^{perhaps} brief moments.

How do we experience a city? We know how to experience our room, our home, or our neighborhood but how do we experience our

city? It is impossible to be familiar with all its parts and all of the functions that maintain it. More difficult, what is it that we experience when we experience a city? What should we experience? Clearly we cannot experience a city with the same degree ^{of resolution} with which we experience our local neighborhood, much less with which we experience our own homes. So we must substitute new measures and experiences as the size of our object of exploration increases and sacrifice ^{more} level of detail.

*In the drive thru
tramway NW*
MAPPING
DESTINATION
PATHS OR ROUTS
ONTO NUMBERS
THINGS - CARS
LINKS
NODES
VALUES
CARRIERS
LATER
GLUONS
LEPTONS
BARYONS
FOULS

A mortician, George W. Olinger, was interested in boys and in the development of character. His view was a sort of later day transplant of the ideals of chivalry. He invested his profits in the establishment of a boys organization, known as The Highlander Boys. It was unique and true to the spirit that pervaded Denver in those days. Several thousand boys passed through the ranks of the Highlanders--ranks is right, the organization was paramilitary, with close order drill serving as the catalyst of self discipline. But it did build character and introduced the boys to other skills not available in schools ^{or} camps, public speaking, bands, visits to industries. It was hoped that the organization would spread and become nation wide like the Boy Scouts, but the paradigm was out of phase with the times and the Highlanders faded into history.

No recollections of Denver in the 20-30's would be possible without stirring the Denver Post-- I suppose any period could say the same. In those days Ben F. Stapleton was the mayor of Denver. He was not only an administrator of the present but a mayor vitally concerned with the future of the city. Everyone

became aware, after Lindberg's transatlantic flight in 1927, that aviation was going to play an important role in the future. Stapleton felt that some day Denver would need an airport so he bought up a few hundred acres for the city out in the country east of town. The Denver Post came down hard on this wastefulness. I remember the editorial. The purchase of land for an airport in Denver is an absolute ^{absurdity} waste. The great heights of the Rockies just west of Denver preclude Denver's ever being on any major air routes. (At that time the east-west airmail route went through Cheyenne Wyoming because the Continental Divide in Wyoming was ~~at~~ ⁱⁿ about 9000 feet instead of 14000 feet ~~as~~ in Colorado) The Post went on to label the purchase as 'Ben's Folly' and in cartoons and editorials plagued the mayor with this bit of stupidity throughout his terms in office. Today if Ben had any folly it was to have purchased so little land so close to town. Stapleton Field ranks in air traffic among the top five or six airports of the country and is cramped into a space long outgrown. I think the Denver Post must ^{take} ~~take~~ some of the responsibility for the present inadequacies. I salute Ben Stapleton, a great mayor.

Perhaps I have been wrong in feeling there has been a failure to realize the vision of that day in May. The vision had already been realized. The American Dream had been met. It was there around us at the foot of the mountains back in those distant days. What has happened since derives from the anomie that follows a vision realized, the post partum depression, a child having been born. Our trials will endure until that child shall weave a new vision beyond where we ^{can} ~~can~~ mount Nebo can see.

who cannot go beyond

Colorado ~ The Garden of Eden or a Mandala 4 sided

The four rivers:

So, Platte N
 Arkansas E
 Rio Grande S
 Colorado W

THE 4 TRIBES
 THE UTES
 THE CHEYENNES
 THE KIOWAS
 THE COMANCHES?

I think the Denver Post must take some of the responsibility for the present inadequacies. I salute Ben Stapleton, a great mayor.

more than it was a
Denver was a city, a real community. It was not a question of identifying with Denver, identification took place on a much deeper level, on an unconscious level. Each of us was Denver, there was a three level identity, I, my family, and Denver. It was both city and tribe, and it contained many clans, all living symbiotically. Denver was not a city intoxicated with growth (that disease came later), there was a zoning restriction no building over 12 stories, it was important to keep sunshine on the street and keep the air fresh. Denver had quality of life values long before taking the wrong road brought such values to the national consciousness, long before the Silent Spring. It was not growth, it was living that intoxicated Denver. And at no time more than at Christmas, did the essence of community and living become so vivid. The Civic Center, and Denver's had all of the mystique and power of any Agoura or Forum. It was a place, especially at Christmas, where each of us could find the spiritual fire with which to light our own hearths. Living in Denver one could understand Athens. There are magic moments in history where place and time and heaven meet. The Camelots. I was fortunate to have lived during one of those brief moments.

same thing

at the right place

at the right time + place

The Communists
Civic Center
William Randolph Hearst
Media

Leave it on the table
Again in Gemt Grass

LSTPSC01.W52

DISK:LASTPISCEAN

April 28, 1994

PRE-KINDERGARTEN COSMOLOGIES

I am often asked how I decided to become an astronomer. Unlike a lot of other things I did and know not why, I have a very clear memory of why I decided to become an astronomer. The story goes back to Denver, Colorado sometime around 1924.

We lived in a small upstairs apartment on Franklin Street between Colfax and 16th Ave. Across the street was a large vivacious self confident family whose name was Lunt. The youngest son in this group was a boy my age named Horace. We were to attend kindergarten together in the fall at the old Wyman School. We had developed a close relationship which involved not only play but discussions on all manner of things which challenged young boys.

One day the subject of the world came up. And somehow a dispute arose over whether we lived on the inside of the world or the outside. I held that we lived on the inside of the world. My cosmology was that the world was shaped like a hamburger bun, flat on the bottom, round on the top. It was a hollow bun, the earth was the flat part beneath and the sky was the round part overhead. This was the observational cosmology of a five year old. But against this was the well informed cosmology of a teacher's youngest son. He knew that the world was shaped like a ball and that we lived on the outside not the inside. This stunned me, it violated all my personal experience. I could not imagine this. To settle the dispute we took the matter to authority, an older Lunt sister. I was wrong. The earth was a sphere and we lived on the outside. Furthermore there were other spheres, the sky was full of them. They were called planets and stars. How could I be so wrong? I guess I felt I had not given the matter adequate consideration. So starting right then and there I began to give the matter consideration. I learned all I could about the earth, planets and stars. By the time I was in the fourth grade I was the recognized authority on all matters astronomical. The momentum of this launched me into a career in astronomy in which I was an observer, a theoretician, a professor, the director of an observatory. But though I taught astronomy for many years, I never took a course in astronomy.

Although my observational model as a five year old was wrong, I have never given up the value that personal experience is to be trusted. And all my life I have have placed my personal experience, not against conventional wisdom, but in juxtaposition to it. And when there are differences, I have to assume both are somehow right and search for a larger framework that contains them both.

*But maybe it was
the inner world that
I was to do astronomy
in*

*I question both
and tend to the one that is most liberating*

HORACE GRAY LUNT III

went on to become an outstanding linguist.

He became a professor of Slavonic Languages at Harvard
and one of the world's foremost scholars on
Old Church Slavonic.

THE GARRETT GRAVE

The Texas summer beat down on the dust covered yellow station as the south bound Santa Fe slowed into McGregor. The whistling arrival of the limited was the daily event that could rouse the locals--human and animal--from the shelter of whatever shade was about. While the steam and smoke of the limited were occupied in enhancing the local heat and in flavoring the smells of hot asphalt and cotton seed that hung over the yard, the station master and the station dog reluctantly emerged to transact whatever business the south bound had brought. On this particular day the business was one steamer trunk and two dusty passengers. With the engine panting impatiently the baggage cart was maneuvered to the side of the train as the two passengers were manipulated down the steep steps by their suitcases. From the platform one could see off to the west, on a track crossing the Santa Fe's at right angles, a dingy train consisting of one chair car, one baggage car and an antique engine. These items shimmering in the heat belonged to the Cotton Belt's west bound local out of Waco. In any railroad pecking order the south bound limited carried little prestige, but here in McGregor it could assert itself. After an unnecessarily long blast on its whistle, displaying its contempt for the local, the limited made a hasty jerking departure for points south. After an unnecessarily long delay to give the sound and fury of the day's big event sufficient time to subside, and to allow the Santa Fe sufficient time to remove itself to a safe distance, the diffident local cautiously chugged back to the station, taking care not to disturb the humans and animals resuming their siestas in the shade.

Waiting on the L-shaped station platform beside their steamer trunk and two suitcases stood the dusty pair responsible for all the activity: A woman about 30 inappropriately dressed in black, wearing a white cloche hat--the ubiquitous feminine millinery of the 20's--and a thin boy about 10, dressed in a white shirt and knee length knickers, wearing a sand colored cap, the ubiquitous masculine headgear of the 20's. The boy and his mother were on one of their annual summer pilgrimages from home in Denver to Grandma Straw's. Their destination and that of the Cotton Belt local was Gatesville, located about 20 miles west of McGregor and about as deep in the heart of as it is possible to get in Texas.

The boy had become aware that these trips to rural Texas were not only measured in miles but also in whatever units measure differences in culture and world view. Denver in the twenties was an enterprising urban center, progressive, probing the future, but still suffused with the vestiges of the idealism that had led America to the battlefields of France in a "War to end all war". Texas, ~~is~~ ^{yet} untransformed by the economic power of oil, was rurally oriented, conservative, holding to the past, and still suffused with the vestiges of devotion to a Lost Cause that could not be forgotten nor wholly abandoned. The binocular ~~vision from the trips between these cultures had instilled in the~~

vision from the trips between these cultures had instilled in the young boy an allegiance to both worlds and a confused distrust of both worldviews. But more than that, his blood heritage had come from both of these worlds and demanded he integrate all of it. He had ancestral roots deep in New England, where antecedents had forged human rights and liberties, and later had supplied and fought to preserve the Union in Mr. Lincoln's armies. He also had ancestral roots in the deep South where antecedents had developed the land, been slave owners and later served as governors and members of Mr. Davis's cabinet. Integration for him could not be denial of either ~~nor~~ acceptance of both. It had to find its resolution on a different plane.

The train covered the 20 miles to Gatesville in slightly over an hour, allowing for stops in such places ^{and in places} as Uglesby, Mound, and Leon Junction. Grandma never met the train, but Uncle Fenno, who worked in the bank ^{to greet us} was there and arranged for ~~our~~ trunk to be delivered, ^{has in order} and took us to our first stop, the cemetery, located about two blocks from the station. The ~~initial~~ initial visit to the cemetery was ~~always~~ an obligatory ritual. I never quite understood this. Whether to visit the dead before meeting the living was merely because the cemetery was on the way from the station, an act to get out of the way so the rest of the visit could be uninterruptedly enjoyed or was really the most important aspect of the visit and the primary purpose of the trip. As the years went by the train, tracks and station disappeared, the town was entered by another route, yet the first stop was still the cemetery. ~~But~~ ^{But} more people had moved from the town to the cemetery, and its importance had increased, so it ~~was~~ ^{is} still difficult to ascertain the reason for going first to the cemetery. All I know is that I go there first myself and don't really know why, unless we at some deep level hold Chinese like views about our ancestors.

The 10 year old could regard the family plot for only so long and had to leave the adults to their deliberations ^{from his corner} and explore what else was in the grave yard. The soil in the country around Gatesville is ^{a red clay} ~~red and sandy~~. Not the best for growing cotton or anything else but very good at communicating to us that we are of one substance with the earth. Even at the age of 10 I was sensitive to being in a very sacred place under the oaks and elms amid the silent stones. I had been in many cemeteries, but this one was somehow different. It seemed to contain some important secrets and much unfinished business. I had wandered about reading the names and dates on the various stones, names unknown but vaguely familiar. I was standing looking at a stone with the name Pat Garrett, 1896-1919, when mother and Uncle Fenno came up. They stood silently beside me regarding the grave. My mother whispered, "This is where Pat is buried. Has Mrs Garrett ever gotten over his being killed?" My Uncle replied that one could still not mention the war in her presence without her going to pieces. I said, "I thought the war was over in 1918. How come he was killed in 1919?" Following a long pause, my uncle answered, "He was killed in Siberia. Part of the army was sent there after the Armistice to fight the Bolsheviks." This confused me. "Who are Bolsheviks?" and "If the war was fought to end war, how come there were more wars?" My questions went

unanswered. Had they been answered that would have ended the matter, but I detected perplexity, evasion, and a strong signal to drop the subject from both my uncle and mother. This I did but filed the matter under 'conflicting messages' like the difference between the world view current in the Denver Public School System and the ambient world view in Texas. Apparently there was even more to be integrated.

Emphasize Jim Crow

October 17, 1990

Dear Jack and Charlie,

Thank you for your gifts of Coryell County history. These books have an essence that spreads over more than the highland country of central Texas. They encapsulate an entire region along with the evolution and merging of many heritages. It is a fascinating picture. Bill Moyers from Marshall, Texas has dipped into a few of the aspects of the ^{evolving} of the peoples of Texas in some of his PBS broadcasts. One of his broadcasts deals with the statue of Johnny Reb on the courthouse square in Marshall. After watching we are left with an undefined and unfulfilled space in our souls. We can read the history books and settle for what they tell us it all meant, but there is a nagging elusiveness that makes us feel that the real meaning lies far beyond the recorded facts and the 'official' interpretations. So it is with all of life. And in delving into these books one gets a glimpse of that greater and more fundamental drama that is being unfolded through the lives of the unrenowned, the so called common people. The real history is not written by historians. It is in the vignettes in books such as these, it is in the genealogical charts, and in the inscriptions on grave stones. But it can be read only by the heart.

The caption for the picture of the troops at the top of page 10 is probably wrong. The men are in Spanish War uniforms and are too young to be Confederate Veterans. The caption should probably read: "Picture of Spanish War non-commissioned officers from Texas,..."

A splendid picture of Aunt Vivian on p 16.

Another aspect of what I was trying to say above is in the 'colored' you have looked into on p88. There is a deeper integration taking place in our land. It dates back centuries, not just from the civil rights movement. For all of us the true integration will be completion, not homogenization. Each will bring to the other what it lacks or needs. Each will give and each will receive--a two way street, *and all are needed*

Again, with gratitude and affection,

Albert George

ON THE QUESTION OF FAITH VS. REASON

When I entered the university in 1936, the so-called war between science and religion was still being waged. Although it was more than ~~a~~ three quarters of a century since Thomas Huxley and Bishop Wilberforce had exchanged their historic castigations, it was only a decade since the Scopes "monkey" trial. While I had some feelings of neutrality in this war, I felt, as I have always felt with wars, that they are fought ~~for~~^{not} for the proclaimed virtuous values but ~~rather~~^{some} for hidden egoistic agendas. But if we are to participate in the battle, since we are not called on to discuss the hidden agendas, we must engage on the level of the proclaimed issues.

As a freshman, I found myself agreeing with Science concerning the nature of the God whose existence it was denying, and agreeing with the Church in not rushing to atheism as the only alternative to this God. I felt that Science had produced a convincing falsification of the fundamentalist position. But there are many Gods both outside and inside the Bible, and the falsification of a God was not a nineteenth century innovation. Indeed, some of the great heroes of the Bible, such as Elijah, earned their renown by the falsification of a God. In the case of Elijah, this was done through an empirical demonstration, which was much more powerful and convincing than rationalistic arguments such as those of Spencer and Huxley.

Both sides in this war finally came into agreement on one point: the existence of God can neither be proved nor disproved, where by proof was meant a rational or intellectual demonstration. So a cease fire was called, with Science resorting to the position that any theology which was inconsistent with reason or outside the domain of scientific demonstration was of no consequence, and the Church retreating to the position that since God wasn't to be proved, God was to be experienced. But the Church's adopting this position sounded the ~~shofar~~^{shofar} that would bring down the walls of ecclesiastical dogma, for one would be forced either to deny experience or to refute dogma which ran counter to that experience. And the walls have been crumbling ever since.

Much later I began to see that the real ~~issue~~^{is} was not the existence or non-existence of God, but whether ~~God~~^{that of western tradition} was worthy of human worship. And worthiness was to be determined on the basis of what worship did for the worshiper. The worship of a God who was capricious, jealous, and vengeful, who played favorites and agent provocateur, and who rejoiced in punishment and damnation, may have kept people under the clerical thumb, but certainly did not bring out the best in the worshiper. The world needed a better God than that. And at this point it sounds as though man creates God, rather than vice versa. Indeed, I believe both propositions are true: God creates man and man creates God, which is one example of the overreaching archetype through which all change ~~is~~ takes place.

Teacher

One of the most fortunate circumstances of my life was the level of the schools which I was able to attend. I reflect on the quality of education today and in Denver in the 20's and 30's and must conclude that a high school diploma from a Denver High School in 1930 's represented more education relatively and absolutely than a bachelors degree from most colleges and universities today. I knew more than tahn most graduates know now.

Teacher

My experience with teachers and principals was so unlike that of today. I encountered in 13 years in the Denver Public Schools, K-12, only two teachers that I did not respect or learn from. One of these was an art teacher who succeeded in cutting me off from any development in this area for years. The other was a science teacher who resented my self-taught knowledge of astronomy, obnoxious no doubt, and set me up for a well needed come down. A set of about 10 rocks were displayed and I was asked to pick out from the collection a carbonate bearing rock. I had no criteria for this and had to guess. Wrong! of course. The next student was given a hint and got it right. I had been put in my place. Later I learned there were no purely inspectional ways of identifying the chemical composition of random rocks. A trained geologist might make a knowledgeable guess, but short of chemical tests there was no sure method. I resented having been humiliated by this devious trick, and began to distrust science teachers. In retrospect this was probalby an invaluable lesson, not for the lesson in humility so much as for the insight into the ego problem permeating science. Overwhelmingly confirmed in all my later experience with scientists.

Roscoe C. Hill was the principal of East High School. He was well known ~~to~~ and respected by all of us. (They have since named a school in Denver for him.) Mr. Hill governed the student body with a 50 cent piece. From his office he could overlook the school grounds and whenever there was anything out of order he would bring it quickly to rights simply by tapping on his window with his 50 cent piece. How this little exertion of authority could achieve such results seems incomprehensible to us today,

when no amount of threat, terror or punishment is effective. At first one would guess that East High must have been like Kublai Khan's China, "where a virgin with a sack of gold could go from one end to the other of the empire without fear of any molestation." -- the result of punishments so severe and so certain that none dared have a thought of getting out of line. But on deeper inspection, East High was more like the paradigm of Lao Tse where the ruler needed only to provide a nudge here and a hint there and a tap on the window to effect order and all regarded that they themselves effected the results. It was cooperation and cooperation goes in two directions each element being proud of the trust and the responsibility that their contribution makes possible.

also for hierarchy

50

I like to watch the coming and going of the birds on the bird bath and in the maple tree in the front yard. Their activities seem very much like our own, hectic, hastened and even hazardous. Superficially their flights seem random, but on closer inspection there are patterns. One of the more visible patterns is that governed by a "pecking order". This order of precedence is not always a matter of size. Some of the smaller feisty birds seem to have acquired a high rank on the pecking ladder. While the larger birds have unmistakable visible recognition as their source of status, the smaller ones are always having to remind others of their rank by chasing and other aggressive behavior. This is an example of the old Persian adage concerning two kinds of truth: truth which is so only if continually repeated (small bird truth) and truth which is visible whether or not it is ever repeated (big bird truth).

What intrigues me is, why is it that birds and sometimes humans indulge in this kind of behavior, while most other grounded animals do not. Are hierarchies peculiar to birds and to humans whenever they are ungrounded? Is this because in the three dimensional world of birds there may be more degrees of freedom than can be coped with and surrogate restraints are necessary? Indeed, hierarchy and freedom seem to be universally antithetical. They are each anecdotes to an excess of the other. If this notion also applies in the realm of the angels, we must assume they possess many dimensions of freedom since they are so tightly structured hierarchically. Or does grounding, rootedness in the earth, play a role in the presence and absence of hierarchy? The structure of the earth is more a complex net of everything being related to everything else than a chain of command hierarchy. Perhaps the basic parameter is determinism. Where there is strong determinism, there is no need of hierarchy. Where there is great choice hierarchy appears. The offsprings of choice are hierarchy, orthodoxy, heresy, and morality. When there is no choice, no freedom, there is no orthodoxy or heresy, there is no morality, and there is no need for hierarchy.

*structure +
spontaneity*

I watch birds of many sizes, colors, and markings come to bathe or drink in the birdbath. I do not know the names of these birds and consequently I cannot always be sure that a particular species of bird is new or that I just have never noted it before. Some seem vaguely familiar, but only those whose names I know, like robins and jays, can I be sure are repeat performers. Thus in order for a bird to be really familiar to me I must know its name. Memory just doesn't seem to work on one level. It must be 'sealed' on a second level to be retained, retrieved, and recognized. There must be both the visual experience of the bird and a referent to that experience, such as a name, before the properties of memory, retrieval and recognition can be invoked. And it is this encoding of memory that affords familiarity and hence understanding.

The White Egret who lives in the laguna has become my guru.

I watch her patience, standing on one leg for long hours on end, not asleep, but intensely alert, awake, and in the present. When the fish moves then the egret strikes. The lack of motion is not the sign of inactivity, rather it is the preparation for activity. In our



world of ubiquitous noisy activity, most of it has little significance. The fish is either scared away or is caught at great expense of energy. We have much to learn from the white egret.

I sometimes speculate on whether the egret centuries ago observed the Buddha and adopted his wisdom, or the Buddha observed the egret and emulated her wisdom. Perhaps they both independently discovered the proper way to retrieve life's fish. And this perhaps was the source of the old adage: don't give someone a fish, teach them how to fish. Tell them to watch the egret.

SECRET.WP6

Include the story on the origin of Tai chi chuan

Forests delocalize us. Our sense of whether we are here or we are there is somehow blurred when we are in a forest. This is more than the irregularities of the forest confusing our sense of direction, which way is east or north, it is even more than a feeling of not knowing exactly where we are though we may not be lost. It is a feeling that we are no longer in one particular place but are somehow suffused throughout all the space around us. In a forest the trees seem to exude a sense of diminished individuality and we, like them, lose a measure of our own identity and become part of the forest itself. We enter an altered reality, in which individuated reification by form is subsumed by archetypal form and location is replaced by its archetype, which is to say, here becomes everywhere. A particular tree ^{whose} summit projected against the sky becomes every tree summit projected against the sky. Yet while many specifics are supplanted by the archetypal, the transformation of here and there to everywhere and anywhere is not total. For example, while the differences between horizontal perspectives become lost, the upward perspective still retains its differences from the downward perspective. We might thus say that the forest possesses a partial "quantum reality", where here and there are only partially transformed into everywhere and nowhere. But whenever differences between perspectives are diminished, both space and time are altered.

All of this has its feeling dimension as well as its perceptual dimension.

*Is this a property of aggregate?
or*

of the Plant Kingdom?

*cf
forest with watching clouds*

*cf. The Sea
The Desert*

loss of contiguity w diffusion

Some thoughts on a visit to the Armstrong Redwood Grove November 10, 1987

Upon entering the grove, one is very aware of entering a different space. The vibes suddenly change. It is difficult to articulate the message one receives. First, one gets the feeling that one is an intruder, not exactly welcome but of necessity tolerated. Then there is the feeling of being regarded somewhat contemptuously, of being judged, or rather prejudged. The mood is most solemn and there seems to be a soporific spell cast on everything. The primary message of the grove is DO NOT DISTURB, a message also passed on by the forestry people who undoubtedly have come under the spell of the grove and serve unconsciously as agents of the giants, independent of any of our national conservation values. My reaction is to try to avoid coming under the spell and maintain "scientific objectivity" which is to say to keep inviolate my own subjective prejudices. Certainly I could not rock their boat if I wanted to.

These giants have created an environment in which they can indefinitely survive. Ring counts reveal many to be over 1300 years old. But the number of species in their ecological complex is surprisingly limited. They are almost a self sufficient species depending only on each other for the preservation of the environment which sustains them. Some mosses and ferns together with their own droppings seem sufficient to maintain the moisture and soil conditions necessary for equilibrium. What prevents a proliferation of other species who would thrive in this type of "rain forest" environment is the absence of light. In fact the giants have removed practically all competition by appropriating all the sunlight and monopolizing the source of energy. But they have also cut off light from their own offspring. Only here and there a very limited number of young redwoods survive. And what is most significant, there is no "middle class". There are only the giants and very young, only those centuries old and those a decade or two or less. Evidently aspirations of the young to become part of the grove are illusory. Upon reaching a certain size their energy requirements can no longer be met and they fail to survive. I am sure that the remains of smaller trees have been removed by man. Only here and there on the forest floor are the remains of giants, who have succumbed to fire, wind or the vandalism of man.

How did such a configuration come about? More typical ecological complexes are dynamic. There is birth, ageing, death and recycling. Young trees sprout,

grow up, and eventually, if all goes well, reach a maximum size, then in time succumb. The key that differentiates a dynamic ecology from that of the redwood grove, seems to be the limit to maximum size.

Variety is also an important parameter in every complex. The grove ecology appears to function with very restricted variety, but also there are only a limited number of giants. More dynamic ecologies have both a greater variety of species and greater numbers of members within each species. There seems to be some sort of "equipartition" relation between numbers and variety. The number allowed within each species depends on the breadth of the variety of species. The greater the variety, the larger the permitted population of each species.

From one afternoon's observation, I have generalized to the extent of surmising that number within a species, $n(s_1)$, $n(s_2)$,.. the variety of species i.e. the number of different species, $v(s)$, the maximum sizes (masses, heights, ...), $m(s_1)$, $m(s_2)$,...and the dynamism or maximum ages $a(s_1)$, $a(s_2)$,...are all parameters of basic ecological significance. **Some functional guesswork:**

I. The equipartition relation:

$$n(s_1) = n(s_2) = n(s_3) = \dots = \kappa v(s)$$

Which is to say the greater the variety, the greater the numbers within each species.

II. The maximum size-maximum age relation:

$$m(s) \text{ varies directly with } a(s)$$

What is revealed here is that there are two basic types of organism. 1) Those that follow Sigmoidal growth curves, reaching maxima, and 2) those whose size appears unbounded. The above relation is for genre 2)

III. The maximum size-variety relation:

$$v(s) \text{ varies inversely with } m(s)$$

It follows from the first relation that $n(s)$ also varies inversely with $m(s)$.

IV. We finally suspect some bound on the entire mass of the complex.

Some thoughts on a visit to the Armstrong Redwood Grove 10/30/87

Upon entering the grove, one is very aware of entering a different space. The vibes suddenly change. It is difficult to articulate the message one receives. First, one gets the feeling that one is an intruder, not exactly welcome but of necessity tolerated. Then there is the feeling of being regarded somewhat contemptuously, of being judged, or rather prejudged. The mood is most solemn and there seems to be a soporific spell cast on everything. The primary message of the grove is DO NOT DISTURB, a message also passed on by the forestry people who undoubtedly have come under the spell of the grove and serve unconsciously as agents of the giants, independent of any ~~of our~~ national conservation values. My reaction is to try to avoid coming under the spell and maintain "scientific objectivity" which is to say to keep inviolate my own subjective prejudices. Certainly I could not rock their boat if I wanted to.

These giants have created an environment in which they can indefinitely survive. Ring counts reveal many to be over 1300 years old. But the number of species in their ecological complex is surprisingly limited. They are almost a self sufficient species depending only on each other for the preservation of the environment which sustains them. Some mosses and ferns together with their own droppings seem sufficient to maintain the moisture and soil conditions necessary for equilibrium. What prevents a proliferation of other species who would thrive in this type of "rain forest" environment is the absence of light. In fact the giants have removed practically all competition by appropriating all the sunlight and monopolizing the source of energy. But they have also cut off light from their own offspring. Only here and there a very limited number of young redwoods survive. And what is most significant, there is no "middle class". There are only the giants and very young, only those centuries old and those a decade or two or less. Evidently aspirations of the young to become part of the grove are illusory. Upon reaching a certain size their energy requirements can no longer be met and they fail to survive. I am sure that the remains of smaller trees have been removed by man. Only here and there on the forest floor are the remains of giants, who have succumbed to fire, wind or the vandalism of man.

How did such a configuration come about? More typical ecological complexes are dynamic. There is birth, ageing, death and recycling. Young trees ^{germinate} sprout, grow up, and eventually, if all goes well, reach a maximum size, then in time succumb. The key that differentiates a dynamic ecology from that of the redwood grove, seems to be the limit to maximum size.

Variety is also an important parameter in every complex. The grove ecology appears to function with very restricted variety, but also there are only a limited number of giants. More dynamic ecologies have both a greater variety of species and greater

numbers of members within each species. There seems to be some sort of "equipartition" relation between numbers and variety. The number allowed within each species depends on the breadth of the variety of species. The greater the variety, the larger the permitted population of each species.

From one afternoon's observation, I have generalized to the extent of surmising that number within a species, $n(s_1), n(s_2), \dots$; the variety of species i.e. the number of different species, $v(s)$; the maximum sizes (masses, heights, ...) $m(s_1), m(s_2), \dots$; and the dynamism or maximum ages $a(s_1), a(s_2), \dots$ are all parameters of basic ecological significance. Some functional guesswork:

- I. The equipartition relation:
 $n(s_1) = n(s_2) = n(s_3) = \dots = v(s)$
Which is to say the greater the variety,
the greater the numbers within each species.
- II. The maximum size-maximum age relation:
 $m(s)$ varies directly with $a(s)$
What is revealed here is that there are two
basic types of organism. 1) Those that follow
sigmoidal growth curves, reaching maxima,
and 2) those whose size appears unbounded.
The above relation is for genre 2), *some trees
and sea creatures*
- III. The maximum size-variety relation: *(If the large can control energy flow)*
 $v(s)$ varies inversly with $m(s)$
It follows from the first relation that
 $n(s)$ ^{inversly} also varies inversly with $m(s)$
- IV. We finally suspect some bound on the entire mass
of the complex.

dynamism is also related to changeability

∇ 2 kinds of time

Growth time

and Envelope time or Group time

cf. wave & group velocities

*different velocities can be transformed
into different times*

1 level → 2

MY AVOIDANCE OF REMARKABLE MEN

Gurdieff posited his search for truth as 'my search for remarkable men' and gave that title to his biography. While it is certainly true that one cannot proceed very far along the path without a teacher, do the teachers have to be remarkable men?

By intent I have never embarked on a search for 'remarkable men'. I have found whomsoever and whatsoever was before me at any time to be remarkable beyond my power fully to comprehend. What I have learned has been gleaned from that which happened to come my way, not only persons and books, but towns, hills, birds, clouds, lights and sounds. All of these were my remarkable men. Yet none of what occurred was random. There was a pattern in what came my way. Behind it all there seemed to be an invisible guiding hand.

I certainly do not question the existence or the value of remarkable men. But I do question, had I given my life to searching for them, that I would ever have found them. Yet I feel it is possible by learning how to assimilate the experience that happens to come one's way, independently to learn that which remarkable men have to teach. Indeed, much of what I had already learned, I later found again in reading their books.* And in this I see nothing remarkable. Great truths can be found again and again independently by those who seek them. But what has been especially important is that in arriving independently at these truths, I am taking them on the authority of the world itself, not on the secondhand authority of remarkable men. But also of importance is the ^{at}confirmation that we may give to one another.

* But here I must say that had I not gone as far as I had, I would not have recognized what they said nor been led by them to the next step.

I have never by intent embarked on a search for 'remarkable men'. I have found whoever and whatever was before me at any time to be remarkable beyond my power to fully comprehend. What I have learned is from that which happened to come my way, not only the persons and the books, but the towns, the hills, the birds, the clouds, the lights and the sounds. All of these were my remarkable men. Yet none of what occurred was random. There was a pattern in what came my way. Behind it all seemed to be an invisible guiding hand.

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More for the Denver Tramways

04/10/91

The living at an interface. In this case plains and mountains both available to exploration (by more or less the same rules) unlike living on the sea shore

Also the oscillation between two cultures similar enough that emic = etic

October 15, 1994

They sensed my skepticism. I was never a true believer. I was always looking for cracks in the scientific wall. I applied the same skepticism to their methodology that they applied to its results, the result was I was ostracized, sent into exile.

In spite of the pain I have no regrets. It is always important to question orthodoxy, to propose alternatives, believe the world to be richer than what we have so far netted, and to believe that we ourselves are far more than we have settled for in our collective consensus. Perhaps, as Feynman said, these pursuits are for will-o-the-wisps. One who sees them as possible doors to greater understanding is forever doomed, these things are forever beyond our grasp. But I must remember, "What Shiva gives, no monkey can take away". (but he can tell you he has taken it away)

Although I have failed in the thousand things, by some inner yardstick, I feel there has been a net gain. I feel I have had glimpses of the lofty ranges of magnificent peaks yet to be discovered, and those glimpses have made it all worthwhile.

My advice to myself is that of William the Silent: "Persist, even when there is no hope". It was the advice followed by both Don Quixote and George Washington. So we never know which will turn out to be the case. But I must continue to explore the paradoxes, search the cracks, and disregard the pain.

It is very lonely. But the positive thing about loneliness is that it fuels our desire to find where our home really is. We all want to go home, but we don't know where home is. My definition of God is "God is Home" and my definition of Home is "Home is God".^b

where

I guess home is wherever I am

January 18, 1993

I am not much on keeping a diary, but today I am compelled to write down my feelings. I feel at odds with almost everything and everybody. Only when I look at the hills and the clouds do I feel related and in harmony. I am angry with the missile attacks on Baghdad, killing civilians in a hotel. I am angry with the hypocrisy of selective support of U.N. Resolutions. I am angry with the subverting of the constitution and the placid acceptance, even ignoring, of repeated subversions. I am even unhappy with the constitution itself and with all other great documents. They are found wanting in these times. I am upset with my church. It is emphasizing outreaching to get new members, while ignoring internal poison and doing nothing to correct the causes of departure of those already belonging to the church. I am annoyed with the scientific establishment and its drift from open searching to dogma and the persecution of those not subscribing to the party line. These items all seem to be matters of choice, things we can do something about, but don't. I am most unhappy with myself, I have accepted the American norm that the most criminal thing we can do in this society is to blow the whistle, rock the boat, not go along.

But there are other matters beyond present choice. Usually the result of past choices. The disparate distribution of the earth's resources, the ignoring of unchecked population increase, the worldview of growth as an unquestioned basic good, the oppressions of both "me-first" and of the collective, the whole signification process and its distorted product. At the deepest level, I am soured on our culture's epistemology and its consequent ontology. I long to make a break with it all, disavow the whole package. Only the natural order, that part not yet contaminated, radiates meaning, peace, and love. Man has goofed up. It is time to shut up, face the East, lift up our eyes, and listen.

Thinktank Reflections

We come together, all from a different place. In this state enriching and rewarding dialogue is not possible. Before there can be anything beyond a random exchange of self advertisements, there must be a common language, a common intent, a focus on shared problems and on questions mutually deemed to be important. This does not mean we must be in agreement, it means that we must be accepting of each other. We must be open and patient and willing to take the time to build trust and to create a common code book which will allow us to understand one another. Only after this is done can we agree on the rules of the game we wish to play together. But having agreed on the game and its rules it does not mean we have to always play on the same side. The game we play may evolve as we grow in trust and understanding. We must not limit our potential with specific expectations, we must remain detached from results, yet alive to the assurance that something better than we could prescribe will in time happen.

We begin by telling our own stories. Indeed, people must tell their own stories, write their own operation manuals, assemble their own prayer books. But, paradoxically, we do this through sharing. Without sharing we cannot recognize our own uniqueness and the uniqueness of each other. Through telling our stories and listening to each other we also come to treasure our common humanity. If in hearing you, I find you have articulated something that has eluded me, but which I recognize as valuable for me, I can adopt it, coopt it into my own operating manual. It is only in this manner that we proselyte. I hear you, question you, distill your message, then take that portion that feeds my needs.

Then we each write our discoveries for ourselves--an act of self-reference sealing our growth and transformation. But there is value beyond this. When we recognize something, a laugh, a tear, an inspiration, a revulsion, then it becomes a part of our **common story**--our Book of Common Prayer.

*Disagreement is the opportunity for insight and wisdom,
not an excuse for oppression and violence*

LK

This is a dry season. Everything seems on hold, on dead center. Energy seems to have become locked up, frozen, the flow has stopped. It is like money, it has been siphoned into fewer and fewer pockets, and sits in the coffers of the greedy, motionless. The system has strangled everyone and is now strangling itself.

It seems as though we are riding on a subway train. We entered at birth and we will exit at death. Probably from a different station than where we entered. We have difficulty remembering anything before we got on the car. What were we doing before we got on, why are we here, where are we going. We watch people get on and get off, wondering when we are supposed to get off.

We have a vague map of the subway system, which seems to be mostly a huge loop. We know the names of some of the stations and their sequence (philosophy and religion) but there is only speculation of what it's like above. Why can't we remember?

We are getting a better idea of how the train works, brakes, power, wheels, tracks, lights, the cables along the walls (science and technology), but that is of no use in informing us why we are riding and what we should be doing. Some hold that when we have all the details of how it works figured out, we will know what the ride is about. I doubt this deeply.

Meantime, we concentrate on our fellow passengers, and get absorbed in all of the drama taking place within the car. The lovers, the drunks, quarrelling couples, sleepers, noisy kids, readers, and once in a while violence, and quick exits. OR watch the cables on the passing walls, colored lights appearing and disappearing, and peering intently at station stops in hope of getting some clue of what is upstairs.

But the car is getting crowded, no longer can everyone have a seat, and the air is getting foul, smoke, pollution. It is becoming difficult to reflect on the ride any more. But one still wonders whether topside is the same at every station, or varies from place to place. There does seem to be a faint memory of the above, but have we taken previous rides? And why should anyone want to come down here and ride on this thing. Perhaps we are all bodhisattvas, why else would anyone choose to be here.

SOME REFLECTIONS ON THE 126th SCOTTISH GAMES

September 1, 1991, Santa Rosa, CA

[Privately dedicated to the memory of Adrian Perkey]

1993 ^{1st} year
at Santa Rosa

Only in a celebration of this nature do we have the opportunity in our times to experience the power of ritual. In stripping pageantry from our lives we have lost a bridge to ^{the} deeper meaning, and to the spiritual reservoir that empowers our lives.

A ritual takes a sacred symbol from a container, provides it with an honor guard to escort it to the place where it is manifested to the people. The people honor it and ^{make} come into communion with it. Past sacrifices are recalled and the symbol is ceremoniously paraded and returned to its sanctuary. This is the framework of all ritual whether it is the celebration of the mass or parading of the colors. ^{or taking the torah from his ark} A LUM HAKODESH

At the games there was a placing of symbols in juxtaposition which led to a healing synthesis. The flags of Great Britain, Scotland, Canada and the United States became one honored symbol uniting us in an eternal bond. The chaplain's prayer asked God's blessing on all peoples everywhere and on 'George (Bush), our President and Elizabeth, our Queen'. Not only nations and peoples were joined but we were united with our past and our future.

The military may be losing many of its traditional missions, but there is one mission it will always have and that is ~~its~~ ceremonial one.

.....

In visiting the booths and tents of the various ^{unifying} clans we could see the evolution of many peoples, who a millennia ago were at perpetual war with one another, celebrating their ~~individually~~ and their commonality. A red bearded kilted young man proud of his McGregor tartan and his claymore, whose last name was the teutonic 'Ganzer'. who teaches sword fighting all styles, foils, epees, and Heidelberg broad sword. And my great grandmother Cornelia Wilcox was a McGregor. The ancestors of both Grant and Lee came from the same highlands. The tartans are indeed "E Pluribus Unum".

But there was another unifying force present--the pipes. What is there about the pipes, with their shrill cry, that brings our blood to the surface and unites us with the earth. The magnificent performance put on by the Tokyo Drum and Pipe Band made us all conscious of our unity through the pipes. But when they marched off and the bass drummer switched to a traditional Japanese tatoo, the crowd was carried away and fell in with the beat with rhythmic hand clapping. The pipes and drums allow us to reach a level where we indeed are all one.

Finally there were the bonnie lasses who could toss the caber (somewhat lighter) as well as the champions.

Not all ceremonies are rituals in the sense of the previous page.

At the Pacific School of Religion

Michael Hornfield gave the structure of a ritual as follows:

1. Coming together, gathering
2. Tell stories
3. Exchange gifts, share a meal receiving
4. Good Bye - sending giving

See Berkeley Spiral

A somewhat inverted ceremony is the parade or passing in review.

Here the people move past the high priests who are in a reviewing stand

The people carry banners and icons - sacred symbols

The moment of communication is in passing the reviewing stand: Being seen by the High Priest

The focus is changed from the symbol to the priest.

Rituals
to reinforce community
to acknowledge ^{god} and ^{community} ^{with god} something transcendent

To understand rituals + ceremonies all of these forms must be put in juxtaposition.

The Torah is already sanctified
The sanctus resides in the thing
in the book

In the mass bread & wine are consecrated - and consumed
The sanctus resides in the process not in the bread & wine.

Sometimes I feel it fun to release the Walter Mitty in me and exercise my imagination in impossible but enjoyable fantasies. My Walter Mitty frequently finds himself in situations where he is called upon to make speeches of important historical consequence, addressing parliaments, congresses, mass movements,... Rewriting history, what I would have said had I been present at Whitby in 664, at Philadelphia in 1776, at Appomattox in 1865, etc. Here is an example of a recent fantasy:

It is the White House, a state dinner in which the Queen of England is present and I am called upon to make a toast.

Mr. President, Your Royal Highness, Ladies and Gentlemen, A few years ago I attended a festival celebrating our British inheritance. The Pastor in his opening invocation, asked for God to "bless George our president and bless Elizabeth our queen". This struck a liberating note with me. I suddenly felt that something that had been divisive in me had been removed. I felt I could accept without conflict, the identifications that I really felt in my heart of hearts. While George was indeed our president, it was also true Elizabeth was our queen. While not our constitutional queen, not on the law books, not in the history books, but in our affections and in the wholeness of our hearts, she was indeed our queen. We Americans declared our political independence from the motherland, but we never declared nor can we ever declare independence from our heritage. Our hearts and our affections are forever bound to our heritage--to our entire history. This is why today, although having no constitutional queen, we still have a queen. She is our queen in our affections and in our identification with our heritage. And so, ladies and gentlemen, may I propose a toast to Her Royal Highness, Elizabeth, OUR Queen.

And in our pledge to pluralism, each American can make the same toast: To America, our Constitution, our home, and to our heritage from whatever land or continent it be.

When I first moved to Pasadena in 1941, we lived a half block from Colorado Street, the street along which the famous Rose Parade moved every January 1. I saw many of the parades, very convenient, having to walk only a few steps. I heard then that there was another city in California that had a Rose Parade, somewhere up north. Today I got to see that other Rose Parade-- the Santa Rosa Rose Parade. There is a big difference. For one thing, the only roses I saw were on the first car in the parade, a car carrying our Congresswoman, Lynn Woolsey. But it is unfair to compare, The Pasadena Parade is a national institution, the local parade, only Sonoma County.

But I am writing this not to compare rose parades, but to compare the times, the parades I saw and participated in as a boy in Denver in the twenties and thirties and the parade I saw today in the nineties. Sometime about 1928 the G.A.R. held a reunion in Denver and we were privileged to see a parade of veterans of the Civil War near the end of their era. Most rode in cars, but there were quite a few who marched, some with shouldered rifles. That parade was supplemented with veterans of World War I, men mostly in their thirties. Today, there were a few WWI veterans in cars and only about 6 who marched. I have seen quite a bit of history in passing parades. Our turn is next to be last, we who are the veterans of World War II.

But the impression I got today was that, whatever the war, the veterans are all fading away. They now seem to belong only to history. It is not only the Vietnam Veterans who are not honored, no veterans are the national heroes they once were. If this reflects our feelings about war, then it is well. Being ignored out of distaste of war is a sacrifice I feel most veterans willingly accept. Maybe at last there is light at the end of the tunnel.

Another impression, there were relatively few flags today compared with 60 years ago. And I was surprised to notice that no one salutes or puts their hand over their heart when the flag passes, which used to be de rigueur. (Also no one takes off a hat when the flag passes, maybe because there are no hats.)

What I am trying to say is that I have lost sight of so many things that have radically changed in my time. Seeing the parade today made me aware of some of them.

Today Confucius' old adage regarding the joy of hearing from old friends was confirmed for me. I received an unexpected phone call from the person whom I have known longer than any other now alive. She was ninety eight years old on March 7th, and I have known her for 65 of those years. She was a neighbor living next door to us in Denver while we lived on Jackson Street from 1926 to 1933. She and my mother became very close friends during that time and stayed in close touch afterwards. On the phone she called my mother her dearest friend. They were pioneers in a pre-womans-lib enterprize known as the Delphians. These were women who met monthly to discuss ideas and great books and find for themselves fulfillment beyond the kinder, kuchen, und kirche, which still dominated women's lives in those years.

Margaret has lived alone since her husband Ray died some 20 years ago. She takes care of herself and keeps her house in beautiful fashion. Bob, her son, comes by every day, but otherwise she is quite self sufficient. Up until a few years ago several days each week she did volunteer work at the Denver Art Museum.

The only time I ever heard her complain about anything, and that facetiously, was that her grandchildren were getting too old to be good traveling companions. They seemed to be more interested in dates than in seeing the sights. She guessed that she would have to wait for her great grandchildren to grow up a bit to find some new travelling companions. She is truly a most remarkable woman, an inspiration to all privileged to know her.

*A second call on
She will be 99 on March 7th, 1992*

A third call Feb 20, 1993

Margaret died on September 28, 1993 100 1/2 years

MARGARET ELIZABETH OLSON, was born in Denver, Colorado March 7, 1893 and died in Denver on September 28, 1993. She was the daughter of John and Olivia Wessen. Margaret was a graduate of the Denver schools and was employed as a legal secretary.

Margaret married Ray F. Olson in 1922. They had two children, Elinor and Robert. Elinor died in 1965 and her husband, Ray, died in 1971.

Margaret is survived by son Robert R. Olson and his wife, Carol; surviving grandchildren are Curt R. Bidinger, Elizabeth Kinsey, Alan R. Olson, Jory Olson and Margaret Davis; and three great grandchildren, Caitlin and Daniel Bidinger and Jeffrey Kinsey.

Margaret is a charter member of Messiah Lutheran Church and an active member as a teacher, in women's organizations and altar guild.

As a community member Margaret was active in the Denver Symphony Guild, Denver Art Museum and the Musicians' Society of Denver.

Margaret will indeed be dearly missed by her family and many friends.

+ + + + +

SOME AUGUST THOUGHTS

August is the month of the end of beginnings and the beginning of ends. The end of beginnings with the final end of a series of Roman Empires with the termination of the Holy Roman Empire (1806), the end of the 'era of enlightenment' with the invasion of Belgium beginning World War I (1914), the finale of Watergate (1974). Also the beginning of ends with the beginning of the end of World War I with the "Black Day of the German Army" (1918), the beginning of the end of World War II at Hiroshima (1945), the beginning of the end of 'we know not yet what' with the invasion of Kuwait (1991). August is indeed the month of the initiation and consummation of change. It is fitting that the Feast of the Transfiguration, which is the profound symbolizer of all change, should occur in August. (AUG 9)

After weeks of summer interruptions, I return today to look at the world. The view is an August view-- depressing if we eschew change. From whatever perspective, personal, local, national, global, the developments are changeful and distressful. Personal: health matters, teeth, ears, eyes. Family: Art out of work and having to sell house, Nan out of work, Suz in job bind, bookstore depressed, Clayton in marriage dilemma. Local: Judy in cash flow crunch with health problems, Amory's bicycle stolen, all stressed out, everybody working harder, earning less, traffic vicious and dangerous, opaque school boards, unbending clerics and parishioners. National, crime ubiquitous, violence everywhere, greed rampant, downsizing, joblessness, drugs, homelessness, partisan and me-first politicians, general indifference, shoddy standards and values, egos on power trips. Global, floods, hurricanes, ozone depletion, wars, fragmentation, intolerance, one set of rules for me another set for you. Indeed, All of creation seems to groan with suffering.

More specifically:

- Ronald Reagan's and Al Neuharth's America: the American Dream as the sacred right to get rich. This version of the American Dream is Socrates' royal lie. It violates that other America, the America of the Constitution and bill of rights.
- The randomizing of time: The dephasing and desynchronizing of clocks and calendars. Invoices and billing, days notice, charges and payments instead of occurring at fixed intervals are increasingly occurring at odd intervals.
- Rights without obligations, e.g. the media. The Media are a third power with the checks and balances largely underdefined. Who sets the agenda, the government or the media?
- Rights destroy obligations, guaranteeing the handicap certain rights should not relieve the rest of us from our obligations.

- There are increasing numbers being excluded from access to the market place. Two things must be remembered: 1) Those with no investment in or access to the existing order do not fear its destruction. 2) "Those who oppose peaceful stepwise change make violent change inevitable"-- John F. Kennedy
- When it comes to productivity and jobs, productivity per technology prevails. The unquestioned premise in our culture is that, whatever the social consequences, technology must always march on.
- There exists an economic engine driving car crimes. Cars are stolen and chopped, the parts resold at a greater price than the car would bring. This is a result of the costs of car repairs and the insurance structure. It is curious to have any whole valued at less than the sum of its parts. Here we have an economic anomaly generating the social anomaly of car crime. (cf the bounty on rats)

AUGUST SIEGE

aug15.wpw

DISK: WORK02

SUNDAY
August 15, 1993

Today brought a vivid experience: a direct encounter with a burglar. About 12:30, after my lunch bowl of soup, I decided to write up some instructions with the word processor. Hardly seated at the computer, when I heard a loud crash that shook the entire house. I thought earthquake, but no shaking, then I thought a sonic boom. But then there was a second loud crash. I began to feel that whatever was going on was more local than an earthquake or sonic boom. Then I heard other noises, tinkling and shuffling. That got me up and I went down the hall to see what was happening. Through the kitchen door I saw the deck door had been shattered, that meant human beings, burglars. Then as I rounded from the hall into the living room, I stood at about six feet distance face to face with a rather hefty young Mexican about 5'7" wearing a baseball cap and a mustache. Since I had had the warning of seeing the shattered door, and he was under the impression that no one was at home, I was slightly less surprised than he. I shouted at him: "Who are you? What are you doing here? You have no business being here. Get the hell out of here right now." He was very much startled but raised his right arm and pointed his index finger at me as though he held a gun. He shouted back at me, "Who are you?", then turned and went out. I hesitated to follow, not knowing how many others might be outside. Quite confused, I decided to dial the sheriff, 211, that was wrong, 911. I finally got through and relayed the situation, reporting that no one was apparently still in the house but that there might be several outside. They kept me on the phone for a few minutes, that was good, I didn't exactly feel like going outside and confronting whatever might be there. After a bit, I felt they were not going to invade again and probably had left. The sheriff's lady said it was O.K. to hang up. I then called Judy and asked her to come over. The sheriff arrived about 15 minutes later and went through all the angles with me, then Judy and the kids arrived. She surveyed the situation and called Gary and Danielle to come over and help. Amory and I went to buy a couple of sheets of plywood to cover the smashed doors. Then everyone pitched in cleaning up the glass which was all over the living room, and helping put up a temporary plywood wall until the sliding door could be replaced. I am very grateful to these fine friends who came to my aid when I was pretty much in a state of shock.

A curious thing I felt later. Some hours after the siege bombardment, I began to feel in some strange way somewhat simpatico with the burglar. We had both experienced an intense moment of surprise and fright. In some sense our sharing of this experience has made, at least me, feel somewhat comradely toward him. We had been through the same frightening ordeal together. Sharing this seemed more powerful in bonding us than the power of all the adversarial elements that separated us. But if the encounter had been unequal this could never have happened. However, I am very grateful he turned and left.

Thursday:

This has been a week of re-runs of what happened last Sunday. The minor damage is the broken clock, the heavy damage is to my state of mind. I try all kinds of scenarios to heal myself. Finally, I found an acceptable one. The intruder was not a human burglar, it was Siva in the disguise of a human. He shouted back at me - "Who are you?" I've been fumbling to find an answer ever since.

Perhaps in some way yet to be learned. This was a "gift of Siva".

The efficacy of the shouting goes back to the principle of righteous anger and its great power. Elijah saying to King Ahab (45p 289) "The Lord says you have killed Naboth and possessed his vineyard. In the place where the dogs licked up the blood of Naboth, dogs will also lick up your blood." And Nathan's denunciation of David, for the murder of Uriah and the taking of his wife, Bathsheba.

see 2 samuel 12:7, 9, 11-12, 14
In neither case did the kings ^{in effect} oppose the prophets

I was yelling at the burglar - "You have violated a sacred space, get out before disaster strikes". He left.

don't use this version

FROM
JOYONT1.WPW
JOYONT2.WP6

JOYONT1.WS4

DISK: JOURNEYEAR00

12/03/87

DISK: EPIONTOLOGY

April 4, 1993

July 9, 1994

A few years ago I took a camping trip with my sons and grandson on Lake Powell on the Colorado River. We rented a boat and explored many of the inlets and side canyons, some not much wider than the boat, with sandstone cliffs stretching vertically upwards from the water for several hundred feet. One evening we pitched our camp on a large flat rock on the south shore of the lake. Across the lake we could see the red stone cliffs rising above the northern bank. As the sun dropped low in the sky, and the shadows lengthened, suddenly a huge face, strongly resembling that of an indian chief emerged from the cliff. The likeness was striking, the features were strong and stern, yet quite handsome, and constituted a powerful presence that dominated the entire lake. We stood transfixed and watched as the face slowly disappeared in the dissolving shadows of twilight. ~~All the next day, no face was to be seen, although there were several interesting patterns appearing and disappearing on the cliff as the sun went across the sky. Then at evening as the shadows lengthened, the face re-emerged and again held us prisoners in its stern gaze until sunset.~~

not
frup
we left

There is more to the story, but for now I want to make a metaphorical point. What we call reality corresponds to the face seen on the cliff. There are three ingredients behind this appearance: the actual indentions and protuberances on the rock cliff; the source and direction of the light which illuminates the cliff; and a set of patterns in the observer's code book. The sunlight interacts with the rock shapes to create patterns of reflected light and shadow, these patterns are perceived by an observer who makes note of them only in the event they suggest something already familiar.

Some
four
when my
stand
reflected from

The rock shapes on the cliff we shall call an "ontolog". These shapes have a different level or order of existence than do the patterns of light and shadow. Each configuration of intensity and direction of light corresponds to what we shall term an "epistem". Every epistem interacting with the ontolog creates a particular set of patterns we shall call a "world". The observer finds some of a world's patterns of interest and records them while ignoring others. But some forms, such as the face of the Chief cannot be ignored. So it is with our ontological interaction with the physical world. We select as our reality certain patterns, but at no time do we change the cliff. In addition to selecting patterns from a given world, we can choose to significate a different epistem and its resulting world and patterns. Some worlds are richer in correspondences with our code book than are others. The basic question in this metaphorical construct is, "what is the source and origin of the code book?"

For...
we shall

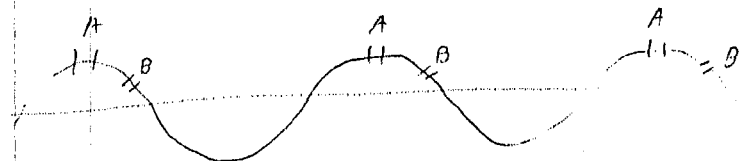
perhaps...
(but still deja vu)

To break out of a given reality, the reality of our culture, one must break with the conventional times and live by a different clock, move to a different place where the perspective is altered, and live in a different configuration including even what one eats. These are the prerequisites to unlearning and restructuring (perestroika). Only when these changes have been made will the light cast different shadows and a different facet of the world be revealed.

very rich
 The Pagan world was not wrong, the Christian world was not wrong, the Scientific world is not wrong, all are but facets of an ontolog, each ^{facet} revealed through the adoption of a particular epistemology. We must not view the historical sequences as progress, rather we must view the different worldviews as different facets of the basic ontolog which underlies all of our realities. Progress is not in the sequence, nor in the exchange of one worldview for another, but lies in the accumulation and integration of the facets, from which we can begin to perceive the nature of the Ontolog itself.

There are six ways to consider the three elements, Ontolog, Epistem, and Code or Pattern: O, E, and P. These approaches lead to several classical and historic ontological views.

CHOICE OF "MOMENT OF REALITY: A or B or ...



Phase, Amplitude, Code, Frequency, Timbre (form),
 Moment

Are phase and moment the same?

To say progress is not in the sequence but in the accumulation - i.e. in variety (cf Gould) but the variety includes both the extinct and the viable. In the long run every species will be extinct so Brahmi's meaning is in the accumulation of possibilities, their survival is of no significance (as it is of (environment) ... bringing your own gift!!

Trip = 1963-2

ECLIPSE.WP6

I would like to recount a personal experience with this second aspect of darkness that made me come to feel that we have been too quick to equate darkness with evil.

Some thirty years ago, we were able to put together a new type of eclipse expedition. There was to be a total eclipse of the sun whose path crossed northern Canada. We were able to obtain a large jet plane and modify it to carry our telescopes, spectrographs, and other instruments. There were two ideas involved. First, to improve observing conditions by getting above as much of the atmosphere as possible. We were going to be able to fly at almost 50,000 feet. And second, we would fly east along the eclipse path and thus extend the time of totality by more than 30%

On the day of the eclipse there was a heavy cloud bank covering most of northern Canada, and we were thankful that we were assured a view of the eclipse by being thousands of feet above the clouds. As the time for the eclipse approached we got to altitude and took course at top speed along the eclipse path. We could look back and see in the distance a darkness beginning to cover the cloud bank. As we watched this darkness swept toward us at an incredible speed, like some devouring monster it blackened all in its path. It swept on and soon engulfed us, and we looked up and saw that the sun was gone and it was time to go to work.

Our project involved taking several short exposures with various filters in different wave lengths. We were so busy with our instruments that we could not tell what was going on. About half way through, it was necessary to change film. This was my partner's job and I had the privilege of a few

George Kocher

seconds direct view of the spectacle. Here we were suspended half way between heaven and earth and there was the amazing corona of the sun and adjacent were stars and planets that would not be visible again until another time of year. The whole universe was displayed above and beneath us. I had the strongest feeling that if I could just look at this spectacle long enough I could penetrate further into the truth than with all the data we could ever collect with our instruments. In that moment of deep darkness, I felt for the first time the oneness of all things, the earth, the sun, the stars, and we ourselves in the middle of it all. This was enlightenment. This was a glimpse of God.

You know, today I can't remember what the purpose of our observations was. We collected and reduced our data, wrote and published the report and it sits on some shelves in some libraries. But that does not matter. The exploration began with a telescope, but the message was received with the heart. For me now darkness is not fearful nor depressing. It has become through the path of knowing a way to the mystic's 'cloud of unknowing'. And this is what the darkness of Advent can be.

I often think about the astronauts and their encounter with darkness. In outer space all is black. But this is curious because space is filled with light. Light is everywhere and nowhere, and only when it strikes a bit of matter does it manifest itself. This gives us a different way to look at light and dark, perhaps closer to the way it was before God separated the light from the darkness to make day and night. It is only on the surface of the earth that light and dark are so separated. Elsewhere they are intimately intertwined. I think this is why it is said that 'to God light and dark are as one'. I feel the time has come for us to venture into the darkness knowing that in its depths we will find a light greater than any we have known.

A SAND CASTLE

[An answer to Job]

Some years ago Len, his two sons and I went to Zuma Beach near Malibu. We had planned to build the mother of all sand castles and came equipped with spades, trowels, various molds and whatever else was useful for creating an architectonic wonder. But we had forgotten one important item--a camera. There would be no record of our handiwork. Undaunted, we pitched in and with our combined imaginations and creativity by noon had created in sand a fortress with turrets, battlements, drawbridges and every other fenestration we could think of. Any medieval lord would have been proud to have possessed the real version. The boys were delighted with their creation. They viewed it from every angle, lying down, climbing the cliff and viewing it from above, and finally dancing all around it.

Suddenly we realized the tide was coming in. Each successive wave was creeping closer to the castle. This alarmed the boys. They felt what they had built, being so elegant, must somehow be permanent. They couldn't be reconciled to their work being obliterated. First they decided to build a dike that would divert the waves to the sides and preserve the castle. It seemed like a good idea, the dike did divert the first few waves just as it was supposed to do. But then it became apparent that the dike was being eroded by each wave and unless we kept bringing in more sand, it would soon be overwhelmed. For a while, the sand brigade held the line. But then the relentless sea made an end run and it became apparent that we could never build a dike long enough nor massive enough to forestall the inevitable.

When the boys saw that in spite of all efforts the castle was doomed, they decided to destroy it themselves. Len and I tried to dissuade them. Let the sea do its work. We will watch the castle go down with dignity. But the boys could not stand the sea being in control. If the castle had to be destroyed, they at least would be in charge of its destruction. They flew into the castle with a fury and kicked it into shambles depriving the sea of any conquest. In doing this they felt that in some way they had achieved a victory.

Going home we had something to think about. The day at the beach had presented us not only with the fact that the ultimate power of nature must ever be faced, but with a pattern imbedded in our own psyches which also must be faced. After discussing it all, we decided that what was really important was that we knew we could build a better castle next time. We weren't stuck with the one that was washed away.

RECAPTURE THE CONFEDERATE FLAG

In an age of dawning understanding, we can say that in every conflict both sides are right and both sides are wrong. In the triumph of one side, the right as well as the wrong in the defeated is vanquished and the wrong as well as the right in the victor is confirmed. To truly learn from history we must disavow the premise that might makes right and search out the right we have vanquished and the wrong we still enshrine.

In many a county, in many a state, in the court house square stands a statue to a soldier who fought in years long past for a cause called lost. Those who bother to stop and gaze upon the statue wonder how he could have fought for a cause we now abjure. We who have been conditioned, not by history, but by those who have written history, cannot place ourselves in his shoes. For us his cause was not only lost, it was wrong.

To the victor belong the spoils. And the most important spoil of all is custody of the record, the power to reshape what has happened in order to shape what will happen. The victor rewrote the lost cause into an ignoble cause. The victor rewrote his own cause into a lofty cause. That is why as we stand in the court house square today we cannot perceive what was in the heart of those who sacrificed all for what we have been told they fought for.

(Georgia?)

Today in a great state in the South a debate wages over whether to change that state's flag, to remove from it the portion that preserves the emblem that was the battle flag of that lost cause. It is argued that only 1.5 percent of that state's history was lived under that flag. And that is not what that state is about today. All of which is true. But the deeper reason for seeking this change is that the flag of the lost cause was left unprotected and it was stolen by bigots who rewrote its meaning to conform to their own purposes. For each generation rewrites the meaning of its symbols in order to render them useful and understandable to its own agendas.

That there is contention over possession of this flag proves that it is still an energizing symbol. Even though less than two percent of that states history was lived under that flag, the devoted sacrifices of that time made that small percent one of the state's finest hours. The cause has died, ^{but} the flag still lives. ^{Measure} And this flag belongs to all Americans, not to bigots who would distort it into a racist symbol. The flag stands to remind us that while we remain united, we must ever oppose ^{over} centralization and homogenization. These values ^{are the} ^{of} the defeated's right values, ^{that men their} and should speak today for cultural diversity and local selfhood as the victor's values, ^{continue to} speak for our unity and equality of opportunity. All of our history is our precious heritage.

The South was fighting in the spirit of '76
A new American Revolution. - in the spirit of Washington, Jefferson, etc.
The invading Yankees were like the British before
The idea of iterated revolution - was being born in the South
It was lost with the war.

Iterated revolutions seem too destabilizing
yet they are ~ evolution

The Confederate soldier was not fighting to preserve slavery.
He was fighting to not have centralized authority
imposed on him. He was fighting for his home.
local autonomy
In an economic sense, he was opposing change
- this was the loss.

The North was fighting for Union, centralized control
for Technology

Slavery's abolition was an opportunistic spin off
rewriting the entire struggle

and only when
the slavery issue
was inserted did
the South collapse

Out of
the War

Not only has the question of secession never been
constitutionally resolved, but the centralism
and its ^{prosperity} homogenization ~~not taken from~~
its ~~environment~~ has been enshrined

The war has ever
at the end of the
20th Century not
been digested
or resolved

There was a law in the Confederacy
that whoever owned more than
20 slaves was excluded from
military service.

The war was fought by non-slave
owners manipulated by slave
owners

See Confed. 1, P51 O8a
93 - #5

CONFED2.W52

DISK: CONSTITUTION

February 1, 1994

\ J491

MORE ON THE CONFEDERATE FLAG

The recent demonstrations in Atlanta and other southern cities against the incorporation of the Confederate Battle Flag in the state flag disclose that there are still vestiges of the Civil War that remain unresolved. This is not surprising, since main stream historians have simplified the modern perspective of that war to the issue of slavery. However, that this was not a one issue war, nor at that time was slavery the principal issue, keeps alive the tensions and disagreements that center today on the symbols of the Confederacy.

As with many Americans, I am a descendant of both those who fought with the Union and with the Confederacy. In my blood is the blood of New Englanders who fought with the Meade and Grant and of Alabamans who fought with Johnson and Lee. I honor both sides and know that in reconciliation both contributed to a higher vision of what this country is about.

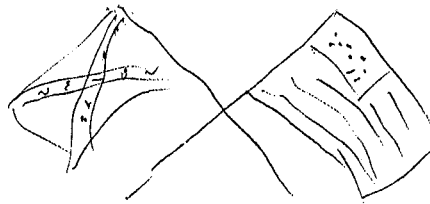
The motto on the Great Seal of the United States is "E Pluribus Unum": Pluralism and Unity. The deeper issue of the war was how to make possible both pluralism and unity. And this is an issue that is unresolved today. The South felt pluralism was impossible within the Union. The North felt that pluralism must be restrained for the sake of Union. Today, the issue still focuses on cultural pluralism versus economic unity. Everywhere in the world people want the benefits of economic union, but fear the loss of cultural heritages that appear to be the price of these benefits. (Are culture and economics examples of Niel Bohr's complementarity? At one level contradictory, at some higher dimensionality reconcilable? Any higher dimensionality has yet to be discovered.)

Those who want the state flag changed insist on a particular interpretation of the issues of the Civil War and of the Confederate symbols and demand that all others accept this interpretation. These same people want, rightly, to preserve their cultural heritage. But pluralism requires that others be allowed their interpretations. After all cultural differences are basically different interpretations and emphases of human experience.

The African Americans who object to the symbols of the Confederacy are in agreement in interpretation with the skinheads and members of the Klan. All look on the Confederate flag as a symbol of racism. Skinheads and the Klan parade the Confederate flag along side the Nazi swastika. Their seizure of these symbols and juxtaposing them does great violence to historic truth. But in a pluralistic society, the Klan has a right to its interpretations too. It is only when we demand that our



particular interpretation be universal that we violate "E Pluribus Unum". The Klan has taken the Latin Cross, a Christian symbol, and by burning it on peoples front lawns given it a totally unchristian meaning. Are we to demand that crosses be removed from all churches because the Klan has appropriated the cross? Today we fight over possession of symbols. They cannot be owned nor can a symbol (in Jung's sense) be tied to one meaning. An essence of cultural pluralism is let people have the right to their interpretation of symbols. The swastika still belongs to the American Indian. The Nazis own it only if you give it to them.



PLURALISM UNITY
E PLURIBUS UNUM
MY INTERPRETATION

The boy who was beaten by a gang because he wore red, and red was the gang's color. NO gang Nobody; can own a color, nor a symbol

NEXT

MELTING POT vs PLURALISM

Courts cannot rule on what a symbol must be interpreted.

IF the 1st amendment is about speech the 14th amendment is about thought

Symbols cannot be legislated - They may mean quite different things to different persons.

The Confederate Soldier was fighting for his home for what was local (vs Global) rather than imperial (i.e. universal)

Emancipation saved the war for the North
The character of R. E. Lee saved the war for the South

for freedom (of self) states and above all for pluralism and the right to be left alone

The appropriation of the Confederate flag by racist groups is as big a travesty of history as Disney's proposals to have a theme park to re-do the Civil War. Each Age views the events of the past with its own lights - but the resulting distortions are parallel to Santana's warning: "Those who are ignorant of history are doomed to repeat it." Those who distort it are worse than ignorant of it.

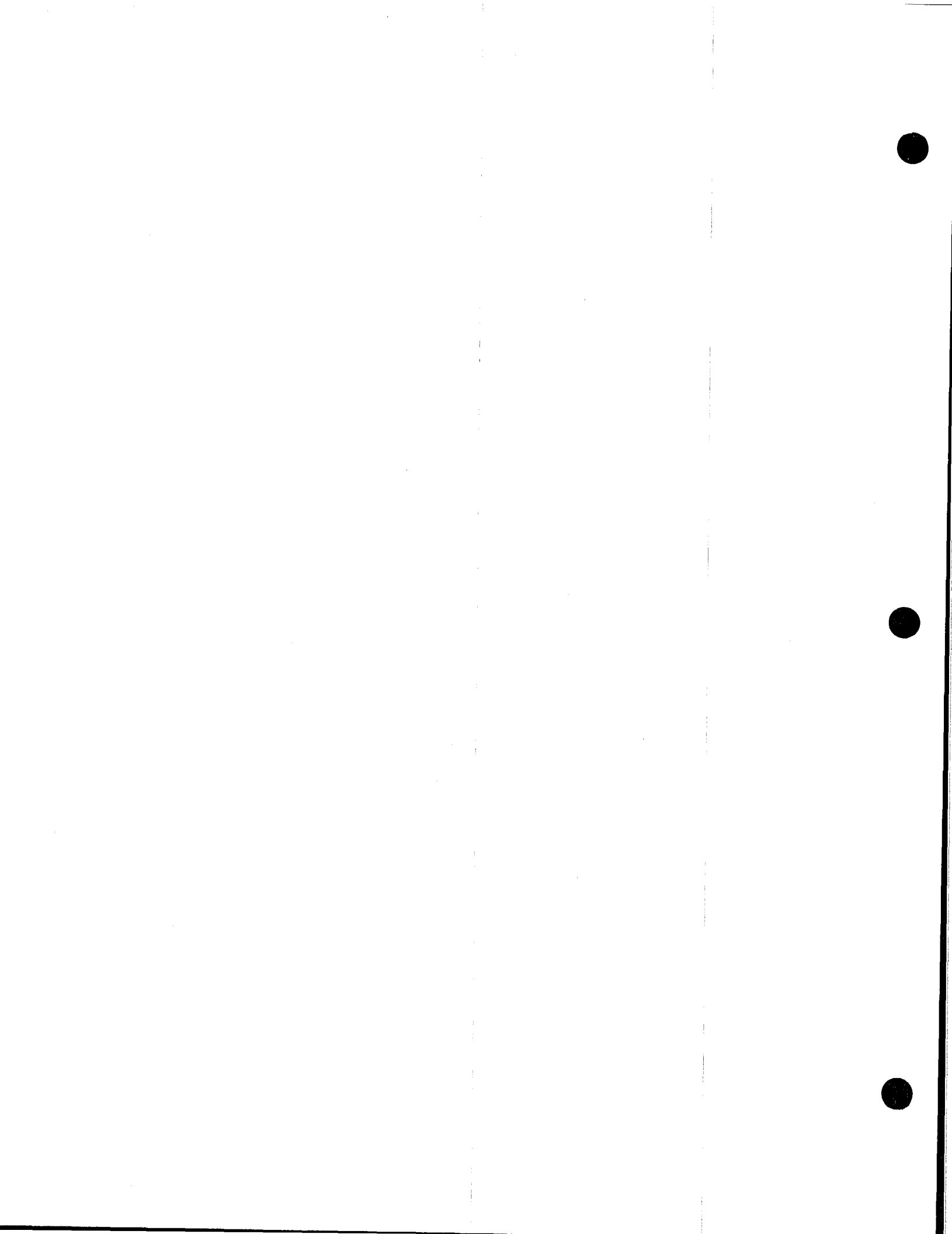
The notion of red + white

During the four years that I lived at the Lowell Observatory (1953-1957) I was provided with a house located on the edge of a forest covered plateau which overlooked the city. This forest was one of the fringe benefits of having a position at the observatory. In fact I almost could say that having a job at the observatory was a fringe benefit to having access to this beautiful pine forest. Whenever there was free time my dog, Deadeye, and I would explore the forest. In time I came to know its trees, glens, thickets and clearings as well as though I had been provided with a detailed map. I had developed several unmarked trails by memorizing the sequences of tree stands, clearings and fallen timbers. But the forest was always new no matter how familiar the trails I followed.

One afternoon in late spring I went into the forest alone. I don't remember why Deadeye wasn't along. After walking about a quarter of a mile, I suddenly realized I didn't know where I was. How could this be? This was close in and I knew this part of the forest very well, but I was in a place I had never seen or been before. I came upon a small clearing and paused to orient myself with my watch and the sun. Then an amazing thing happened. Suddenly there in the middle of the clearing was a glowing image. An image so vivid it seemed substantive. A curiously shaped cylindrical object about five feet high and a foot or so in diameter radiant white stood but a few feet before me. I had never seen such a shape before. and along its frames were what appeared to be large pearls all glowing white. I was transfixed and stood motionless for several seconds trying to get reality back in place. Then as suddenly as it had appeared, the cylinder disappeared and no trace of its having been there was evident. I had never seen this clearing before, but I knew the direction toward home and in a short distance I was back on familiar ground, but dazed and uncomprehending.

At the next opportunity I went back bent on finding the clearing and trying to figure out why I had missed it on all previous occasions. But I couldn't find it. From direction and distance I knew about where it should be. I knew it was but a short distance into the woods, but in several systematic searches I never again could find the place. Nonetheless, the form of the radiant image was indelibly impressed on my memory.

It was many years later that I next saw the same form that I had seen in the forest. A friend ^{Len} and I made a trip to Northern California to check out an ad for a ranch that had interested us as a possible retreat facility. It didn't turn out but on the way home we stopped in Garberville to eat and noticed a sign on the front of a building that a Buddhist group was meeting upstairs. So we decided to check that one out. We were admitted to a hall where there were meditation cushions laid out on a well polished floor. At one end of the room was an altar with pictures of gurus, flowers, bowls of water, some bells and the form! It was



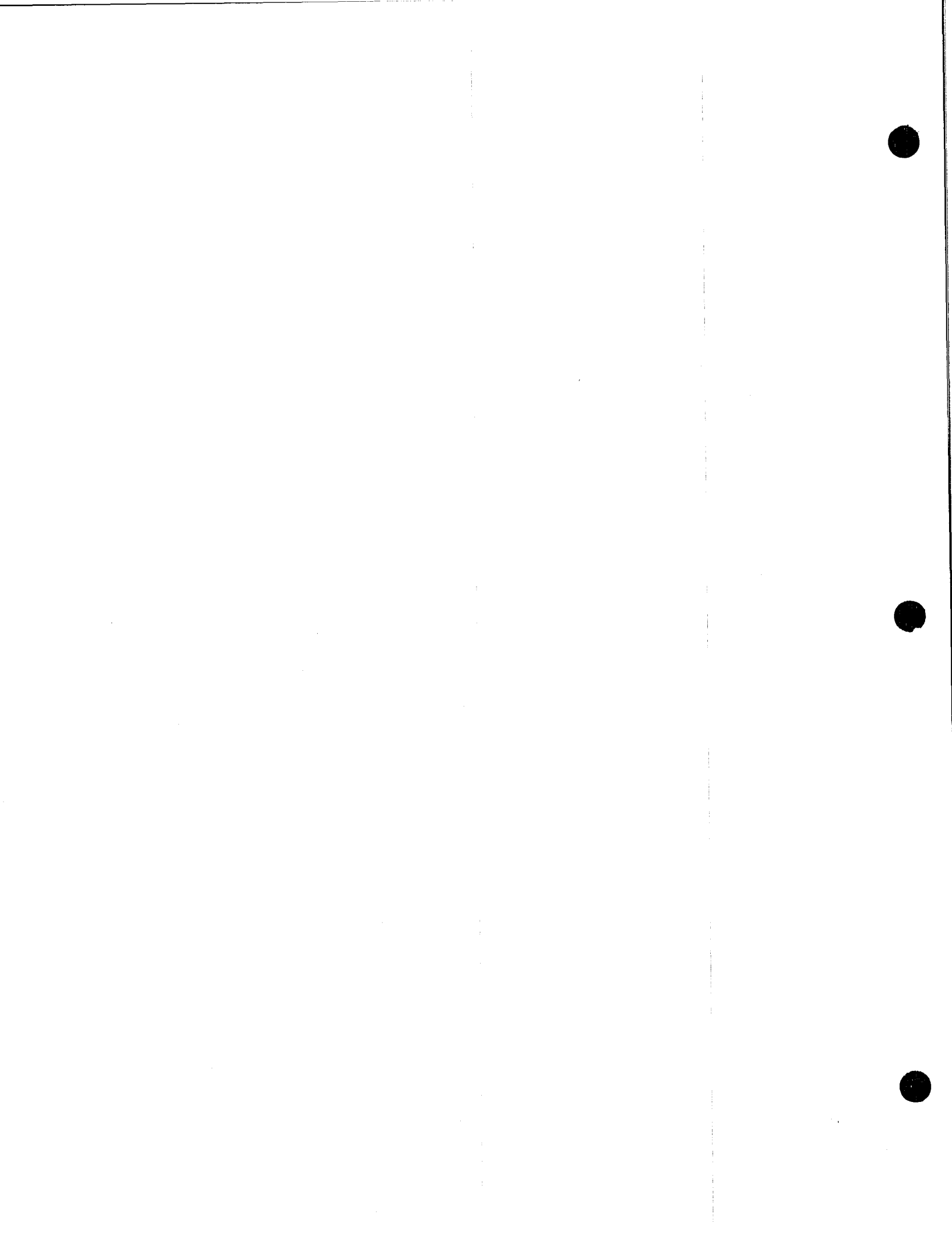
what is called a vajra, or in Tibetan, a dorje. It symbolizes lightning wisdom, an important aspect of certain branches of Mahayana Buddhism. The vajra is made of metal and is from five to seven inches long and about an inch diameter. Its shape is the same as the white five foot image I saw in the forest, but its color is metallic and dull. How could this shape peculiar to the fastness of the Himalayas appear in the American southwest? I have no idea, but on seeing the vajra, I knew I had a calling to learn whatever I could about this wisdom that has only recently been released from its Tibetan seclusion.

A final postscript. In the summer of 1994 I visited the Museum of Northern Arizona, and in one of the exhibits in a glass case were two Navaho wood carvings that in a crude way outlined the same form as the vajra. Here I leave the puzzle for now, wondering whether the vajra shape is hit upon by certain peoples independently or it is a transfusion through the Tibetan-Mongolian-Athabaskan-Navaho linkage.

I

This story bears on the subject of Sacred Space.
The Hebrews, as contrasted with other ancient peoples did not have sacred spaces. The Ark was portable. The sacred place was where the Ark happened to be. (Later they fell into sacred place with the building of the Temple)
Other peoples, Egyptians, Greeks, etc. had sacred groves, mountains...
We are supposed to carry sacred space with us.
My story resembles the story of the burning bush. Sacred - projected - but not belonging to metric space rather to some spiritual space. And in this sense carried within. All sacred spaces are internal. They are projected externally. The flow of spiritual energy in a sacred place [e.g. Chartres Cathedral] ^{exhales} in from the inside out, rather than from the outside ⁱⁿ in. It is flow (regardless of direction) that inspires us.

A sacred place evokes the spiritual energy within us.
We pour it forth from our inner space to the physical place.
Those who do not feel the "Presence" in a sacred space do not feel it because they did not bring it with them.



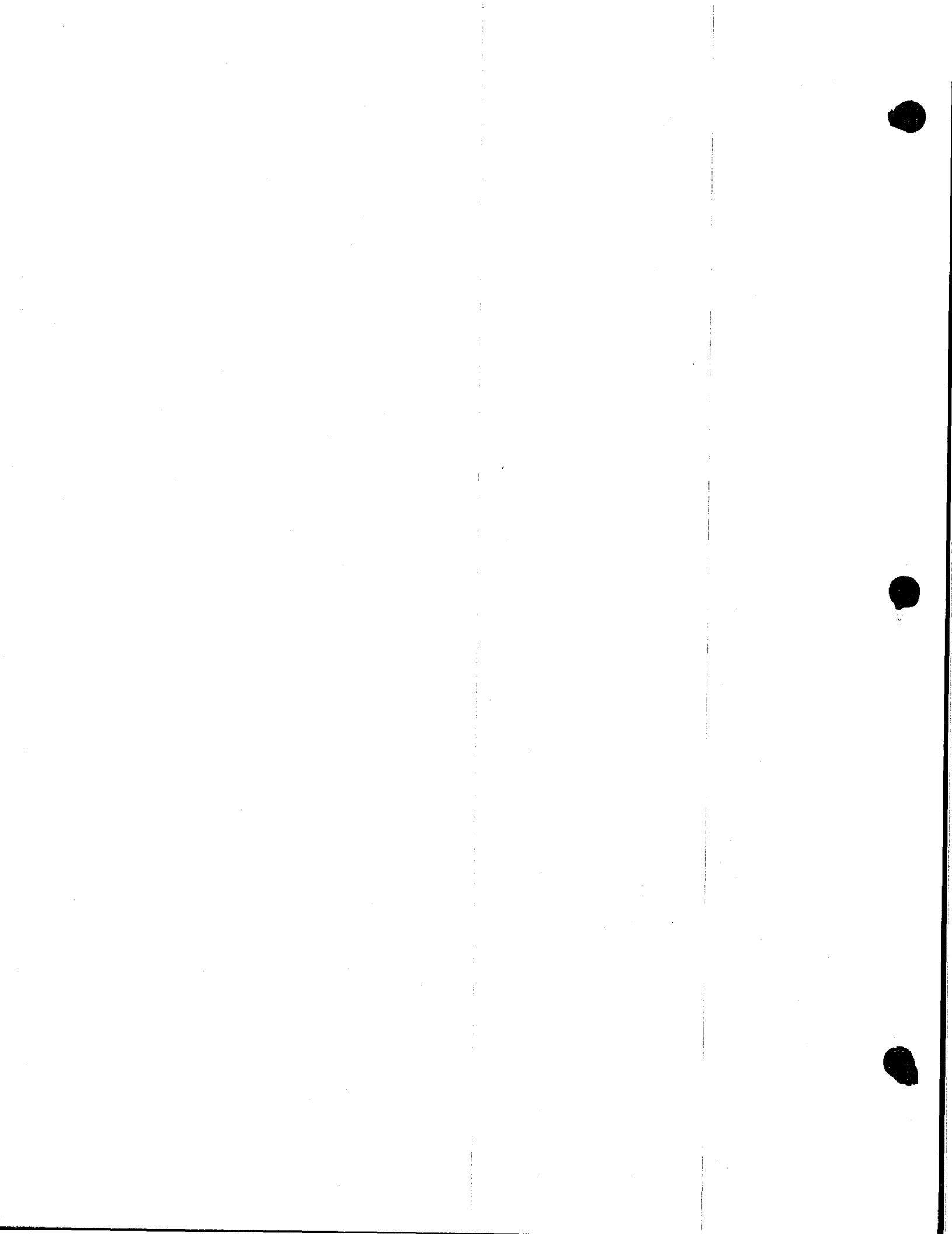
ON NON-CONFORMITY

Those Americans who made a sacrament of pursuing non-conformity were Marxists in the thirties but had become Buddhists by the eighties. The Life of non-conformity was to be lived like a flat spinning stone skimming over the surface of a pond, touching the world only long enough to be propelled upward again in the flight to freedom.

But there is a question whether the non-conformist is pursuing freedom or liberty. (Liberty is getting others off your back, while freedom is getting yourself off your back.) Perhaps the pursuit is for both. There are those like Yevtushenko who were free even where there was no liberty, and there are millions of Americans who are not free in the land of liberty. De Toqueville noted this a century and half ago. Americans, he observed, would suffer no tyranny from government but readily succumbed to the self created tyranny of conformity. This is why here the distinction between liberty and freedom has long been obscured.

But conformity itself is currently being challenged from another source. The issue, usually phrased in terms of the rights of immigrants, is whether to continue to subscribe to the traditional dominant heritage or encourage a diversity built of minority heritages. If the pluralistic view prevails then the tyranny of conformity will come to an end, or at least we shall have the paradox of 'choice ~~among~~ conformity'. All of which makes the task of the non-conformist more difficult, ~~for~~ eclecticism among conformities does not constitute non-conformity. In the future Marxism, Buddhism or any other non-domesticism will no longer be a refuge for the non-conformist. To non-conform in the twenty first century one must create original alternatives, blaze entirely new trails, ~~at~~ which will require high levels of both imagination and courage.

*rev: for selection
of eclecticism from a menu
of conformities does not
constitute non-conformity*



One problem I still have is I don't know what to be when I grow up. Maybe you have this problem too. It's one I have been working on all my life. When in high school I wanted to be in the Navy, I got to do that. At one time before leaving Denver I wanted to have a bookstore, I got to do that. At Rice I decided I wanted to be an astronomer, I got to do that. I wanted to visit Russia, India and Japan, I got to do that. I wanted to see a total eclipse, I got to do that. I wanted to visit special holy places, Jerusalem, the pyramids of Egypt and Yucatan, the sacred islands, Iona and Lindesfarne, I got to do that. But there are many things I want to do yet and time is running short. I want to understand the Book of Job, why bad things happen to good people. I haven't done that yet. I want to acquire knowledge of the physical world, and even more to affirm and expand my glimpses of the spiritual world, I haven't done that yet. I want to somehow break the Wilson gridlock and get through to my children and share with them the love I deeply feel for them, I haven't done that yet. I want to finish putting together my many notes in an understandable form so that they may find some use in other people's lives as they have in mine. I hope I can still do that. What do I want to be when I grow up? After all these years I think I am at last beginning to see what I really want to be. I want to be a bodhisattva. This may take many lifetimes, but it is the only really meaningful vocation I know of. My goal in this lifetime is to get to where I **really** want it. We must remind ourselves, that we always get what we **really** want, and if one is not getting anything it is because one is flipping around between A and Z and is not decided and committed.



AN ENCOUNTER WITH A SAINT

Robin Amis asked, "Have you ever seen a saint?" This question took me by surprise, I had never been asked this before nor given the matter much thought. On the other hand I have often been asked a rather parallel question: "Have you ever seen a ghost?" Certainly most of us have never seen either, but in my experience I have indeed encountered both. While I vividly remember the five occasions and three locations of my encounters with ghosts and the effect all of this had on my view of reality, after thinking about two other experiences that deeply changed my life, I recognized that they involved an encounter with saints. Leaving the ghost stories for another time, I want here to tell Robin Amis, yes I have seen saints.

One of the encounters was in India at Mahabalapuram, an ancient village of temples some built with stone, some carved out of living rock. The other encounter was in Japan, on a short voyage on the inland sea from Hiroshima to Miyajima. Both events greatly changed my life. The Mahabalapuram event is told in the story of 'The Gift of Siva', this is the Miyajima story.

While in Japan in 1959, I felt compelled to make a pilgrimage to Hiroshima. I was told I was unusual, most Americans didn't like to go there. They had a denied guilt over using the bomb. Many stories circulated about curious events the day the bomb was dropped. Dr. Murayama, an astronomer, told us how for some unexplainable reason on the morning of August 6, 1945, when he had reached the station to take the train into Hiroshima, he realized he had forgotten his brief case. He hurried home to retrieve it but when he got back to the station he had missed the train. That is why he was alive. He said many things of that sort, events that Jung would call synchronicities, had occurred to him and some of his friends.

He said as long as we were in that part of Japan we should see Miyajima, where there was a beautiful temple with its famous torii in the water, one of the five most scenic spots in Japan. Murayama, my friend Major John Cochran, and I boarded the small pedestrian open ferry that would take us across the bay. We had just taken our seats when I felt a strange salutary presence, a feeling of peace and confidence. I noticed other people on the boat had turned and were looking toward the dock. I turned around to see what was going on. Coming along the dock was a small solitary bald man wrapped in a monk's robe. He was smiling, not only smiling, but radiating joy. He seemed to be swathed in light and exuded love towards us all. He got on board and bowed to us. Who was this? Coming from this city of radioactive desolation and radiating a totally different energy. What contrast! I asked Murayama who this could be. He told us that this was one of the monks from a nearby Buddhist monastery, probably going to visit the shrine at Miyajima. Never had I seen such a person, never had I felt such a presence. I had to know more about him and how he got that way. That day was the day I realized that I must find *Study* Buddhism.

s-eesaint.wpg

96/02/23

Disk: Last PIVcean

January 8, 1991

UPDATE 74, WPD

In reviewing my work for tomorrow's assignment, I find that I have not updated the record since 1974. I found some old resumes from my establishment days which describe the sort of thing I used to do. I view them somewhat in amazement so much has changed since. However, I include them for the record and will here try to outline what I have been up to since. But before I do that, Let me recount the events Leading up to my departure from the establishment.

In November 1958 we held at our research Lab a very successful international conference on "Hierarchical Structures in Nature and Artifact". One of the results was a widely translated book of the same title. But November 1958 was also the date of the election of Richard Nixon as the 37th President of the United States. Within the next few months the entire research climate, industrial and academic, suddenly changed. The new republican administration was not interested in the space effort, which was a democratic initiative. (Kennedy's A man on the moon in a decade.) So back to weapons. Our Lab's budget was cut to two fifths. (Our annual budget was the same as the cost of two hours of the war in Viet Nam.) The vice president in charge of the Lab asked me to submit a 'totem pole, Listing in order of priority those to be terminated. My first reply was, 'Why don't we aLL take a shared cut and save aLL the jobs'. A couple of days Later the answer came back that the unions (of which the Lab had none) wouldn't Like it. Therefore, terminations not shared cuts. At this point I decided to put my own name at the top of the totem pole for termination. After the shock waves subsided, I got a deal for all who were to be fired and found I had enough to Live on frugally for about a year. I officially, departed from the establishment on August 19, 1969, but taught as adjunct and visiting professor at both UCLA and USC.

Mark in 1974, I finally made a bureaucratic breakthrough at UCLA and succeeded in getting the deans of engineering and humanities to Let me give a jointly sponsored interdisciplinary course entitled, "Machine, Myth, and Metaphor". The course was a success, but the breakthrough was an illusion. The pigeon holes of academia are not only part of the structure of education, but are the quintessence of its substance as well. To violate them would effect a restructuring of our entire world view. Permission revoked the second year.

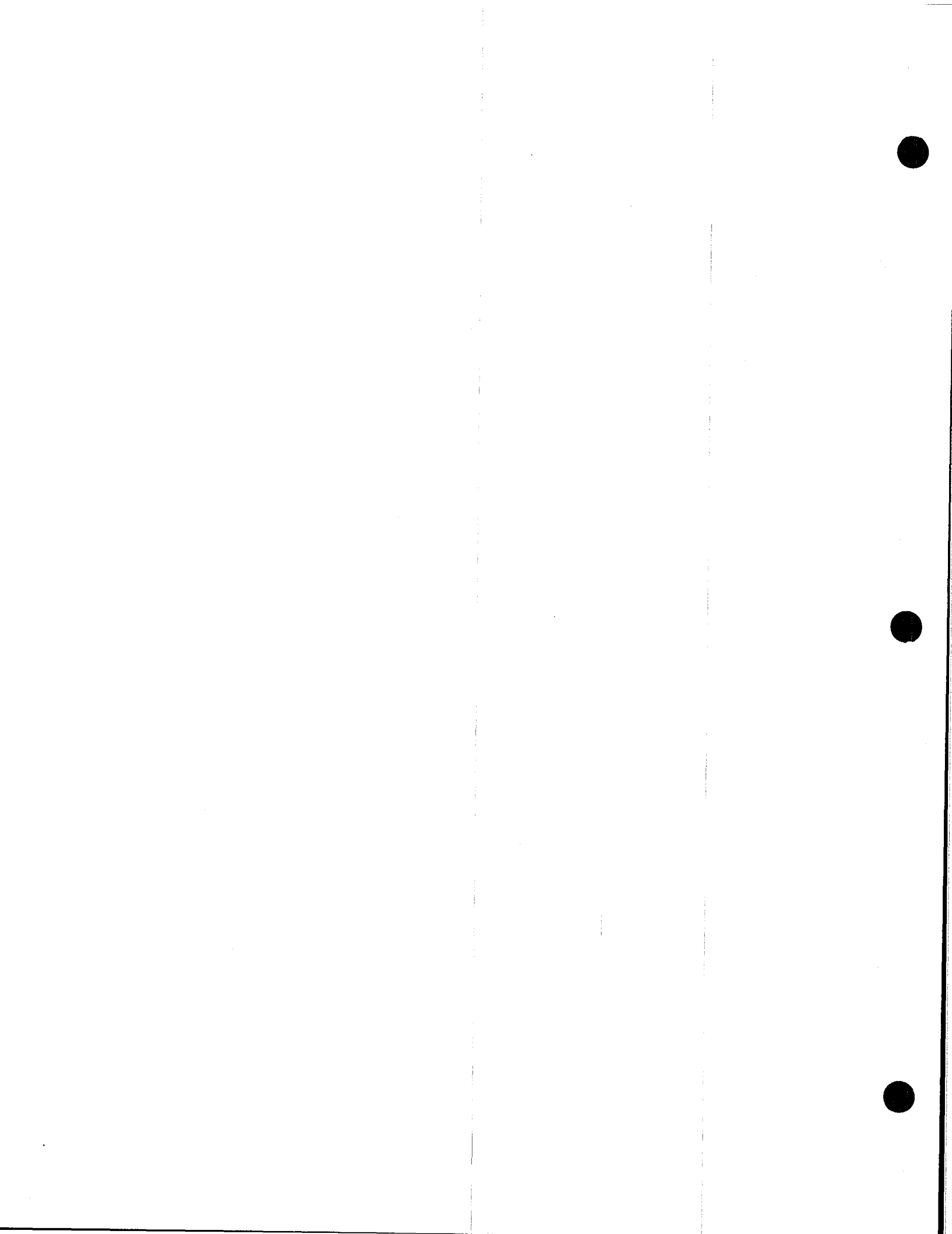
About 1975, I began working on a project with Professor Len TroncaLe at the Institute for Advanced System Studies at CaLPoLy, Pomona. We had a contract with EPA to develop curricula and material for environmental ^{research} education of students grades K through 12. We put together some pamphlets, which after 15 years still seem both advanced and needed. This project got Lost in, political infights over contract renewal and the results are buried in some file in Washington.

After these experiences, I felt that departure from the



establishment was not enough. There had to be a complete break. over the next few years I was a partner in some business ventures: A natural food store, SAGE NATURAL FOODS; a book store, THE GINKGO LEAF; a publication enterprise, EOMEGA GROVE PRESS; and my own consulting operation, RESEARCH PROGRAM STUDIES, in which I became involved in futures studies and worked with many companies as a futurist. Somehow with teaching and consulting ends were met and Life continued.

But it was along about this time that my real break with the establishment began. A vision of the future break, a philosophical break, an axiological break, an epistemological break, and even steps toward an ontological break. Here began my 'scraps of paper, period in which I jotted down on backs of envelopes and other scraps divers and sundry ideas on many subjects ranging from Athroismatics (parts and wholes) to Zipf's Law. Today I am trying to synthesize this material and put it in some communicable form. Not an easy undertaking.



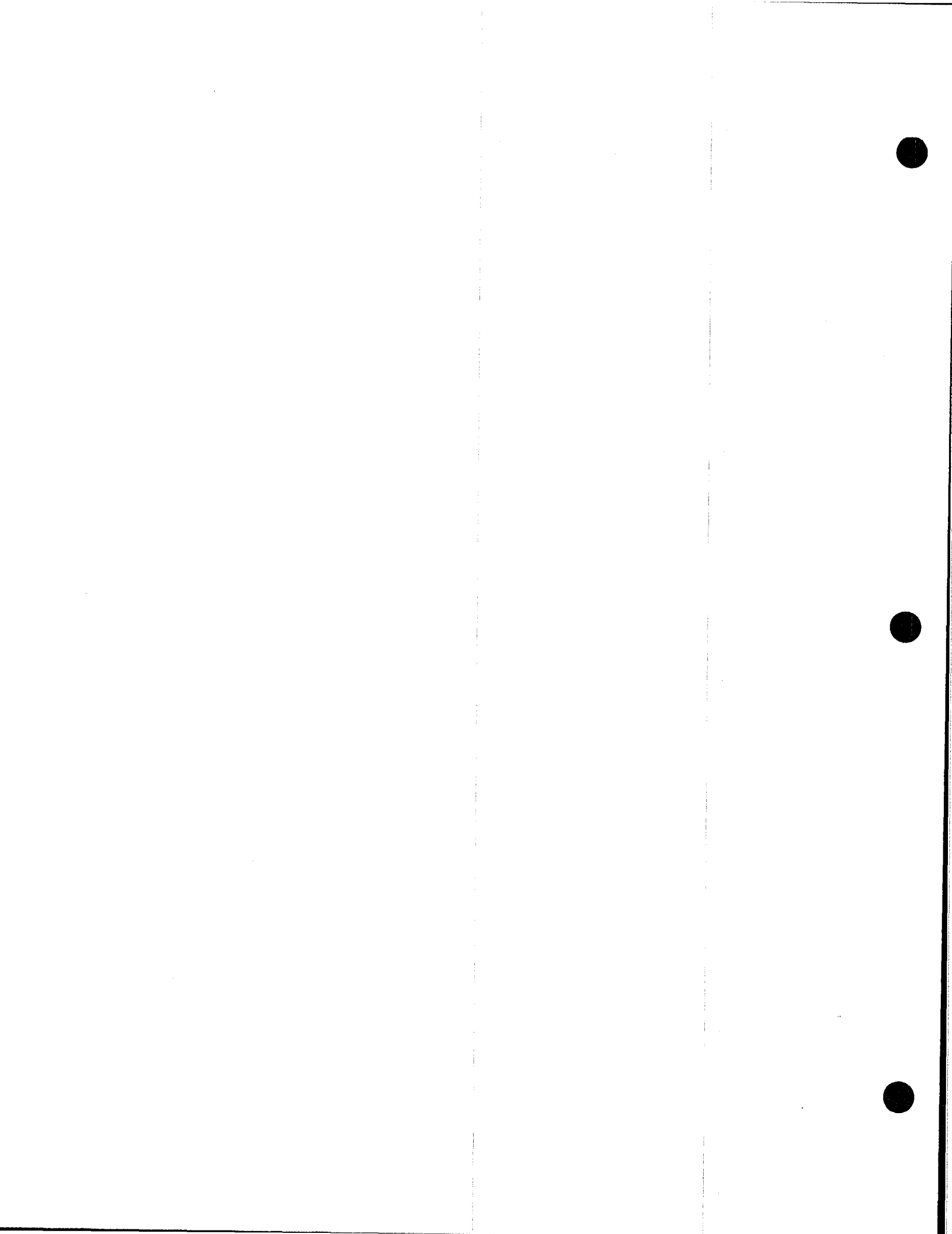
August 1, 1990

THE CALCITE PINNACLES OF MONO LAKE

A few days ago I was in a second hand book store paging through a beautiful picture book that I could not afford to buy. I came across a captivating colored illustration of the strange crystalline rock forms that have emerged from waters of Mono Lake. In some rare environment of salinities and temperatures these stalagmitic spires grew crystal by crystal somewhat like a reproducing organism. I saw in their upreaching towers a manifestation of the same force or urge that motivates living creatures to build beyond themselves grasping for an actualization of something possible but yet to be realized. I then became aware of the background music that subliminally suffused the bookstore. It was a work of Bach, some fugue whose variations seemed to direct the dance of the molecules as they built the crystals. I realized what had captivated me, not the picture, not the music, but their interplay. I had been afforded a glimpse of how the cosmos works, through the interplay of levels, through a resonance of things we have experienced but never related.

This was an example of a sensory experience, sight and sound, inspiring a trans-sensory experience. This was a recognition of two seemingly unrelated things being but facets of a glimpsed higher reality. Now, how could I reconstruct what I felt at the moment of the glimpse? Could I 'defacetize' the image of the growing crystals and the themes of the fugue into an image of their oneness? Having seen the rectangular face of a cylinder and 'heard' the circular end of the cylinder, could I, a two dimensional creature, reconstruct the cylinder itself. I have not succeeded. But perhaps what was important, the glimpse gave me the knowledge that the higher reality exists. And that may be all that I can know for the present.

But there is another glimpse: the importance of glimpses themselves and the role of trans-sensory moments in our lives. It seems as though the most important use of sensory experience is in its creation of transsensory experience. It is trans-sensory experience that builds the soul. I am here reminded of Trungpa Rinpoche's words regarding 'spiritual materialism'. It is well to use candles, gongs, incense, or whatever as an aid in learning to meditate and reach higher states of consciousness, but all such aids should be discarded when they get in the way of further development. They are aids not part of the goal. Thus it is with sensate life, sensory experience is an aid to the development of the trans-sensory, and when the trans-sensory has been secured, the aid is no longer important and is to be discarded. Indeed, it must be discarded whether the trans-sensory has been acquired or not.



Dear Wally,

It has been a long time since I have tried to think about my history since leaving East in 1936. But I shall try to put some of it together, not trying to reach the high standard you set in your electronics history.

When I graduated from East, I had been accepted at Yale and was planning to join Walt Emery there, but Dad was transferred to Houston and it then worked out that a try for Rice would make more sense. As it turned out Rice was probably a better choice for me. I was interested in astronomy, but there was no astronomy at Rice, although the President, Edgar O. Lovett was an astronomer. I signed up for electrical engineering, feeling that it would probably be possible to get a job on graduation. In those days EE was heavily loaded with electrical machinery items, motors, generators, etc. The best part of the course for me was the communications engineering which had the most mathematics. I took extra math courses, substituting for engineering administration and economics. In my junior year I had an endemic infection from teeth, and lost about five weeks. That turned out to be both a plus and a minus. The minus put me into the class of 41 instead of 40, the plus was that I got to take several courses beyond the prescribed engineering curriculum. I took German and French, philosophy and history, and a special course then offered on Islamic history. When I returned to engineering the following autumn, I knew for certain that my future was not in the business world.

I graduated in 1941 with distinction with a B.S. in E.E. I had applied to several graduate schools and was awarded a fellowship at three. I chose Caltech. My fellowship was in mathematics. But I felt that going to Caltech I would be close to the new Palomar observatory and might be able to work my way into astronomy. I received an M.S degree in 1942 in mathematics, then came the war. Having been in electrical engineering, the navy sent me to officers' training school at Fort Schuyler, N.Y. then to Bowdoin in Maine, and then to radar school at MIT. It was here that I ran across the name of Wallace Blake, wondering, but sort of sure it was the Wallace Blake I knew.

I went to Mare Island Navy Yard and worked on installing ship's radar. We sent the cruiser Indianapolis on its way to the Pacific. It was the ship that later picked up the bomb and delivered it to Eniwetok. I often wonder how history would have been altered if the Japanese had torpedoed the Indianapolis before instead of after delivery of the bomb. I was then assigned to an escort carrier as radar officer. We were to participate in the invasion of Japan. But the war ended. No regrets.

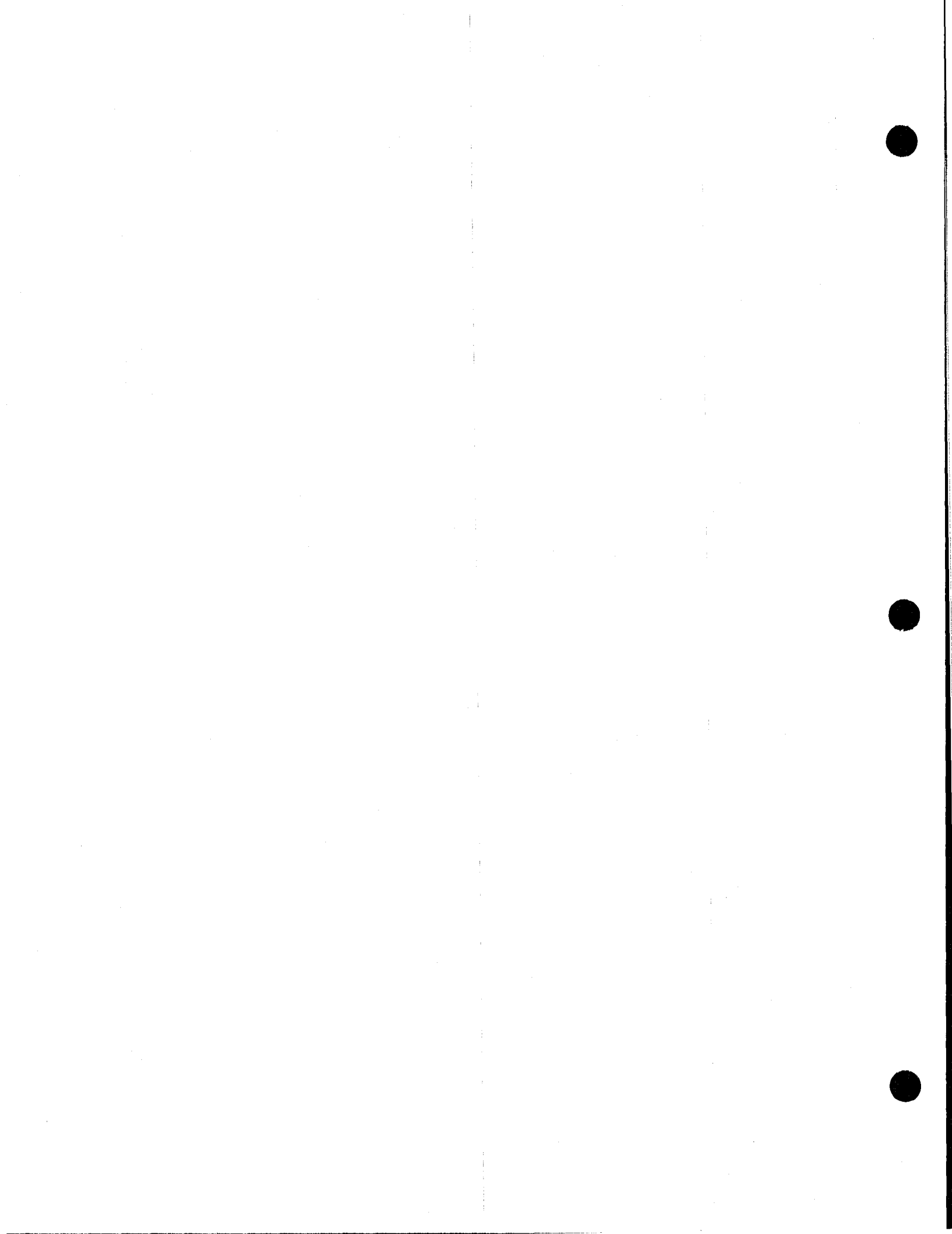
In January of 1946 I returned to Caltech. Astronomy was picking up where it had left off before the war. I was fortunate to get a research fellowship in astrophysics and spent time working at Palomar on a supernova search while finishing writing my thesis in mathematics. I received a Ph.D. cum laude in Mathematics and Physics in 1947. With Jesse Greenstein and Fritz Zwicky, I was the third member of the astrophysics faculty beginning in the fall of 1947. I taught a graduate course in dynamical astronomy although I had never taken an astronomy course in all my life (I still have never taken a course in astronomy). In 1949 I was appointed astronomer in charge of the National Geographic Palomar Sky Survey. We used the just completed 48 inch Schmidt camera to survey the entire sky to minus 20 degree



declination to a magnitude of 19 to 20. I worked on this project for four years, when I was given the chance to be the director of the Lowell Observatory in Flagstaff. I went to Lowell and spent four years mostly on modernizing the plant, since new funds had become available. I liked Arizona, and the observatory, but some domestic problems made it seem best to return to California. I resigned from Lowell in 1957 and joined the staff of the Rand Corporation in Santa Monica. Rand had the project of doing the celestial dynamics for a proposed moon flight. We completed this work and proved its feasibility. Kennedy then made his famous decision, "A man on the moon in the sixties". I stayed at Rand, learning some stuff about computers, and took several extended trips (around the world twice) until 1966. I was then made an offer to be the director of a research laboratory at Douglas Aircraft. I went with Douglas and stayed until McDonald took over and decided to move the lab to St. Louis. I resigned. I then taught as an adjunct professor at both UCLA and USC. I taught a liberal art version of astronomy and cosmology, the philosophy of science, and a course in futures research. I was a member of the Institute for the Future in Connecticut, and the Institute for Man and Science in Albany N.Y. Finally, in 1979 I dropped out. My wife had started a natural food store, then a book store. I did consulting for several corporations and even worked with Disney on some movies. In 1987 the smog finally drove me from Los Angeles. I had been up north to some meetings and found I very much liked Sonoma County. I had a friend who lived in Sebastopol who suggested I ought to look into moving here. I did and I did. My being in Cevactopol had nothing to do with my Bolshevik past. (Incidentally, I was never a communist, only a bolshevik, by that I mean I supported the first three months of the Oktobr Revolution, nothing that happened after that). It is interesting that those whose idealism was seduced by Marxism in the 20's and 30's after they recovered began to turn to Sufism and Buddhism in the 70's and 80's. I am now a Buddhist.

Love,

Al



January 14, 1997

A.G.WILSON Ltjg USNR

When I read biographical summaries of fellow graduates in alumni magazines I am rather surprised that though World War II ended over a half century ago, most devote the bulk of their life's summary to their war experience. Why is it that those three or four years of the over fifty that have elapsed since are the most important years to them? I don't feel that way myself, but maybe that is because I was never in battle, and they say that one of the few times you feel really alive is when at any minute you might be dead. I feel what I did during the war years was probably necessary but it was not a peak experience in my life. Nonetheless, I recall a few of my war time experiences that may be worth recording.

Since initially fathers were deferred, I didn't get into the service until 1944. I joined the navy and spent the first few months in training. First boot camp at Fort Schuyler, then pre-radar school at Bowdoin College at Brunswick, Maine, and finally radar school at MIT. All pretty much routine, but interesting because of the developments in electronics that had occurred in the three years since I had graduated with a degree in electrical engineering from Rice. Only one incident of this period seems worth mentioning. In a radar class a discussion of magnetrons came up. These were new high frequency oscillators that had been developed in England and were classified highly secret. We had to know about them and how to use them but their design and construction was classified. I remember our instructor telling us. "I am not allowed to tell you what is inside the magnetron, if I did I would probably go to jail, but if you really want to know all you have to do is go to the corner news stand and buy a copy of the latest Electronics Monthly, you can read all of the design and engineering details there. Maybe just telling you this will send me to jail, but after all this is war and things get a bit mixed up."

We had heard rumors of a super secret project somewhere in New Mexico. Word was circulated that something was being developed that would end the war overnight. Those of us who were pretty much up on developments in physics had a good guess what this might be. But it was just a rumor. After leaving MIT I was assigned to the shipyard at Mare Island, California. I helped with the installation of radar equipment on various vessels. One Wednesday we were told that the coming week end there was going to be no day off. We were to work around the clock to upgrade the radar on the cruiser USS Indianapolis which was to arrive Friday and be out by Monday. She had a super secret high priority special mission and all else in the shipyard was to be subordinated to getting the Indianapolis quickly to sea. Well

When I was in the navy, I felt I was fighting Hitler and Tojo, not Germans or Japanese, who were like me preferring to be home with our families doing productive work.

But we were all under the orders of clashing political egos who had spun our identities into theirs.

July 30, 1945

The USS Indianapolis, which had just delivered key components of the Hiroshima atomic bomb to the Pacific island of Tinian, was torpedoed by a Japanese submarine. Only 316 of the 1,196 men survived the sinking and shark infested waters.

Timian²
everyone now knows what we didn't know at the time. The Indianapolis was to pick up an atomic bomb and deliver it to Eniwetok. After delivering the bomb the Indianapolis was torpedoed by a Japanese submarine with great loss of life. I have often wondered how ~~the~~ history of ~~the~~ war would have changed had the Indianapolis been torpedoed while delivering the bomb instead of afterwards. Maybe not just the history of the war, but even the history of the twentieth century.

Later I was assigned to the Naval Shipyard at Long Beach. Two events of interest occurred there. The war in Europe had ended and the U.S. and the Soviets divided up what was left of Hitler's navy, namely two ships, the pocket battleship Deutschland (renamed Lützow) which the Russians took, and the cruiser Prinz Eugen which we took. The Prinz Eugen was brought to Long Beach and placed in dry dock so that every facet of its construction and gear could be studied. Nothing impressive was learned, but a few things that seemed strange to us showed up. We could not understand why the Germans would locate a pump which could easily need repairing behind a boiler in such a way that it could not be reached without removing the boiler. This didn't look like the top notch German design we had all learned to respect. I asked the executive officer why they had placed the pump where they did. He said it was a matter of optimizing use of space. But I objected with the necessity of repair question. He said, "You must not forget the context in which all the design decisions must be made. In our navy we design knowing that the lifetime of the ship will be shorter than the lifetime of the pump." In further exchanges with the Prinz Eugen's officers, an interesting piece of information emerged. When Admiral Lütjens took the Bismarck into the North Atlantic in May 1941, the other ship in his squadron was the Prinz Eugen. The British intercepted the German squadron and in the ensuing battle the British battleship Hood was blown up. The officers on the Prinz Eugen claimed it was a salvo from their ship, not from the Bismarck, that sank the Hood. However, no one from the Bismarck was around to counter their claim.

The second project I was assigned was to assist in the preparations for the Bikini bomb tests. I assisted with the design and construction of the small radio controlled "drones" that were to enter the radioactive area after the explosion to gather data. I did not get to accompany them to the island. But heard they had functioned as required. The whole project was predicated on the question asked by the Chief of Naval Operations: "What can the bomb do against our ships?" He asked the wrong question. The pertinent question would have been: "What can our ships do against the bomb?"



Subj: **Re: A washingtonpost.com article from: john.demott@verizon.net**
Date: 2004-05-22 9:40:59 PM Central Daylight Time
From: john.demott@verizon.net
To: NagaCoatl@aol.com
Sent from the Internet (Details)

Dedication of the WWII Monument

TIME slams the memorial as "banal." It ain't no Vietnam Wall. But style could be secondary.

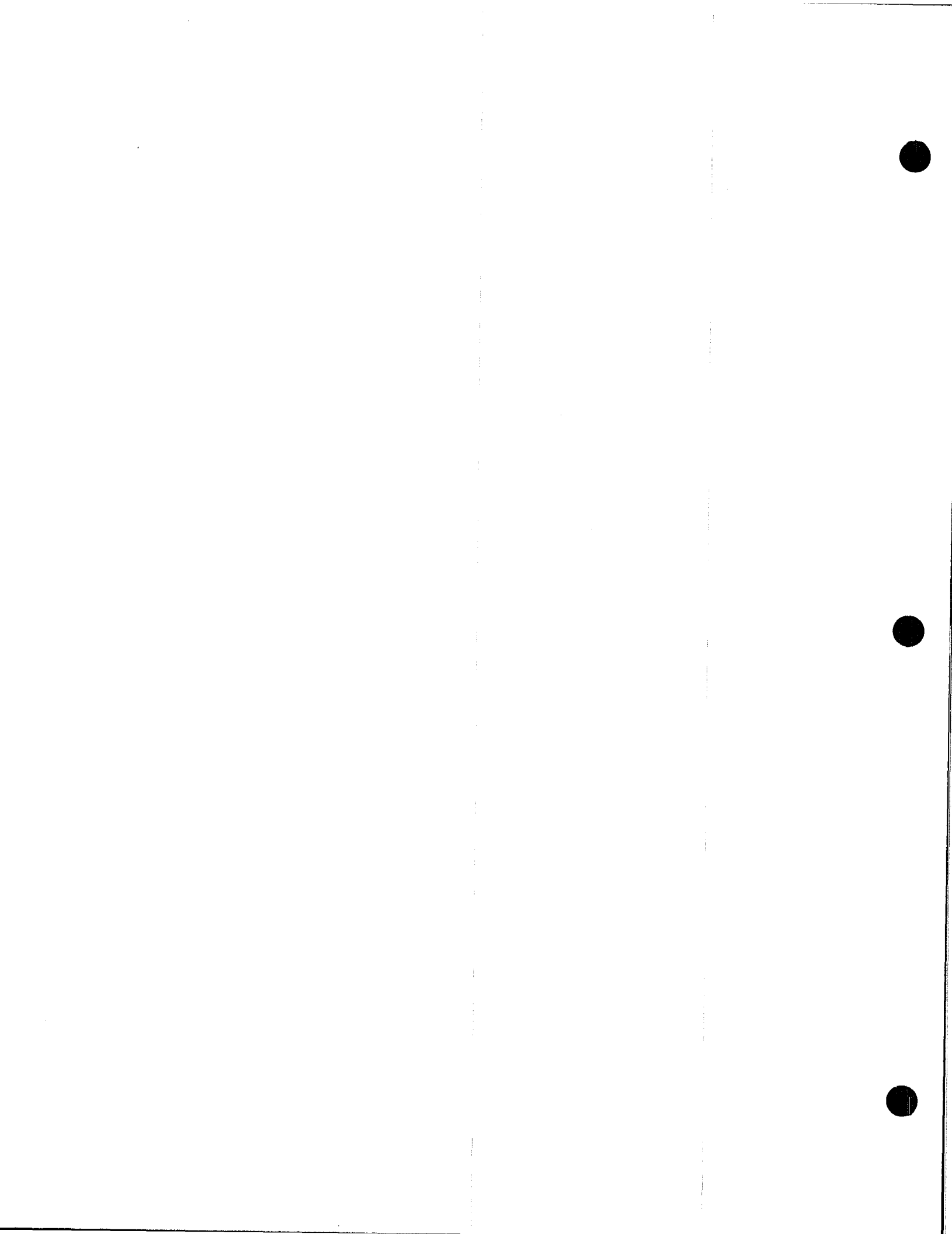
But I will see it and I will report to you when I see you.

On May 22, 2004, at 9:52 PM, NagaCoatl@aol.com wrote:

> I only met the enemy once in WWII. I was at the San Pedro Naval
> Shipyard when one of the two remaining ships of Hitler's navy, the
> Prinz Eugen, was brought in. We wanted to learn everything possible
> about the ship, so a technical inspection crew was sent to study their
> radar, sonar, etc. I was selected both for radar and because I could
> understand some German. We had a successful run, learning a great
> deal about der Fuhrer's Kriegsmarine. Aside from the technical
> aspects, I remember a conversation with the officers in the ward
> room. They were all anxious that we should know that it was the Prinz
> Eugen, and not the Bismark, that sank the Hood. They may have been
> right, but then there were no survivors of the Bismark to dispute
> them.

>
> It was a totally different war then. Our efforts enhanced America
> militarily and morally. I wish I could be there for the dedication of
> the monument.

>
> B.A.



January 14, 1997

THE FIRST TIME I SAW HUBBLE

Recently, probably because of the fame of the telescope ^{Edwin} named for him, books and other biographical material about Hubble himself have appeared. There is no question that Hubble is the most famous astronomer of the 20th century. Not every astronomical discovery gives us an entirely new view of the universe. Copernicus () took us from a geocentric to a heliocentric universe. Thomas Digges (d 1595) recognized the stars as suns and as being spread through space rather than located on a single sphere. Thomas Wright () perceived the fuzzy patches in the sky as other milky way systems. Harlow Shapley () measured the extent of the milky way. Edwin Hubble () proved the external nature of the spiral nebulae and discovered the expanding universe. But such momentous discoveries are never the work of one man. There are many whose names are hardly known who contributed to the discoveries, or perhaps made them first. But Hubble is famous not only because of his role in important discoveries, but because Hubble knew how to play the role of celebrity.

The occasion of my first meeting with Hubble was in 1946 at the first seminar at Mt. Wilson Observatory following World War II. Hubble and several other astronomers had just returned to Pasadena after war time service. Hubble called the seminar to discuss the state of research, to review where we were when interrupted by the war, and to plan projects needing to be finished and others needing to be initiated. Much of the planning was in anticipation of the completion of the 200 inch Palomar telescope.

The seminar was held in the old library at the Santa Barbara street offices and included not only the staff of the observatory but physicists and astronomers from CalTech. I was still in the navy stationed at the San Pedro naval shipyards, but fortuitously was able to attend because of the timing of the seminar. Hubble called the meeting to order and proceeded to outline in considerable detail the state of knowledge of extragalactic astronomy. I was fascinated with the scope of the problems to be solved and with the implications of the answers when forthcoming. Was the universe open or closed? Would it continue to expand forever or collapse back for continuing repeat performances? When Hubble had finished he said he would appreciate any comments. No one said anything immediately, but after a half minute Fritz Zwicky stood up and waving his arm at the blackboard said, "Dot's all wrong." and sat down.



The room fell silent. There were suppressed coughs, people looked at the floor. Hubble turned red, slowly removed his pipe from his jacket pocket, took his time lighting it, took a couple of puffs, then said, "Perhaps Professor Zwicky would favor us with some amplification of why he thinks this is all wrong." Zwicky then stood up and went through item by item pointing out assumptions that had not been tested, measurements that were unreliable and should be repeated, and raising some questions regarding the Doppler interpretation of the redshifts. Hubble listened and when Zwicky finished, rebutted some of his remarks. A dialog ensued in which a synthesis of ideas emerged. Everyone present, Hubble, Zwicky, and the others all profited by the exchange. I was very impressed. We had witnessed a clash of egos, and Hubble had proved his caliber by transcending the provocativeness in the situation and turning it to exploratory discourse.

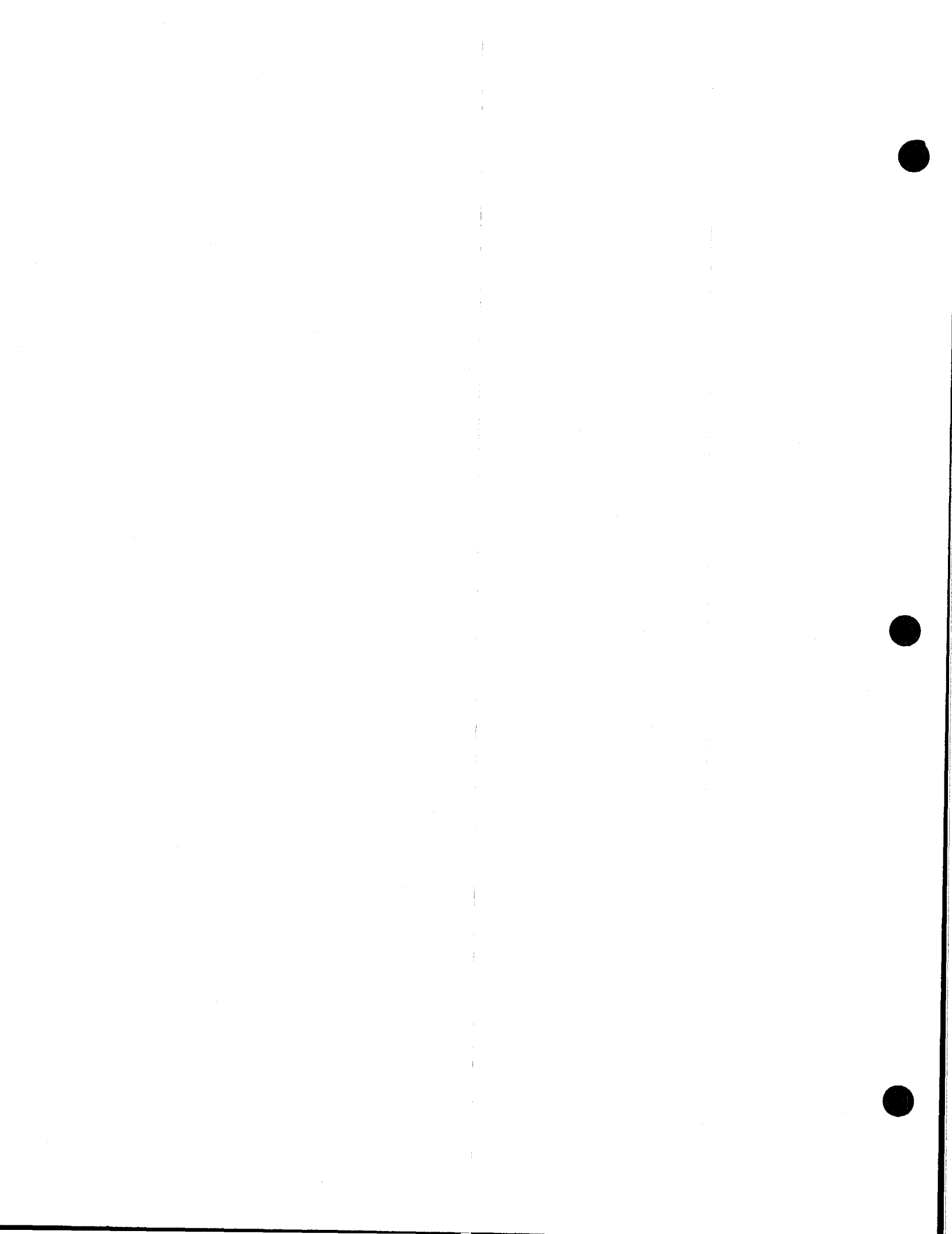
The biographical material coming out on Hubble emphasizes his huge ego. But this one event showed me that whatever the power of his ego, when research itself was involved, Hubble could subdue it to second place.



April 17, 1997

As much as I don't like to admit it, I fear that I am really a bigot. There are people against whom I am very prejudiced. This has nothing to do with the color of their skin, it has to do with the color of their car. I am keeping statistics and I find that there is a developing correlation between people who drive red cars and people who should not be driving at all. (I believe the CHP also has some statistics pointing in this direction.) The predominant number of tailgaters I have encountered are in red cars. These people, like the Red Baron of World War I fame, suddenly appear immediately behind you on a road that was completely empty only a few nanoseconds before. They come up to within a few centimeters of your rear bumper and hope to threaten you off the road. I am a strong believer in the Mikado's injunction: "Let the punishment fit the crime". The proper punishment for these people is to have their licenses suspended until they work 101 physics problems involving speed, distance, kinetic energy, braking distance, ^{coefficient of friction} friction, wet pavement, ice, etc. The other day I saw in the mall a bumper sticker that reads, "The closer you get, the slower I go." I like this. You are behind so you chose the distance at which you wish to follow, but I am in front and can adjust the speed to conform safely with the distance you decide on.

At breakfast this morning my check came to \$5.31. I like to have some quarters to use in the newspaper vending machines, so I gave the young lady who was cashiering \$6.06. She looked at this and said, "What are you up to?" I said I need some quarters. She became very confused and started counting out pennies and dimes, then got further mixed up and took out a dollar bill. Then she threw everything back in the cash register and started over. She got the first decimal place right on the second try--no pennies. I then got four dimes, two nickels and a quarter. I then asked if I could exchange two dimes and a nickel for a second quarter. I guess I now have two quarters, two dimes and a nickel so I am OK with vending machines that take only quarters or take anything that adds up to 50c. But what I am wondering is, how do these vending machines count money so easily when we humans have so much trouble.



WHEN I GROW UP

Here I am almost 79 years old and I still don't know what I want to be when I grow up. This has been my problem all of my life. Now at last I realize the facts are: I am never going to grow up. So why worry about what to be. In one sense I am still very much a child. I "play" at many games, whatever comes to my attention, whatever is thrown into my cage, like a child wandering through a garden, examining a flower, a bug, a stone. I have been accused of trying to analyze everything. To me every part of the world is filled with wonder and the wonderment would cease if we were to write a last page. On any particular day I can get deeply involved in some project and lose account of time and what needs to be done. But then another project comes up and my attention switches, leaving the first project suspended in mid-air. My note books are filled with suspended in mid-air projects. My cognitive space is like an atmospheric space filled with balloons of many sizes and colors, but all just hanging there, none going anywhere in particular, no finished products.

Perhaps the trouble is I do not have deadlines. But I hate deadlines. I truly feel that nothing should ever be closed off, it should always be left open ended. In terms of my BREAD-WINE metaphor, I am awash in wine, always dissolved and dissolving, always open and opening. Too long now I have frolicked with Dionysus and shunned Apollo. Paradoxically, one of my favorite games or projects is the Apollonian construction of infrastructures in which to order and organize everything. But this too is suspended in mid-air.

The trouble is that we cannot consume an unfinished product. The unfinished has no bottom line; how is it to be evaluated, communicated, marketed? The unfinished creation is of value only to itself, and to its partner, its creator. By what right does a finite mortal indulge in such a caper. Is there not a responsibility to the natural order, to the culture and society that gave him the toys with which he plays? Yes, and I feel this responsibility deeply, but another responsibility seems to be even more important: The responsibility to the internal integrity of the product, a responsibility that demands continue until the product itself says, "I am finished". The responsibility of the living to that which is yet to be born. A higher responsibility than to the demands of the market place of the day.

THE RESPONSIBILITY TO THE SEARCH

"We can, sometimes with considerable difficulty, rationalize any behavior no matter how anti-social, illogical, or perverse."

Li Kiang

LPGROWLP.WP6

97/04/30

~~The~~ unfinished product is of value only
to itself and its creator.

Since we cannot ascertain any "value" to
the universe, it being only of value
to itself and God, we must conclude
it is unfinished.

Some Recollections

A good many years ago, sometime in the sixties, my wife Donna and I were employed as astronomers at the RAND Corporation. One day a group of Quakers appeared outside and picketed the building denouncing war and war planning. We felt this was a misunderstanding of what was going on inside RAND, so we arranged for them to come in and have a dialog with some of us "warmongers".

Thus began a series of unpredicted events that are still unfolding. To mention only a few: After the first three meetings between the Quakers and Randites we found that we were in fundamental agreement on everything but our epistemologies. We agreed on values, the state of the world and the steps toward peace. We disagreed on modes of validation. The Quakers reasoned largely from anecdotes, generalizing in non-logical steps to their conclusions. The Randites took a deductive approach arguing from some basic principles. But the conclusions both sides reached were the same.

Out of these meetings several deep and lasting friendships developed, that in turn resulted in meetings with many remarkable men. For one Dan Elsborg had several discussions with us before he went back to Washington and wrote "The Pentagon Papers". For another through a series referrals Buckminster Fuller spent a few days consulting with us. And later there were dialogues and conferences with Lancelot Whyte and E.F. Schumacher. It appears that ideas have lives of their own and we humans perform the function of bees pollinating and spreading them. Much of what had been generated in the RAND-Quaker dialogues later became common intellectual currency.

One of my fondest memories coming out of the RAND-Quaker dialogues is that of a great, but totally unheralded, intellect. A man rare in any century but particularly in ours. I am referring to Henry Geiger, a Quaker, a Theosophist, and the publisher, editor, and writer of a weekly (believe it or not) newsletter on philosophy called Manas. He had many connections with thinkers all over the world and particularly with certain groups in India whose teachings Geiger well understood, (but which Blavatsky confused). All of this added up to Henry Geiger's being an authentic renaissance man. Saying you knew Henry Geiger, or were a friend of his, opened many doors all over the world. How can a man be privately so widely known and publicly never heard of. It is part of the mysterious way in which the truly important things ~~that~~ take place in the world, ~~operate~~.

cf
memes



~~THREE BEINGS~~⁰⁵ ~~TWO~~ SQUIRRELS AND ~~A~~ MAN

Sometimes certain events impress themselves indelibly on our memories becoming clues to what we feel our experience on earth is really about. Such was an event that occurred some forty years ago that keeps coming to my mind making associations and raising questions. Even though it was, and still is, a very common event, one we ignore every day, this particular instance somehow struck me in the heart and made me face what we all sooner or later must face.

Returning home one afternoon after a ten day observing session at the Palomar Observatory, I was driving along a shady portion of the road when I observed up ahead two squirrels in the middle of the road. One was lying flat, evidently just recently hit by a car. The other was standing on its hind legs by the head of its dead companion, motionless, staring into the distance, totally oblivious to ^{my} the approaching car. My mind was taken over by the scene. I was no longer just observing a moment of pain and tragedy, I was experiencing something that is simultaneously personal and universal.

It has been said that Man is the only creature who is both mortal and knows he is mortal. This particular piece of knowledge is a knowledge we seek refuge from all of our lives. Here, standing upright was a creature, bewildered, not sharing our fatal knowledge, incapable of understanding what had happened. "Why don't you answer my call? Why do you lie there? Why don't you move? Aren't we going back to the woods together?" And here, was this observer, also bewildered, but knowing what had happened, yet trying to digest the full import of this ubiquitous event. Whose pain is greater, those with no knowledge of death or those who carry that knowledge? Was this the real knowledge we acquired in the Garden of Eden, though it is usually called knowledge of good and evil?

In this event I saw again the pain in the countless departures not only from life, but in life. The last embraces in the bus depot, the train station, the airport, off to war, those departures that knew not whether there would ever be a return. Human suffering is not just from our desires and aversions, as a great Sage ^{once} taught, there is something implicit in our very condition, going beyond all intention, that reveals a deep unfilled well of longing in our being, maybe best phrased, "Aren't we going back to the woods together?"

Squirrel.wp6

97/06/22

ABOUT DUCKS AND QUACKERY

A few weeks ago, I believe it was September 20, Rupert Sheldrake was in town and we went to hear him review his recent book on Dogs. He related many curious anecdotes regarding the "telepathic" powers of dogs and cats. According to his stories, animals can not only pick up on human thoughts at a distance [eg master's or mistress' intent to return home at an unusual time] but can perceive human intentions [eg we will be going to the vet]. Many of these cases were done under strict controls and could therefore be considered scientific results, some even being repeatable.

Yesterday [October 7] I was in Rohnert Park and driving past a large artificial pond noticed numerous water birds—ducks, geese, even a couple of swans—out on the lawn. They were scattered, but in groups, resting, some sleeping. A great photo-Op! Being about 1:30 pm I guessed they were taking their afternoon siesta. I got my camera and approached carefully. They were unconcerned and indifferent to my wandering among them shooting pictures. I was grateful to all the humans whom they had previously encountered for engendering in them such an attitude of trust. My picture taking didn't disturb them, except here and there one or two would wake up look me over and go back to sleep.

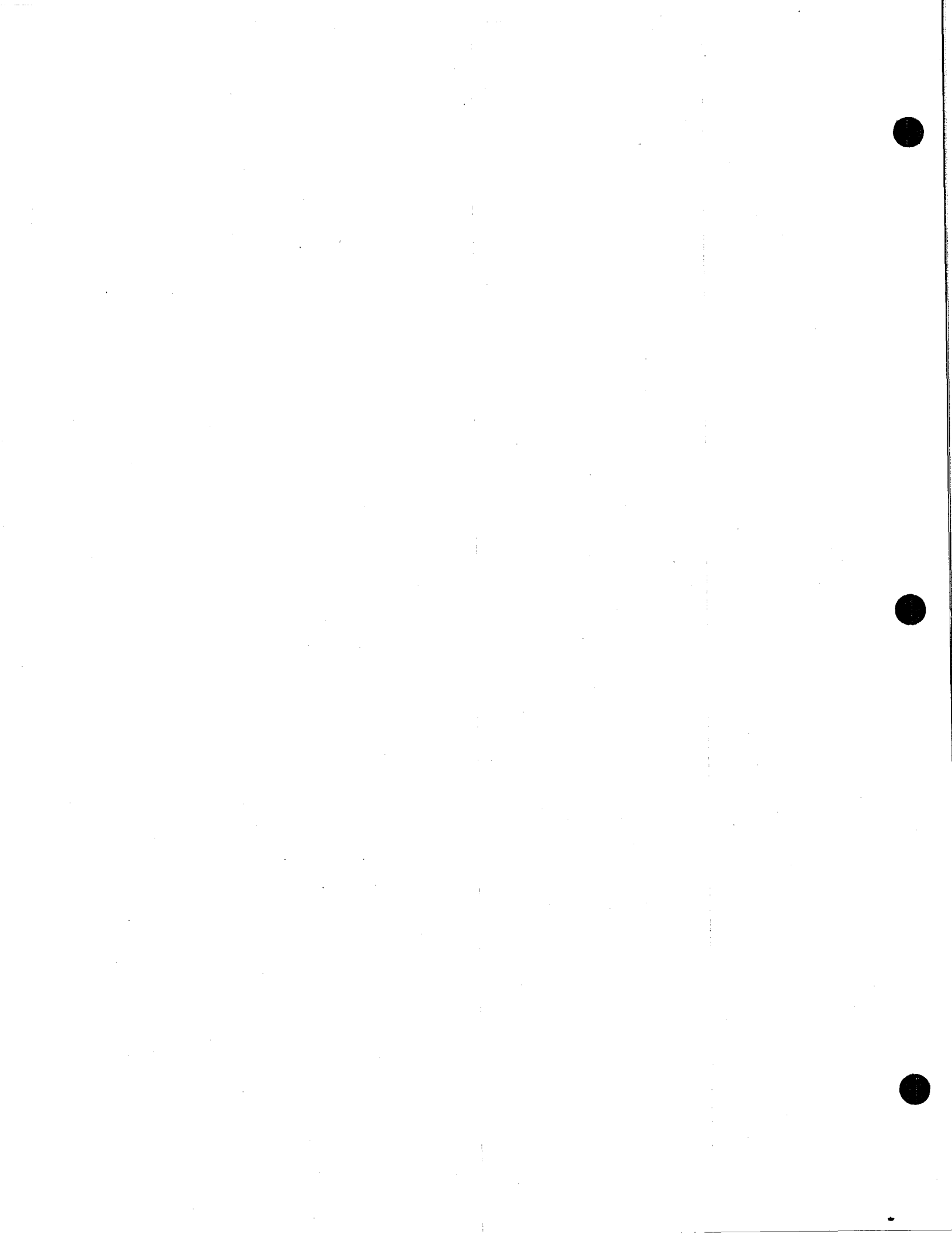
On my way back to the car after taking about a dozen pictures, I felt that I should thank them for being so cooperative. So I stopped a short distance away, turned toward them, stood silently and sent them a mental message, a silent blessing of love and oneness. Almost immediately a great many of them got to their feet craned their necks up and began clucking and quacking. A great chatter seemingly in response to my silent message. After a short time they fell silent but still stood erect as though waiting for me to reply to their response. I left, but later looking back saw that they had settled back to their siestas.

My physical presence did not disturb nor arouse them, but my mental message did. Is there some medium by which living organisms can communicate but is unsuspected by physicists? It is not sonic communication nor is it making use of some part of the electromagnetic spectrum. Is it possible that there may be some entirely different "spectrum" that emerges only at the level of complexity of life? If so, some animals have developed it far more than have humans. For those who drive on the freeway the coordinated movements of flocks of birds and schools of fish is nothing but awesome. .

Legend has it that at least one human, St Francis of Assisi, mastered this mode of communication. So, with humility perhaps humans can learn from our animal brothers and sisters something about ourselves we have long ignored.¹

By the way, What is the origin of the term "Quackery"?

¹I checked, October 4th, not October 7th, is St. Francis' feast day



THE CAT AND THE WITCH

CF 00 # 59

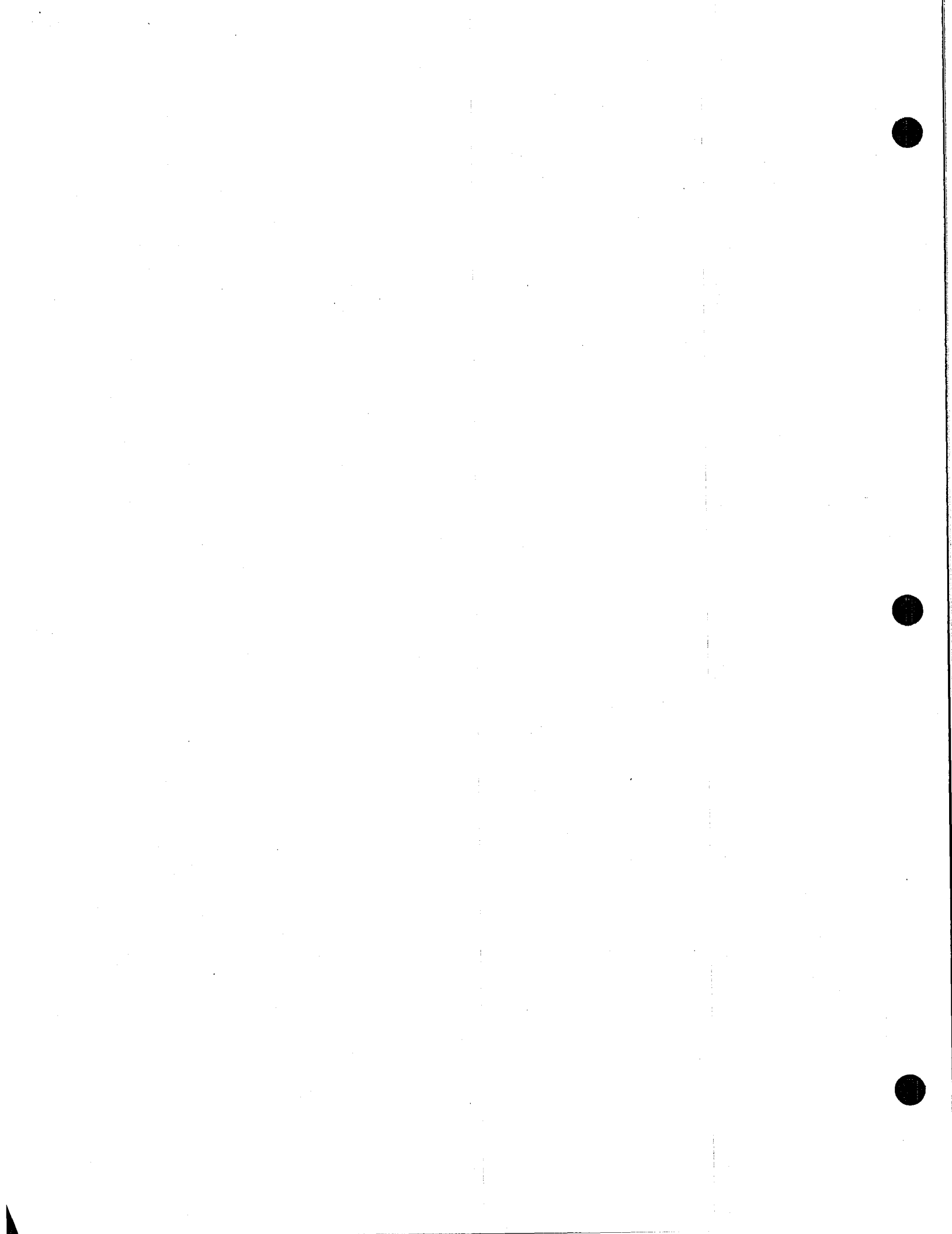
Our neighbor's cats like to spend time in our yard. Perhaps because there are cat attractions like birds and gophers. This morning I happened to glance out the window and saw the neighbor's white cat relaxing and sunning itself. As I watched, the cat suddenly became alert and began looking about. It seemed that as soon as I began spying on her out of the closed window she knew something was staring at her. She looked in my direction and stared back. Then after a few moments, feeling no danger, returned to her sunning.

I was reminded of a similar incident that took place decades ago during WWII when I was in naval radar training at a school in Brunswick, Maine. Three or four of us were in a room on the second floor of a dormitory overlooking part of the campus. We casually looked out the window and saw a bent over old woman walking along a path. "That is Mrs. Coffin", said one of the men who was local to the area. "They say she is a witch". As we watched, she suddenly stopped and starred about in all directions. Then she left the path and walked over to a large tree and slowly walked behind it disappearing from our view. When she suddenly re-emerged she was starring directly at our window. We felt some embarrassment and quickly left the window. "You must be right, a witch should be able to do that sort of thing, get a line of sight on us by finding that behind the tree she could not feel our stare.

I remember that our high school physics teacher told us that in ancient times the theory of vision was based on the idea that something emanated from our eyes and "illuminated" what we were viewing allowing us to see it. He laughed and said now we know better, "Nothing goes out of our eyes, it is the photons reflected from an object that enter into our eyes that allow us to see." Today, I would not laugh at an ancient theory. Al Hasan¹ the Arab philosopher who supported that theory, was really describing something near to what we call radar. Seeing by sending out a wave and noting its reflection. Bats and several sea creatures do this with sound waves. With sonar, we use sound to 'see', and with radar we use e.m. waves to 'see'. But this does not tell us what medium cats and witches employ to inform them they are being seen.

Bio-evolution seems to encourage the development of anything that works: sonar for bats and dolphins, acute olfactory sensing for canines, etc. And cultural evolution seems to encourage the development of any theory that explains: space curvature in physics, DNA in genetics, etc. But these are only special cases of what works or explains. There may exist many alternatives some as good, some even better. It seems most likely that cats and other creatures have developed sensory approaches that we have left totally undeveloped. Each organism selects from the totality of possibilities particular solutions that suit their needs. Then their needs in turn are shaped by the selected solutions. It follows that we must respect all creatures for their particular skills, just as we respect the practitioners of different sports for their varying skills. Look on the world as do native Americans. Honor the wolf, the eagle, the buffalo, the coyote. [And include the cat and the witch] In their specializations they make visible to us a spectrum of alternatives that should shame our human chauvinism.

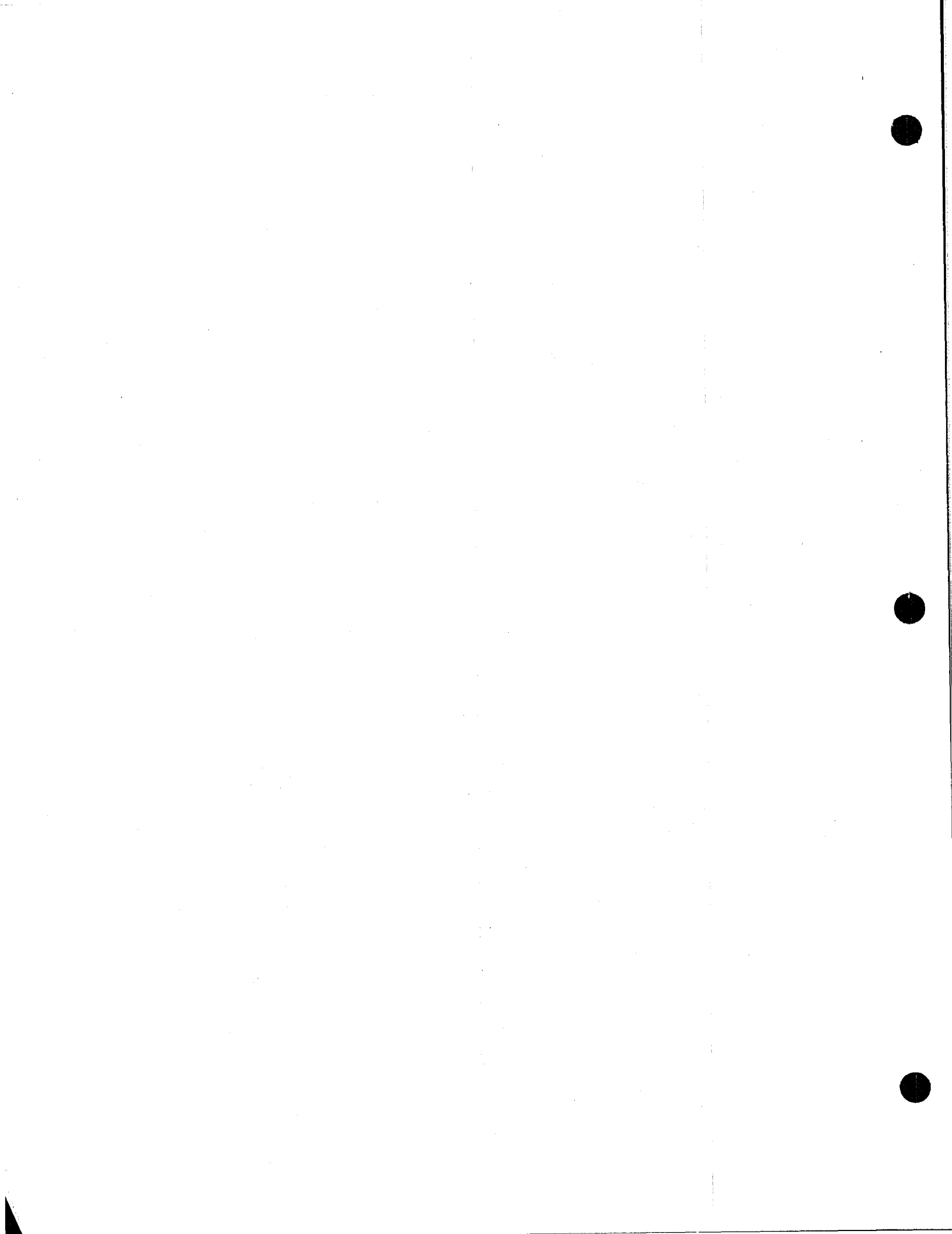
¹Al Hasan, (965-1039), Kitab al-Manazir, A Treatise on Optics



BOOKS

Yesterday I again bought some books. There are now over 5000 books here and I have read but few from cover to cover. Yes, it is a reference library and I refer to scores of these books every year, but there must be some other reason for this library. It seems to be about something that many bookophiles have said about libraries, about being surrounded by books. When we are in a library, when we are surrounded by books we are in some sense in the presence of those who wrote them. We feel their thoughts even when we are not actually reading them. It is as though a collection of books creates a thought field that somehow affects the thoughts that come into our minds. We would not think these thoughts were the books not there. And I believe this to be more than symbolic. It is as though the books are living cells and in aggregate become an organism having a mind that communicates to us. Buying a book by a certain author brings the power of his/her mind into the mind of the aggregate, enriching and extending it.

There are many definitions of information, but all seem to hold that information requires some physical substratum for its existence, be it stone stela, scrolls, books, tapes, disks, or the molecular configurations of a brain. Information can be impressed on sonic or electromagnetic waves and transmitted over space. It can be inscribed in the patterns of fossils or artifacts and transmitted over time. Disembodied information is unknown, but may it not exist in a non physical world such as that of Plato's archetypes? May there not be fields of pure thought containing information radiated both from sources encapsulated in physical form and from sources vibrating in some non-physical platonic space? I feel something like this is valid and that information oscillating between its physical and non-physical manifestations creates a non-localized entity we call mind. And that there are innumerable minds, not only minds associated with individuals, but collective minds and higher minds of many levels, all radiating thought through space and time. We gain knowledge and wisdom whenever we learn how to access these higher minds.



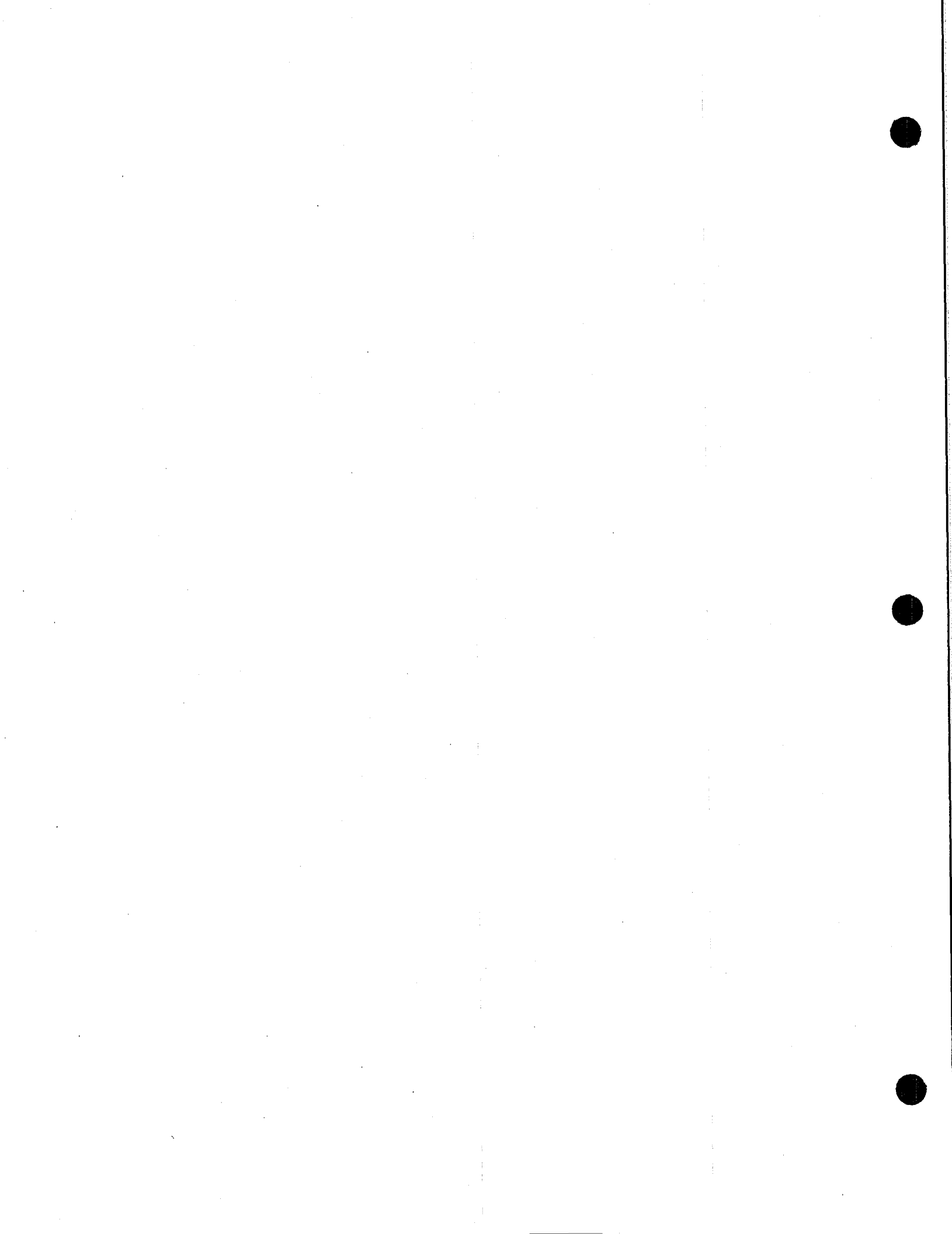
A FUNDAMENTAL FACT

Years ago when I was a freshman at college, I made an important discovery. I found that when I could not understand something I read in a textbook, having at hand a second textbook covering the same topic would most of the time clarify the subject. The difficulty was not in the subject matter, but in extracting the meaning from the authors' particular sentence structure and word choice. This lead me to believe that important matters should be said in as many ways as possible, for every particular way of representing an idea truncates and distorts the essence of the idea. Even when said in many ways the richness of some concepts can be but partially conveyed.

The story is told that when Umar conquered Egypt in the 7th century, he was asked what should be done with the great library at Alexandria. His reply was if books disagreed with the Koran, then they were heretical and must be burned. If books agreed with the Koran, then they were superfluous, not needed, and also should be burned. So, burn them all. And it was done. Burning and banning books disagreed with is still being done today by Umars in all countries. But excluding the books that might be agreed with is also being done by modern Umars, (commonly known as fundamentalists). For them one book is sufficient. All that is needed is contained in the one *Book* and to look elsewhere is unnecessary. Their fallacy lies in ignoring the fact that every single representation of an idea truncates and limits it.

Do these people believe we should listen only to the music of one composer, read the poetry of but one author, look at the paintings of but one artist? The richness of any composition is enhanced by a context of varied compositions. Only in difference is essence revealed. We cannot understand ourselves until we have many relationships. We cannot understand our own culture until we live in a different culture. We cannot understand our own religion until we study several religions. [And now NASA is pushing for the exploration of Mars in order to better understand the earth. They have it right.]

So I say to the fundamentalists: Even if it is all in one *Book*, you will never begin to understand what it is saying until you put it in juxtaposition with other *Books*.



ELITISM ?

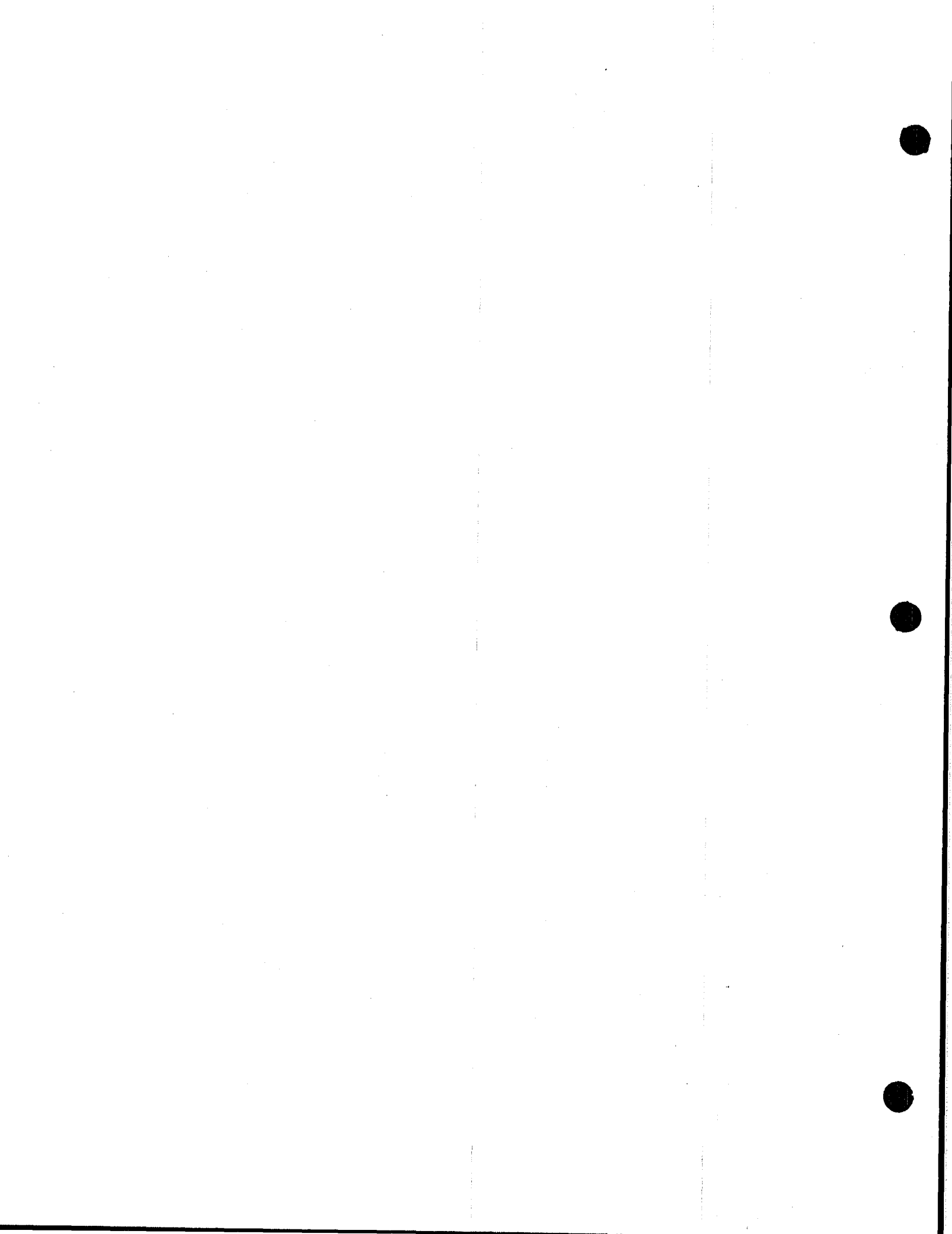
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Although I have met or been in the presence of many important persons, I never felt the least attraction to their supposed charisma or charm. Some radiated an aloofness and feeling of superiority that was to me offensive but perhaps to them defensive. Some were appreciative of dialogue but most seemed closed to hearing anything. Whether these characteristics facilitated the elevation to their positions of status, or were subsequently acquired, I do not know. On the other hand, there are many of the hoi polloi who become comfortable and feel defined with "knowing their place" ^{early} when and after being in the presence of these superior persons. To me this seems ~~be~~ a vestige of the "divine right of kings", but it may really be the explanation for the origin of the "divine right of kings". The need of people for someone superior preceded the need of the superior ones for power and its affectations.

While I have disdain for charisma, charm, and popularity, I have respect for skill, achievement, and character. But in our time the shift of the attributes of leadership is from skill, achievement, and character to charisma, charm, and image. Whatever the source of this shift, TV, PR, ~~the~~ SPIN, it is destroying trust in those in high places. Divine right is now being bestowed on those with minimum claims for respect and trust. And if all becomes just image, will people perceive that the emperor has no clothes?

Contrary to the sense of these remarks, I am very much an elitist. I believe that some have greater responsibility than others, as parents have more than children. It does not follow that those with more responsibilities should have more privileges, though they should have access to the means to carry out their responsibilities. The injunction, "Who would be the greatest amongst you must be the servant of all", has been repeatedly vocalized, but rarely manifested in practice.

We belong to a species that requires leaders, but have yet to develop a system that can select those proper for the tasks of leadership. The popularity criterion of a democracy is as flawed as the heredity criterion of an aristocracy or the terror criterion of a tyrant.



MY SEARCH FOR ALTERNATE WORLDS¹

My first exposure to the fundamental Buddhist principle that we live our lives immersed in illusions occurred at age five. I was informed that my observationally inspired cosmological model that we lived inside a world whose floor was the ground and roof was the sky was an illusion. I was told we live on the outside of a world that was of spherical shape. And not only that, but that there were many more, all spheres like our own. I was deeply shaken. How could what I had observed and felt for most of my five years be so wrong? Senses were not to be trusted!

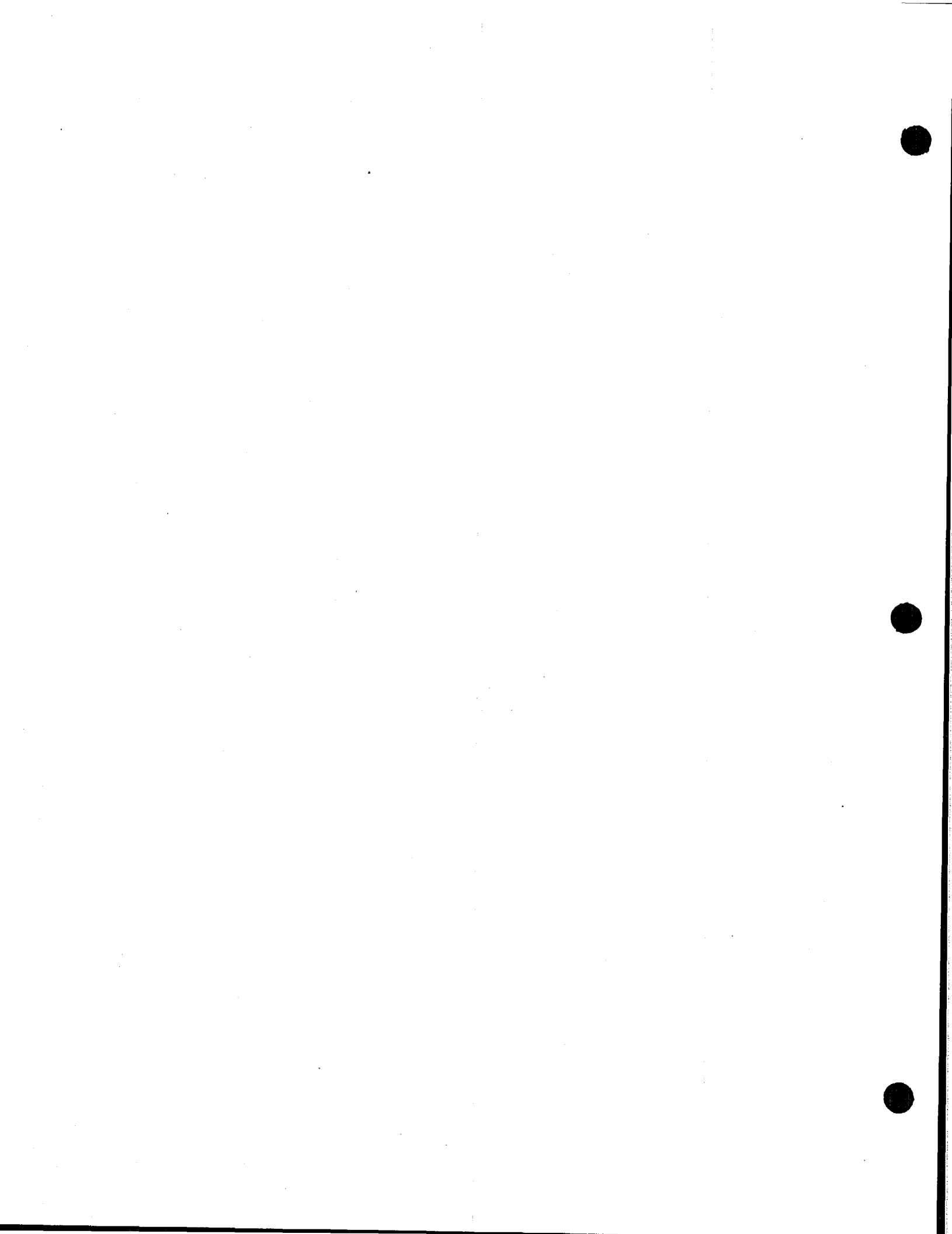
Appearances

This transforming event inspired my interest in astronomy and led me to want to become an astronomer so that I could graduate from my provincialism through the study of other worlds. And, indeed, I did become an astronomer. I spent the years from 1946 to 1961 as a professional astronomer observing the sky and trying to absorb the vast catalogue of differences that pervaded the cosmos. But I gradually came to understand that my interest in astronomy was not the same as that of other astronomers. It really wasn't other astronomical worlds that intrigued me. The worlds of astronomy were but a special case. What I was searching for was more than the alternatives residing in other worlds, I was searching for alternative world views.

But, Such a search must be conducted not only on what is out there, what is on the outside; but must also include the world that is inside. The observer is an integral part of what is observed. So my pre-kindergarten view of my being inside the world had its first transformation to my learning I am on the outside of the world, and its second transformation, to my learning, I am not inside the world, the world is inside of me.

But in my search for alternatives, I have learned that we not only have great difficulty in detecting alternatives, but that we actually seek to protect ourselves from alternatives. We prefer to be exposed only to things that are familiar. We want the world to be consistent, coherent, and representable by single picture. This defeats any escape from our ontological box. It seems our limited capacity for handling information makes us not want to encounter any situation in which this limitation is exposed. Hence, we choose to keep alternatives off table.

¹See "Kindergarten Cosmologists" LSTPSC01.W52, 1994-04-28, 1994 # 32



MY REVOLT AGAINST PACKAGING

I confuse my friends when I confess that politically I stand to the right of Buchanan¹ and to the left of Bukharin². That means I am the opposite of those moderates or middle of the roaders³ who believe political expediency must be the basis of government. I take a stand in opposition to packaging and bundling. Which is to say I am against aggregating narrow self serving components with extensive beneficial components into a legislative package that passes muster because of its publically perceived overall benefits. Packaging is, of course, the everyday occupation of legislators who amend their special agendas to every bill.

So, they ask, where **do** you stand?

Answer: In brief, sometimes with the right, sometimes with the left, but most of the time with neither, completely outside the current political spectrum.

To clarify this, consider what is being called "fuzzy logic". Traditional or Aristotelean logic is two valued, based on the law of the excluded middle. A proposition is either true or false; a defendant is either guilty or not guilty; an entity either exists or does not exist. Fuzzy logic on the other hand allows a middle ground [sometimes called a *verge*], history is both true [Washington as leader of the Continental Army] and false [Washington and the cherry tree]; a defendant may be both guilty and not guilty [Courts in Scotland allow a verdict of "not proven"], unicorns both exist [in mythology] and not-exist [in zoology]. But our Aristotelean conditioning makes us uncomfortable with a verge, a no-man's land between A and not-A. Consequently we frequently draw a line in the sand inside the verge in order to preserve the law of the excluded middle. For example: Aristotle would say that a driver is either sober or drunk. Fuzzy logic allows a middle ground, not in the fuzzyness of intoxication, but in the fuzzyness of definition of intoxication. But in allegiance to Aristotle, the law draws a line through the verge stating that an alcohol blood content exceeding 0.xx constitutes drunkenness and less than 0.xx constitutes sobriety. But we know that some drivers are sober on the drunk side of the line and others are drunk on the sober side of the line. I hope this might explain my being sometimes with the right, sometimes with the left, and against playing games within the verge [political packaging].

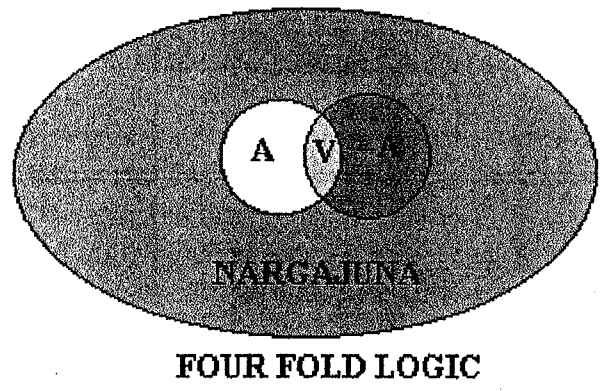
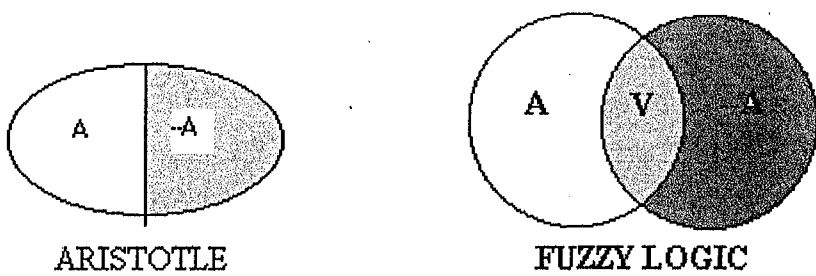
But what about being completely outside the spectrum?

¹Pat Buchanan, the right wing commentator, isolationist, sometime apologist for Hitler, and candidate for president in 2000 on the Reform Party ticket.

²Nikolai Ivanovich Bukharin, publisher of Pravda, member Third International, Bolshevik, executed in 1938 for supporting Trotsky.

³Jim Hightower, Texas Agricultural Commissioner, says "There is nothing in the middle of the road but a yellow stripe and dead armadillos."

To be completely outside the spectrum, not only Aristotle but also fuzzy logic must be transcended. We must go beyond A, not-A, and the verge of both A and not-A, to the "Realm of Nagarjuna", neither A nor not-A. Neither true nor false [Pauli's "not even wrong"], neither guilty nor not guilty [the crime has not yet been committed], neither exists nor does not exist [the Sunyata]. Some Venn diagrams:



When I say I stand on the right, I believe in discipline, in morality, in commitment and in sacrifice. I believe rights must be earned, not automatically bestowed. This makes me an elitist in the sense of supporting status, but only earned status. [Here I interject the leftist provisos that every elite must be an elite of responsibility not of privilege, and privilege be given only when and where needed to carry out responsibility.] When I say I am on the right, I am opposed to leveling all to some least common denominator. I believe in freedom of enterprise [but oppose all monopolistic and homogenizing enterprises]. I do not believe in the equality of opinions, nor in a "freedom" allowing everyone to do his own thing when those things diminish the rights of others. [Such as second hand smoke and unrestricted polluting and spraying] I believe human life is sacred. There must be protection of the young, the weak, the aged and the abused. I am opposed to abortion, [But I am a leftist in holding that abortion is a matter of individual decision, of canonical law and medical evaluation, not a legislative matter to be decided by politicians and courts].

When I say I stand on the left, I believe in people before profits. I am opposed to "winner take all capitalism" and its deification of greed. I believe in a "poverty floor", an economic state below which no one should ever be allowed to fall. I believe certain societal needs are not to be

vehicles of profit, such as education, health care, and such basic needs as clean air, pure water, and adequate energy for life support. These are to be supported by taxes.[But with the rightist proviso of the minimum government required to do these things] I believe in free education, available to all as far as they choose or are capable to go. [But here I interject my rightist proviso, that there should be alternatives, e.g. vouchers, not one homogenized state controlled educational system.] I oppose capital punishment, but hold that incarceration for the protection of society is paramount to rehabilitation, deterrence, or punishment per se, and oppose the release of those who threaten society. I oppose there being elitists of race, gender, genealogy, religion, or any unearned status. I support conservation and the development of a sustainable ecology. Holding that ours is not the culminating generation, for which all evolutionary and historic pasts were created, but that we are a link in an on going process, having obligations to future generations and responsibilities for passing our heritage undiminished to those yet to come.

When I say I stand outside the current spectrum: I believe there is a higher law than the United States Constitution that should be included in legal and legislative decisions. At present being legal does not mean being right or being just. Nature does not employ the profit motive. I believe the profit motive is destructive of people, the planet and ultimately of itself. I go further and question usury and current interpretations of ownership. There are many things "owned" that cannot be owned. I support sustainability over growth, which is the motivation of the cancer cell. I maintain that the right of access is as important to liberty as are other items in the bill of rights. For example, I would like to see transportation included in the non profit access group along with education and health care. I am opposed to the anti-ballistic missile star wars boondoggle. Missiles will not be the terrorists weapon of choice. I support space exploration, and selective government funding of research, literature, and the arts. I believe we shall need upgraded modes of thinking and validating, and updated religions and value systems.

All of this makes me both a heretic and a fundamentalist; a revolutionary and a traditionalist. I am not packageable, hence not salable.

SOME THOUGHTS ON THE MORNING OF A WESTERN SOLSTICE

November 4, 1998: Today is the day each year that the sun reaches its western most position, a western solstice. After moving to the west since the 29th of July the sun now begins to move eastwardly. This western solstice marks Samhain, the time the ancient Celts felt that our world was in closest proximity to the world of spirits. Indeed, if we stand back, we can feel the "specialness" of these days. Whether their mystique is due to the motion of the sun or to some inner emotion of our psyche, we are free to choose. The Samhain season is marked with days of cyclical origin: Halloween, the Day of the Dead, the Christian All Saints and All Souls. It is also marked with days having historical origin: Guy Fawkes, Soviet Oktyabr, Kristalnacht, and the Armistice of World War I.

Maybe our thoughts during the season of Samhain may also be of some special significance. Certainly mine this morning have been somewhat unusual. I woke up recalling something Fritz Zwicky said after one of his meetings with Einstein. He said that Einstein had the most remarkable talent of seeing the implications of any physical proposition in all its contexts. Tell him of a research result and he could immediately point out its affirmations or contradictions in other areas of physics, and suggest its implied hypotheses. What kind of different thinking did Einstein use? This same man who called for us to find a new way of thinking or risk extinction. If we look for some commonalities between this thinking mode of Einstein and the thinking of Newton, we note in both thinkers the imaginative ability to put normally unassociated events in juxtaposition: The falling of an apple and the path of the moon; the force of gravity and the geometry of space. Certainly to escape from our conditioned associations is one key to seeing the world in a new way, the way it might really be instead of the way we habitually think it to be. And the method of systematic juxtaposition is a powerful tool for this escape.

A paradox is when your idea of how the world is differs from how the world really is – Richard Feynman

We particularly need to escape from the notion that a temporal sequence is a causal sequence. Linear time is a framework by which experience is organized by humans. The order in which events are experienced by human beings may have little to do with causality. Archetypes, for example, may manifest themselves as events in an order that has little or nothing to do with temporal sequence. "Camelots", for example, may appear at various intervals in historic time, caused by a "Camelot Archetype", not by a sequence of intervening temporal events. An archetype may manifest through of a set of events distributed in time in an apparently unordered way, but organized in some transcendent manner unperceived by humans. The so-called laws of physics may be the manifestations of the most probably occurring archetypes. The high frequency of their occurrence leads to an illusion that they are inviolable laws. The sequences they manifest are contained in the archetype. We impose on the sequences the concepts of temporality and causality.

A human being is a method of organizing experience. – Lama Kunga

1
Expedition C. 1963
This was written in the 80's
Use in Last Discern

ECLIPSE.WP6

95/02/13

I would like to recount a personal experience with this second aspect of darkness that made me come to feel that we have been too quick to equate darkness with evil.

Some thirty years ago, we were able to put together a new type of eclipse expedition. There was to be a total eclipse of the sun whose path crossed northern Canada. We were able to obtain a large jet plane and modify it to carry our telescopes, spectrographs, and other instruments. There were two ideas involved. First, to improve observing conditions by getting above as much of the atmosphere as possible. We were going to be able to fly at almost 50,000 feet. And second, we would fly east along the eclipse path and thus extend the time of totality by more than 30%

On the day of the eclipse there was a heavy cloud bank covering most of northern Canada, and we were thankful that we were assured a view of the eclipse by being thousands of feet above the clouds. As the time for the eclipse approached we got to altitude and took course at top speed along the eclipse path. We could look back and see in the distance a darkness beginning to cover the cloud bank. As we watched this darkness swept toward us at an incredible speed, like some devouring monster it blackened all in its path. It swept on and soon engulfed us, and we looked up and saw that the sun was gone and it was time to go to work.

Our project involved taking several short exposures with various filters in different wave lengths. We were so busy with our instruments that we could not tell what was going on. About half way through, it was necessary to change film. This was my partner's job and I had the privilege of a few

seconds direct view of the spectacle. Here we were suspended half way between heaven and earth and there was the amazing corona of the sun and adjacent were stars and planets that would not be visible again until another time of year. The whole universe was displayed above and beneath us. I had the strongest feeling that if I could just look at this spectacle long enough I could penetrate further into the truth than with all the data we could ever collect with our instruments. In that moment of deep darkness, I felt for the first time the oneness of all things, the earth, the sun, the stars, and we ourselves in the middle of it all. This was enlightenment. This was a glimpse of God.

You know, today I can't remember what the purpose of our observations was. We collected and reduced our data, wrote and published the report and it sits on some shelves in some libraries. But that does not matter. The exploration began with a telescope, but the message was received with the heart. For me now darkness is not fearful nor depressing. It has become through the path of knowing a way to the mystic's 'cloud of unknowing'. And this is what the darkness of Advent can be.

I often think about the astronauts and their encounter with darkness. In outer space all is black. But this is curious because space is filled with light. Light is everywhere and nowhere, and only when it strikes a bit of matter does it manifest itself. This give us a different way to look at light and dark, perhaps closer to the way it was before God separated the light from the darkness to make day and night. It is only on the surface of the earth that light and dark are so separated. Elsewhere they are intimately intertwined. I think this is why it is said that 'to God light and dark are as one'. I feel the time has come for us to venture into the darkness knowing that in its depths we will find a light greater than any we have known.

LOVEHATE.WP6

March 23, 1997

THE LOVE-HATE PARADOX

Gandhiji once said, "Love the person ^{oppose} forgive the behavior". It is not easy to separate the dancer from the dance, the actor from the character, el aviso de el avisadero. We package certain people with certain behaviors, certain verbs with certain nouns, certain terrains with certain maps. This is the root of much of our prejudice. It seems inconsistent to love and hate the same package. Actually it is not inconsistent, but it is paradoxical, the therefore a key to deeper understanding.

I have made the following list of my own love-hate packages. Someday I hope I shall be able to resolve it all.

I LOVE

TEXAS
 ASTRONOMY
 AMERICA
 THE NATURAL ORDER
 FREEDOM

GOD
 THE SPIRITUAL
 THE TEACHINGS OF JESUS

SOLITUDE
 WINTER
 LIFE

I DO NOT CARE FOR

MOST TEXANS
 MOST ASTRONOMERS
 MANY AMERICANS
 MANY SCIENTISTS
 FREE MEN

THEOLOGIES
 RELIGIONS
 CHRISTIANITY

LONELINESS
 COLD
~~SOME PHASES OF LIVING~~ SUFFERING

What is reflected in this list? Attraction to the potential but aversion for the actual? Respect for *being* but concern with what *being* chooses to do? Awe for the template but disappointment in its manifestation? Identification with the cosmos but alienation from our cosmology? Trust in the goodness of God but bewilderment in what God permits to occur?

But there is another list, a love-love list, in which there is no inconsistency, no paradox, but still much yet to understand. In this list is beauty, devotion, compassion, sacrifice, and that for which we have a word but which nonetheless remains ineffable:

LOVE

CONFESSION--A PERSONAL NOTE

From time to time my frustrations build to anger and disgust, mostly directed at myself. This year has been a succession of breakdowns: cars, computers, health. Sojourns in hospitals and doctor and dentist offices. But mostly finding myself on some sort of dead center, not being able to get moving again in spite of the mountain of things needing to be done. Perhaps the dead center is not having the energy to face what has to be done.

The whole thing is beginning to blow up--right in my face. I take dictation almost every morning. It seems that sometime between 3:00am and 6:00am they--whoever they are--can get through to me. I have learned to be open, to receive whatever comes, jot it on a scrap of paper, even if I cannot make sense of it. Later when I try to organize the messages, trying to force them into my traditional matrices of thought, they freeze up. The messages, the ideas just do not fit. And this is what at root overwhelms me. I have no suitable framework for organizing this material. And it continues to pile up on every card, scrap, page, and file. It has long been incommunicable to others, and now it has become inarticulable for me.

I have joined--no, not joined, passed beyond--the lunatic fringe. My personal experiences in this life, which I refuse to ignore or deny, have put me into conflict with the culture in which I was brought up. To be true to myself I must repudiate much of the conventional ontological, cosmological, axiological, and theological teachings of the current western worldview. While I find myself in accord with much of the thinking of many of history's thinkers and teachers; with Hermes, Pythagoras, Plato, Sakyamuni, Mahavira, Lao Tzu, Deutero Isaiah, Jesus, Shantideva, and many others, I am very much at odds with Augustine, assorted Popes and Saints, Descartes, Bacon, and the moderns of their lineage. While I am a firm believer in disciplined learning, I am opposed to all lineages, opposed to all whose claims to validity are based on auto-authentication. And I am turned off by personality cults and celebrations of ego. All of this adds up to painful alienation.

On the other hand, I find great pleasure and satisfaction when I encounter the wisdom of unheralded individuals; those who seem to have been able to reach essences unshepherded by the protocols of some lineage. I feel it is in the diversity of individuals and their variety of approaches that our true wealth and hope lie. But I suppose all that I am saying is that I treasure most those cultural anarchists like me--no, who are different from me.

those cultural anarchists

DIFFICULT TIMES

At times I must write from a very personal and subjective view just to get stuff off my chest. This year has been an extremely difficult one for me, both physically and emotionally. Beginning with hospitalization on New Years Eve, going through two varieties of flu that carried on for weeks, an accident hurting my right knee, a tooth infection, and eye and ear problems. I know I have a mitral prolapse condition, macular degeneration, cataracts, and deafness. What else, I don't know. On top of this has been constant rain and clouds with the sun becoming a vague memory. Cabin fever sets in. Then my car and my computer both break down. Real frustration in trying to work around software with firewalls and loops instituted to advance Bill Gates march to monopoly. No one seems to know how to fix it. Maybe all of this is for the purpose of making me pause and reconsider what I am trying to do.

What is it that I am trying to do as I approach my 80th birthday? I think it is to write up and organize ideas of mine that have been on scraps of paper some as long as 40 years. It is an overwhelming task. I can not come up with a schema with which I can organize this material. My objective is to put this stuff in communicable form, but some of it isn't even articulatable. I must come to agree with what one astronomer told me decades ago: "They all think you are crazy". [This after our book on discretization] And reluctantly to accept what another astronomer told me four years ago: "They hate you". I have long accepted my being ostracized from the astronomical community, and alienated from institutionalized science's celebration of egos as its underlying motivation for understanding the world. I have no bitterness in this, but I am lonely and miss having discourse with knowledgeable people who are open to "crazy ideas". Maybe I have come to think, not only am I crazy, but they are too. We all took a wrong turn in the road somewhere back there.

William the Silent, I think it was, who said we must always persist, even when there is no hope we must persist. I agree. My responsibility to my being here and to those who have loved and supported me is to bring my gift to the altar. If it is rejected, as was Cain's, I shall not be angry nor kill those whose gifts are acceptable, but shall assume that without alternatives there is no such thing as selection--natural or other. I believe that God created the world to see a richness of variety evolve. To see what variations on His theme are possible. For us to establish a party line and ridicule and persecute all who do not go along, as we have done throughout history, truncates potentiality and precludes the emergence of the variety that transforms a one line tune into a magnificent symphony.

MORE NOTES ON A PERSONAL LEVEL

10.

It seems as though this is the season for self evaluation. Instead of writing essays and editorials, I am writing confessions and introspective explorations. This third personal scrap coming hard on the heels of yesterday's was triggered by receiving in the mail today a solicitation to subscribe to the Skeptical Inquirer, the journal of the Committee for the Scientific Investigation of Claims of the Paranormal. According to their flyer, this group is dedicated to saving the gullible public from the scams of astrologers, Ufologist, psychics, channelers, faith healers and practitioners of alternative medicine. My reaction to their message is that the scientists, psychologists, philosophers, and others involved are attempting to build an intellectual fortress to protect themselves from the assaults of human experiences that lie outside the domain of validation of their scientific epistemology. This is their collective exercise in mutually supported denial.

I have personally known many of the fellows listed on their mast head including Mario Bunge and Carl Sagan, and have great respect for their skills and knowledge in their respective fields. But their approach to those phenomena less frequently encountered violates my basic principle of tentative openness to all experience, whether we can explain¹ it or not. However, I do agree with their assertion that there is a large mass of quackery out there, but it is our job to discriminate between quackery, error, and validity, and not to package all that is inexplicable in a box labeled hoax.

The reason for this confessional scrap is the Skeptical Inquirer flyer's reminding me of why I became alienated from the scientific community in the first place. I have personally had many of the experiences they discredit. I have seen ghosts on several occasions, I have had precognitive dreams, synchronistic events, statistically improbable telepathic communications, (one event witnessed and disbelieved by Carl Sagan) and repeated success with alternative medicine. Since my own truth cannot deny my personal experience, even when it is at odds with what is currently culturally acceptable, I must accept the charge of being "crazy" and of being a hated thorn in the view of certain scientists.

¹The Skeptical Inquirer is very explicit here: Explanation means scientific explanation. This confirms that their entire approach is predicated on the allowability of only one particular epistemology.

SOME REFLECTIONS ON MY 81ST BIRTHDAY

I feel a strong identification with the century now ending, and also with the millennium now ending, but most of all with the age now ending, the so-called Piscean Age. Perhaps that is why I like to call myself the "Last Piscean". This age, the one labeled the Axial Age by Karl Jaspers, began in the sixth century B.C.E. In that century sages in China, in India, and around the world, in Persia, Palestine, Greece, on to Mexico, gave to the world a remarkable set of novel ontological and axiological insights. For the past 26 centuries we have been digesting and amplifying those insights. And as some have said, all the ideas contributed since have only been summaries of or footnotes to the Axial Ideas. Be that true or not, those ideas have shaped and guided our religions, sciences, cultures, and world views to this day. But now there is change in the air. The recent decades have the feel of a new axial period in gestation. What is to be born cannot be said as yet, but whatever it is will effect a deep change in how we view ourselves and the world.

Our task during this inter-age bardo is not to speculate on the future, but to consecrate the experience of the departing age. And how is this to be done? Paradoxically, to consecrate we must desecrate. We must pull down the idols and gods we have worshiped, but recognize their contributions to the elevation and purification of our temples. As the gods depart, the temples become launch pads to new perceptions and new insights—vehicles taking us to new worlds. If we were to view this in terms of architectural metaphor, the domes of cathedrals and mosques transform into those of observatories, the steeples and minarets transform into space vehicles. But the underlying abstract symbols of sphere and trilon with their eternal meanings remain. Only the utilitarian specifics change with the age. And through the juxtaposition of age with age we can begin to glimpse the real meaning sphere and trilon.

WATERSHEDS

Watersheds are a subclass of dyads, different from opposites or duals, but having a Janus like nature.

When I was about eight years old I remember going with my Dad up to one of the mountain passes in Colorado, where the auto road went to an elevation of over 12,000 feet. We got out of the car and Dad explained to me that rain falling on the east side of the road would sooner or later find its way to the Atlantic ocean, while rain falling on the west side would end in the Pacific. He said we were standing on the continental divide. This was a literal watershed.

My boyhood in Colorado also led me to experience another kind of watershed. In summers my Mother and I would visit her family in Texas. We would get on the Fort Worth and Denver railroad in Denver at 11:00pm on a Monday and arrive in Fort Worth at 7:00 am on the following Wednesday, then on south for a full day on the Santa Fe and Cotton Belt till we reached our destination. In those days somewhere between that Monday evening and Wednesday morning, we passed through a watershed. Colorado and Texas were two distinct worlds. At home in Denver there were several blacks in my school, we were friends and nobody paid too much attention to race difference. But getting off the train in Fort Worth there were two waiting rooms, two kinds of restrooms, separate drinking fountains, one marked White, the other Colored. The watershed we had passed through was at the Texas state line where Jim Crow took over, creating that other watershed: White and Colored. The separate (but equal) facilities were only the surface manifestation of Jim Crow. Its roots went deep into the economy and the culture. I sometimes feel that even today, in the year 2000, vestiges of that watershed persist as expressed by the flag flying over the statehouse in South Carolina, but in the 1920's in the South the civil war was not over. The inability to get back at the Yankees got twisted into taking it out on the blacks.

So what does the continental divide have in common with Jim Crow? Just this. A boundary exists that separates behavior, separates what happens on one side from what happens on the other. Both nature and culture are filled with these watersheds. In nature there is the ferric watershed, the boundary at Iron, atomic number 26, that separates fusion from fission. Elements lighter than iron release energy when merged, those heavier than iron release energy when fragmented. There is the Schwarzschild watershed at $GM/c^2R = 1$, where if > 1 a mass collapses to become a black hole, and if < 1 can exist as a star, planet, nebula, etc. This watershed is like $v = \sqrt{2GM/R}$, if velocity is greater than the square root, the object will escape a planet's gravitational pull, if less it remains captive. In human cultures there are also watersheds. Bevelas' research has shown that if there are more than 5 members in a discussion group a chairman is needed, none required for 5 or fewer. In a cocktail party, the number 17 present seems to determine whether the decibel level takes off or remains finite. There is the economic watershed of just making ends meet. Above this watershed you can save and continue to move up, below debt amasses and you are driven down. Finally there is the corporate size watershed. Above it is more profitable to split and divest, below it is more profitable to merge and consolidate. These watersheds, visible and invisible, control our destinies.

SOME REFLECTIONS ON MY 82ND BIRTHDAY

Perhaps there is some wisdom that reduces the acuity of our sensory perceptors as we age. Could this be that we may begin to utilize and sharpen our non-sensory perceptors? It seems as though aging is a process similar to that which takes place in the womb, preparing us for a transition from one domain to another: with birth—into a physical world, with death—into a spiritual world. As we withdraw from the activities and attachments of this world, we begin to dissolve our identification with what we have been in this period of life. Our ego diminishes, but our awareness of who we truly are begins to clarify. The illusions of individuality slowly etherealize. We know that we are part of a different whole than any with which we have identified during life. The meaning which we sought in the physical world was not found there. But our place and role in the plenary cosmos begins to enter our awareness along with the responsibilities that have always been ours. We must not seek to *find*, but seek to *become* the God we once petitioned and worshiped. During life such a view would be considered hubristic and blasphemous, but when faced with but a glimpse of the tasks and the responsibilities, there is only humility and awesome commitment

While we remain in the domain of physical space and time, it is not possible to conceptualize or articulate in intelligible terms the greater reality within which the physical universe and all its contents lies embedded. We have only briefly glimpsed its scaleless magnificence, but glimpsed it with an assurance that overrules all the illusions and contrived consensuses that have imprisoned us here. T.S. Eliot has said that “Old men should explore”. It is absurd for old men to explore the physical universe, that task is for the young. And, for the reasons given above, while here, we cannot explore that which lies beyond. So what is it that old men should explore? We should explore the alternatives that are possible for us here and now. Only those old men [and old crones] who have begun the escape from ego; the escape from their attachment to possession, relationship, and recognition; from their definition of success, pleasure, and happiness; and from their pursuit of wealth, fame, and power, ...can conceive of *real* alternatives to the ruts we have grown to accept as reality.

Old age then is a very special time, not just a time for personal preparation for what is to come, but of equal or greater importance, an opportunity to contribute those alternative possibilities that can best be perceived by those who are in part removed from the place where others must stand.

SOME THOUGHTS ON MY 83RD BIRTHDAY

Aging is a compensatory process, the exchange of physical deterioration for spiritual inauguration. What is distressful as alienation becomes blissful as liberation. The loss of involvement is balanced by the gain of perspective. Success and satisfaction are redefined. And in the transformations effected by aging, the invariants of existence become perceptible.

What are these invariants that retain their validity from conception to death, and perhaps beyond? What experiences do we most treasure as we think back on our lives? And what do they have in common? What hidden truths do they manifest? If we could prepare an ark to take us into the beyond, with what memories would we cargo it? [However, cosmic customs might forbid imports] Does our experience and learning here have any lasting value? If so, to us personally? Or to whom or to what? Perhaps the invariants carry a clue to the answers.

To my mind the first invariant is love with its many meanings: a mother's breast and arms, her ever presence and care; a father's protection, guidance, and example; the faithful intimacy and companionship of a mate; the closeness that comes of sharing tribulations and triumphs; the transforming presence of the compassionate one in our lives, Avalokiteshvara, be her name Kwan Yin, or Holy Mother.

My second invariant is also a form of love, the love called *philio* by the Greeks. The love of the challenge of mystery. The call of the unknown ["to go where no one has ever gone before"] To share with loyal friends the risks and dangers, the defeats and triumphs of the journey into the unexplored. [whether pre-existing or co-created]

My third is the ineffable presence that is the companion of silence, the fullness of nothingness. The omni-present presence that like the music of the spheres, because it is always here we fail to hear it.

The most memorable events of my life involve one or more of these three invariants. To me the moments of love, mystery, and mindfulness in our lives are our passports to immortality.

SOME THOUGHTS ON THE SIXTY NINTH ANNIVERSARY

In the past few weeks I have been held down by a serious illness. Actually a heart attack. While this has been depressing and frustrating, I finally saw it as a gift. An opportunity to break out of routines. And escaping routines allows a new kind of freedom. But it seems paradoxical that with the walls of our physical box growing higher from our disabilities, that the walls of our mental and spiritual boxes come down. But sages and shamans have always known this to be so. Once the walls crumble, we begin to see and experience things that we never could while locked into the routines of our cultural box.

During this illness I experienced frequent oscillations between wake and dream states. The frequency of these oscillations put into juxtaposition images and physical symptoms. It became evident that there is a very close and mutual connection between the two. The images reflected my physical condition and I seemed to respond physically to the images. I became convinced that the essence of the one affected the other. So if I could control the kind of images in my head, then I could change my physical condition. This, of course, is not new. It has been well known for centuries, but in our materialistic culture it has fallen into disrepute. Nonetheless, to heal and have health, it is important to have good thoughts.

What, then, are healing thoughts? What kind of images are salubrious? When this question is asked, we begin to see that, except when we are focused on some activity or problem, a ceaseless chatter of random thoughts constantly runs through our heads. This mix of random thoughts includes destructive as well as salutary thoughts. How do we filter out the destructive ones?

Actually all of these questions are "box questions", formulated from an in-the-box perspective. They become meaningless outside the box. They are not the questions to ask when one is attempting to escape from the box. Rather the question-answer dialectic itself, so useful within the box, is the wrong methodology outside the box. One "outside methodology" is to forego goals and intent altogether and let better things happen than any intent we might formulate could envision. Whatever goals we set delimit the tremendous potential that exists and cuts us off from escape. However abandoning our perceptions of what is best for us is very difficult. It requires risk. It requires trust in something our in-the-box enculturation has made us skeptical of; viz, that there does exist benevolent guidance and protection for us. And if we are willing to surrender to it we are led to places that we could never have reached otherwise.

All of these personal insights from my illness are of course not new to those who have been on a spiritual path. I have glimpsed some of this earlier, but the blessing of this illness is to affirm what great teachers have taught and is but elementary knowledge to sages and saints.

NAME DROPPING: FAMOUS PERSONS I HAVE MET

As part of my story, The Last Piscean, I feel I should define my times by mentioning some contemporaries whom I saw, met, and in some cases held conversations with. In many incidents the meeting was fortuitous.

1923: My first political memory was at age five going up to Cheyenne with Dad and Mother and boarding President Harding's funeral train, seeing his coffin in a special car.

In 1927 after his historic flight, Lindbergh toured the U.S. When he came to Denver we went to the airport and saw him arrive and afterward saw him up close as he drove by in the back of an open car.

It was many years later that I saw my next famous person. In 1944 Robert Millikan, then President of Caltech, unexpectedly showed up for my oral exam and asked me several questions regarding the history of physics. I remember his asking, "Who were the great lights in optics?"

1941-1953: I met frequently with many of the then important scientists at Caltech and Mt. Wilson, including Adams, Baade, Minkowski, Bowen, Merrill, Nicholson, Richardson, Bateman, Epstein, and especially had close contacts with Zwicky and Hubble. [See scrap on first meeting with Hubble]

In 1957 I joined the RAND CORPORATION and met several of those who visited. These included Norman Thomas, Henry Kissinger, and many air force generals. While at RAND I had occasion to travel frequently. On these trips occasions put me within a few feet of de Gaulle in Paris, Truman in Washington, and Krushchev in New Delhi. I was commended by Nehru in New Delhi for my assistance with one of India's science programs. I also had an extended conversation with Lyndon Johnson when he was still a senator, and an informal conversation with Chief Justice Earl Warren and with presidential candidate Adlai Stevenson. I also had a brief chat with Richard Nixon in the LA airport after his losing his run for governor of California. . And as for movie celebrities, I flew to London on the same plane as Rex Harrison, and once watched Gregory Peck pick up kids from a Waldorf School.

I have had conversations and professional exchanges with Margaret Meade, Gregory Bateson, Norbert Wiener, Robert Hutchins, John Wheeler, and Fritz Schumacher. Several discussions with Richard Feynman, Carl Sagan, and Muktananda. I have even had the privilege of being at a meeting which was attended by the Dalai Lama.

Those who impressed me most favorably in this list, in the sense of being outstanding human beings, from their immediate presence not from their public image, were Norman Thomas, Harry Truman, Adlai Stevenson, and Fritz Schumacher, and of course the Dalai Lama in a class by himself. Those who impressed me unfavorably were Krushchev, Kissinger, Nixon, and most unfavorably of all, Lyndon Johnson. The rest, distributed in between, were all impressive persons.

but in none did I detect charisma

THE IMPROBABILITY CHANNEL PART I

I have always found it difficult to accept the reality of a highly improbable occurrence, and since I have personally experienced several very improbable events, I have sought a rationale for their validation. Part II of the "Improbability Channel" [Scrap 2000#78] is a draft attempt to get a handle on this matter. From Part II: *When a sufficient number of improbable events occur that fit the same pattern, while each constituent event may be improbable, the pattern itself acquires statistical validity.* This concept must be explored.

The specific events and pattern that introduced me to this question could perhaps be labeled "the resurrection pattern". Its label comes from a story that is recorded in the Bible, the story where Mary Magdalene encounters one who had been precious to her who recently died. In her story she actually saw, heard and spoke with that person who was physically dead. This story has been interpreted and elaborated to fit several theological dogmas. I can readily disbelieve many of those interpretations, but I can also readily believe that this story describes a specific occurrence of a recognizable and not altogether rare manifestation of an archetype. The pattern or archetype of a resurrection.

I recount here two personal experiences which are manifestations of this pattern:

My son Art and I brought my wife Donna's ashes here a few days after her death in early June of 1998. We were unloading the car and were each occupied with different tasks, being some 20 feet apart, when suddenly, independently and simultaneously, we both felt a strong presence. We turned to each other and at the same instant each of us yelled to the other, "Did you feel that? It's Donna!" We knew the presence was Donna and it reassured us that Donna was still very much alive, or existed, in some non-physical sense that was quite independent of the contents of our own minds.

The second event occurred in late October, 2000. My and Donna's close friend, Robin, had been ill for several weeks with terminal cancer and the inevitability of her death was soaking into our psyches. On Sunday evening October 29, Susan called me about 8:00 p.m. telling me that Robin had passed away about an hour earlier.

A very improbable event occurred the next morning. For several weeks I had been going at least twice daily into the meditation room and focusing on Robin's recovery and freedom from pain. I had evolved a ritual to touch a special candle dedicated to her while supporting her in my thoughts. But I must mention here that for several months, as far back as February, the fluorescent light in the meditation room had become defective. When the switch was thrown, the light would come on only partially, at low intensity. On one occasion during all of those months when I was at a very deep level of meditation the light suddenly jumped to full brightness and remained high until turned off at the switch. But except for that one instance, the light routinely only came on low and stayed low. I should have repaired the light, but I felt it unnecessary. Bright light is not really needed in a meditation room.

Early on the morning after Robin had died, I got out of bed and went directly to the meditation room and turned on the light switch. The usual low light came on and I could see my way across the room to the altar where Robin's candle stood. I walked across and stood silently for a few seconds before the altar, then reached to touch the candle. At the nanosecond my hand touched the candle the light instantly turned up bright! Overwhelmed, I sat and meditated for some time in the brightly lit room, trying to interpret what had happened. On leaving I turned the light off. About an hour later I went back, entered the room, threw the switch, but the light remained low. And it has not turned bright since. [now March 2001] *

What did all of this mean? At the instant the light came on, I somehow knew it had to do with Robin and that she or something had devised a physical way to send me a message. This was a last gift coming from a dear friend, reassuring me and telling me that she was alright and in a state of bliss in a place of intense joy and happiness. The same message Donna had sent to Art and me.

It is recorded that when asked whether he believed in life after death, Jung said "I don't believe, I know" After all I have witnessed of the transitions from this life of those two most remarkable souls, Donna and Robin, I can now join Jung in that special way of knowing that transcends ordinary knowledge.

Certainly there are many ways to interpret these events. Coincidence, random fluctuations in the circuitry, or perhaps certain mental powers that are activated at singular times that can affect physical systems. But the interpretation that resonates with me is that these improbabilities did not originate in the physical world but in an interaction between the physical world and some other realm that has often been called "spiritual".

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* Today, September 23, 2001, when I went into the meditation room about 5:45 PM, I threw the wall switch - I then went before the new Manjushi Gift and when I called for a blessing on him, the instant I said his name, the light went on full for the first time since Oct 2000. [above]

The lights were repaired. Oct 24, 2001

November 11, 2000

Dear Victoria,

No, I have not been to LA since I last saw you. I have not yet received any news concerning a memorial service for Robin. Susan did send me an email about a week ago saying Robin had left me some pictures and a bowl of my mother's that I had given her several years ago. I think Woody, her estate executor, is still there trying to put things in order.

Yes, there are some peculiar happenings. We must get together soon and discuss them. For one, Carl Jung enumerated several anecdotes about flocks of birds gathering just before a death. I recall two days before Donna died seeing scores of crows on the roof of the Ginkgo and in the big tree in the rear. I remarked about it at the time but none of us thought much about it. It was much later that I ran across Jung's material on the mantic gatherings of birds ^{hetero} and death. _{with}

I believe I told you the story of what happened when Art and I had brought Donna's ashes here after her death. We independently and simultaneously felt her strong presence. We were each occupied at different tasks, being about 20 feet apart, when we suddenly felt her presence and simultaneously turned to each other and each of us yelled to the other, "did you feel that?" We knew it was Donna's presence.

Susan called me about an hour after Robin's passing. A bit later that night I went outside and saw the new moon, it was exactly as it appeared in Woodland hills as I left the hospital an hour after Donna died. Robin and Donna both chose the same time-of-moon to die!

For several weeks I had been going twice daily or more into the meditation room and meditating for Robin's recovery and freedom from pain. I would touch a special candle dedicated to her while carrying her in my thoughts. But I must mention here that for several months, as far back as February, the fluorescent light in the meditation room had been defunct. It would come on only at a low level when the switch was thrown. On one or two occasions during those months when I was at a deep level of meditation the light would jump to full brightness and remain high. But most of the time it never changed from low. I should have repaired the light, but I felt it unnecessary. Bright light is not really needed in a meditation room.

Early on the morning after Robin had died, I got out of bed and went directly to the meditation room and turned on the switch. the low light came on and I could see my way to the altar where Robin's candle stood. I walked across the room and stood silently before the altar, then reached to touch the candle. At the nanosecond my hand touched the candle the light instantly turned up bright. I then meditated for some time in the brightly lit room. On leaving I turned the light off. About an hour later I went back but the light remained low, and it has not turned bright since. I somehow knew it was Robin and she or someone had devised a physical signal to tell me she was alright and in a place of great joy and happiness. The same message Donna had sent to Art and me.

Dear Elaine,

You have had a most remarkable dream, rich in symbolism, and in references to who we humans are, and what life and death are about. Thank you for sharing this dream with me. I am not enough a scholar to answer your question regarding references to the literature that speaks to your dream. However, with your leave, I can share with you some of my own thoughts and experiences.

We dare not venture into the realms beyond death on our own. We need a guide. In the Divine Comedy, Dante ventured into other worlds. He became terrified, but a guide, Virgil, appeared who reassured him and lead him safely into the other realms. You asked, "Mommy, where are you?" She came to let you have a glimpse of where she was and its relation to where we who are alive are. She agreed to be a guide to show you where she was.

In the venture to beyond life into the realms of death, the guide first takes us to the wall of death. This is a wall through which we believe all pass but in one direction. But this is not really so, for sometimes one who has passed through the wall returns and speaks to us, (as in your own dream)

A sponge is a living organism composed of many cellular parts. These parts are also living organisms who may live as parts or in community with the whole. Submerged in water, it has been observed that if a sponge is trapped by, say a piece of cloth or porous fabric, it dismembers into its parts and the parts pass through the fabric then reassemble on the other side.

In order to pass through the wall of death we must, like the sponge, release all the parts out of which we are made from their bodily container. [Lama Kunga used to say that a human is an device for collecting and organizing spiritual experiences.] Dismembered, the parts readily pass through the wall and then reassemble, perhaps into a somewhat different organization, on the other side.

Next is a second wall. We perceive there is an "air lock" between the material and spiritual realms. [In submarines there is an air lock to allow ingress and egress without flooding the submarine with water. In a space station there is an air lock to allow ingress and egress with losing the station's air to outer space.] For some reason, beyond our understanding, it appears that our material world has been quarantined, either to protect us from what we are not capable of encountering or to protect the spiritual realm from material contamination.

Beyond the second wall the parts reassemble in quite different arrangements. In arrangements unrecognizable to us, since we can think only in terms of wholes containing parts, and are confused by the whole being but a part of a part. Like sponges, dismembering and reassembling is going on in many ways.

In this life we develop our parts and we are either able to pass through the first wall or be thrown back to be reincarnated as we have been. If we pass the first wall we may choose to return or go on. One who has sufficiently developed certain parts may will to return [eg a Bodhisattva], or may go on to develop a new arrangement with which to incarnate.

Lad Disc

SOME REFLECTIONS ON THE 126th SCOTTISH GAMES

September 1, 1991, Santa Rosa, CA

[Privately dedicated to the memory of Adrian Perkey]

Only in a celebration of this nature do we have the opportunity in our times to experience the power of ritual. In stripping pageantry from our lives we have lost a bridge to our deeper meaning and to the spiritual reservoir that empowers our lives.

A ritual takes a sacred symbol from a container, provides it with an honor guard to escort it to the place where it is manifested to the people. The people honor it and come into communion with it. Past sacrifices are recalled and the symbol is ceremoniously paraded and returned to its sanctuary. This is the framework of all ritual whether it is the celebration of the mass or parading of the colors. *or taking the torah from the ark*

At the games there was a placing of symbols in juxtaposition which led to a healing synthesis. The flags of Great Britain, Scotland, Canada and the United States became one honored symbol uniting us in an eternal bond. The chaplain's prayer asked God's blessing on all peoples everywhere and on 'George Bush, our President and Elizabeth, our Queen'. Not only nations and peoples were joined but we were united with our past and our future.

The military may be losing many of its traditional missions, but there is one mission it will always have and that is its ceremonial one.

.....

In visiting the booths and tents of the various clans we could see the evolution of many peoples who a millennia ago were at perpetual war with one another celebrating their individually and their commonality. A red bearded kilted young man proud of his McGregor tartan and his claymore, whose last name was the teutonic 'Ganzer'. who teaches sword fighting all styles, foils, epees, and Heidelberg broad sword. And my great grandmother Cornelia Wilcox was a McGregor. The ancestors of both Grant and Lee came from the same highlands. The tartans are indeed "E Pluribus Unum".

But there was another unifying force present--the pipes. What is there about the pipes, with their shrill cry, that brings our blood to the surface and unites us with the earth. The magnificent performance put on by the Tokyo Drum and Pipe Band made us all conscious of our unity through the pipes. But when they marched off and the bass drummer switched to a traditional Japanese tatoo, the crowd was carried away and fell in with the beat with rhythmic hand clapping. The pipes and drums allow us to reach a level where we indeed are all one.

Finally there were the bonnie lasses who could toss the caber (somewhat lighter) as well as the champions.

A SAND CASTLE

[An answer to Job]

Some years ago Len, his two sons and I went to Zuma Beach near Malibu. We had planned to build the mother of all sand castles and came equipped with spades, trowels, various molds and whatever else was useful for creating an architectonic wonder. But we had forgotten one important item--a camera. There would be no record of our handiwork. Undaunted, we pitched in and with our combined imaginations and creativity by noon had created in sand a fortress with turrets, battlements, drawbridges and every other fenestration we could think of. Any medieval lord would have been proud to have possessed the real version. The boys were delighted with their creation. They viewed it from every angle, lying down, climbing the cliff and viewing it from above, and finally dancing all around it.

Suddenly we realized the tide was coming in. Each successive wave was creeping closer to the castle. This alarmed the boys. They felt what they had built, being so elegant, must somehow be permanent. They couldn't be reconciled to their work being obliterated. First they decided to build a dike that would divert the waves to the sides and preserve the castle. It seemed like a good idea, the dike did divert the first few waves just as it was supposed to do. But then it became apparent that the dike was being eroded by each wave and unless we kept bringing in more sand, it would soon be overwhelmed. For a while, the sand brigade held the line. But then the relentless sea made an end run and it became apparent that we could never build a dike long enough nor massive enough to forestall the inevitable.

When the boys saw that in spite of all efforts the castle was doomed, they decided to destroy it themselves. Len and I tried to dissuade them. Let the sea do its work. We will watch the castle go down with dignity. But the boys could not stand the sea being in control. If the castle had to be destroyed, they at least would be in charge of its destruction. They flew into the castle with a fury and kicked it into shambles depriving the sea of any conquest. In doing this they felt that in some way they had achieved a victory.

Going home we had something to think about. The day at the beach had presented us not only with the fact that the ultimate power of nature must ever be faced, but with a pattern imbedded in our own psyches which also must be faced. After discussing it all, we decided that what was really important was that we knew we could build a better castle next time. We weren't stuck with the one that was washed away.

LASTPISC

LSTPSC01.W52

DISK:LASTPISCEAN

April 28, 1994

KINDERGARTEN COSMOLOGIES ^{ST5}

I am often asked how I decided to become an astronomer. Unlike a lot of other things I did and know not why, I have a very clear memory of why I decided to become an astronomer. The story goes back to Denver, Colorado sometime around 1924.

We lived in a small upstairs apartment on Franklin Street between Colfax and 16th Ave. Across the street was a large vivacious self confident family whose name was Lunt. The youngest son in this group was a boy my age named Horace. We were to attend kindergarten together in the fall at the old Wyman School. We had developed a close relationship which involved not only play but discussions on all manner of things which challenged young boys.

One day the subject of the world came up. And somehow a dispute arose over whether we lived on the inside of the world or the outside. I held that we lived on the inside of the world. My cosmology was that the world was shaped like a hamburger bun, flat on the bottom, round on the top. It was a hollow bun, the earth was the flat part beneath and the sky was the round part overhead.*This was the observational cosmology of a five year old. But against this was the well informed cosmology of a teacher's youngest son. He knew that the world was shaped like a ball and that we lived on the outside not the inside. This stunned me, it violated all my personal experience. I could not imagine this. To settle the dispute we took the matter to authority, an older Lunt sister. I was wrong. The earth was a sphere and we lived on the outside. Furthermore there were other spheres, the sky was full of them. They were called planets and stars. How could I be so wrong? I guess I felt I had not given the matter adequate consideration. So starting right then and there I began to give the matter consideration. I learned all I could about the earth, planets and stars. By the time I was in the fourth grade I was the recognized authority on all matters astronomical. The momentum of this launched me into a career in astronomy in which I was an observer, a theoretician, a professor, the director of an observatory. But though I taught astronomy for many years, I never took a course in astronomy.

Although my observational model as a five year old was wrong, I have never given up the value that personal experience is to be trusted. And all my life I have have placed my personal experience, not against conventional wisdom, but in juxtaposition to it. And when there are differences, I have to assume both are somehow right and search for a larger framework that contains them both.

I question both

and tend to the one that is most liberating

* I, of course, did not know that the ancients had the same idea, but used the turtle as the cosmic symbol flat on bottom rounded on top.

[They evidently didn't have hamburger buns in those days and had to use ^{the} turtle instead.]

LAST P150

Sometimes I feel it fun to release the Walter Mitty in me and exercise my imagination in impossible but enjoyable fantasies. My Walter Mitty frequently finds himself in situations where he is called upon to make speeches of important historical consequence, addressing parliaments, congresses, mass movements, ... Rewriting history, what I would have said had I been present at Whitby in 664, at Philadelphia in 1776, at Appomattox in 1865, etc. Here is an example of a recent fantasy:

It is the White House, a state dinner in which the Queen of England is present and I am called upon to make a toast.

Mr. President, Your Royal Highness, Ladies and Gentlemen, A few years ago I attended a festival celebrating our British ^{heritage} inheritance. The Pastor in his opening invocation, asked for God to "bless George our president and bless Elizabeth our queen". This struck a liberating note with me. I suddenly felt that something that had been divisive in me had been removed. I felt I could accept without conflict, the identifications that I really felt in my heart of hearts. While George was indeed our president, it was also true Elizabeth was our queen. While not our constitutional queen, not on the law books, not in the history books, but in our affections and in the wholeness of our hearts, she was indeed our queen. We Americans declared our political independence from the motherland, but we never declared nor can we ever declare independence from our heritage. Our hearts and our affections are forever bound to our heritage-- to our entire history. This is why today, although having no constitutional queen, we still have a queen. She is our queen in our affections and in our identification with our heritage. And so, ladies and gentlemen, may I propose a toast to Her Royal Highness, Elizabeth, OUR Queen.

AUGUST SIEGE

SUNDAY
August 15, 1993

aug15.wpw

DISK: WORK02

Today brought a vivid experience: a direct encounter with a burglar. About 12:30, after my lunch bowl of soup, I decided to write up some instructions with the word processor. Hardly seated at the computer, when I heard a loud crash that shook the entire house. I thought earthquake, but no shaking, then I thought a sonic boom. But then there was a second loud crash. I began to feel that whatever was going on was more local than an earthquake or sonic boom. Then I heard other noises, tinkling and shuffling. That got me up and I went down the hall to see what was happening. Through the kitchen door I saw the deck door had been shattered, that meant human beings, burglars. Then as I rounded from the hall into the living room, I stood at about six feet distance face to face with a rather hefty young Mexican about 5'7" wearing a baseball cap and a mustache. Since I had had the warning of seeing the shattered door, and he was under the impression that no one was at home, I was slightly less surprised than he. I shouted at him: "Who are you? What are you doing here? You have no business being here. Get the hell out of here right now." He was very much startled but raised his right arm and pointed his index finger at me as though he held a gun. He shouted back at me, "Who are you?", then turned and went out. I hesitated to follow, not knowing how many others might be outside. Quite confused, I decided to dial the sheriff, 211, that was wrong, 911. I finally got through and relayed the situation, reporting that no one was apparently still in the house but that there might be several outside. They kept me on the phone for a few minutes, that was good, I didn't exactly feel like going outside and confronting whatever might be there. After a bit, I felt they were not going to invade again and probably had left. The sheriff's lady said it was O.K. to hang up. I then called Judy and asked her to come over. The sheriff arrived about 15 minutes later and went through all the angles with me, then Judy and the kids arrived. She surveyed the situation and called Gary and Danielle to come over and help. Amory and I went to buy a couple of sheets of plywood to cover the smashed doors. Then everyone pitched in cleaning up the glass which was all over the living room, and helping put up a temporary plywood wall until the sliding door could be replaced. I am very grateful to these fine friends who came to my aid when I was pretty much in a state of shock.

A curious thing I felt later. Some hours after the siege bombardment, I began to feel in some strange way somewhat simpatico with the burglar. We had both experienced an intense moment of surprise and fright. In some sense our sharing of this experience has made, at least me, feel somewhat comradely toward him. We had been through the same frightening ordeal together. Sharing this seemed more powerful in bonding us than the power of all the adversarial elements that separated us. But if the encounter had been unequal this could never have happened. However, I am very grateful he turned and left.

STANLEY M. GREENFIELD

April 16, 1927 February 28, 2004

IN MEMORIAM

March 7, 2004

With the passing of a loved one or a friend, there is always grief, but in many of our lives at the time of a passing there is also inspiration offsetting our grief. We are inspired by the life of the departed one and the contributions and sacrifices he has made for all of us. And so it is with Stan. In these days of grief our memories bring back to us the years of our good fortune in having been associated with him. And we are inspired by having known a very special person.

What is it that made Stan a very special person, one who stood out in any group or gathering? We all have our personal answers to that question. Our personal memories of particular occasions. Some of us would list Stan's achievements and contributions, and there are many. Others would list sweet memories of a personal or intimate relationship. But it is clear to all of us that we each knew only a part of Stan and that the real Stan was greater than the sum of all the parts.

What made Stan a very special person to me was he was a man of thought and a man of action. A very rare combination in one person. Most activists are pushing ideas that are not their own, and most thinkers never get around to much activity. Stan was at home both in the world of ideas and in the world of people. In his thinking there were no taboo subjects, things that must be kept off the table of discourse. His actions were innovative initiatives not just responses to initiatives of others. Stan was also, if I may use the metaphor of a zoom lens, a master of zoom. He could zoom in and focus on the personal and specific. He could zoom out and grasp the big picture and the diverse factors involved.

Stan was also a leader. He was a committee chairman par excellence. He did not force his own opinions nor compete with committee members. Instead he had the talent of bringing out the best in all of the participants. Stan handled disagreements in a very positive way, achieving synthesis instead of conflict. I am reminded of the story of Einstein and Gödel. Colleagues would ask Einstein, "Why are you always inviting Gödel? He is so disagreeable." Einstein replied, "I invite him because he always disagrees with me and this leads to deeper insights" Stan, like Einstein, understood the opportunities implicit in disagreements and he could always diffuse a locked argument with the Talmudic, "On the other hand".

Yes, Stan was a member of a rare species of human. We somehow knew that Stan was a modern incarnation of those the ancients called Patriarchs. He will be missed by all of us who knew him, but we know that the world is a much better place because of what he contributed during his lifetime among us.

"We shall not see his like again"

PARADES.WPW

DISK:WORK02

May 15, 1993

When I first moved to Pasadena in 1941, we lived a half block from Colorado Street, the street along which the famous Rose Parade moved every January 1. I saw many of the parades, very convenient, having to walk only a few steps. I heard then that there was another city in California that had a Rose Parade, somewhere up north. Today I got to see that other Rose Parade-- the Santa Rosa Rose Parade. There is a big difference. For one thing, the only roses I saw were on the first car in the parade, a car carrying our Congresswoman, Lynn Woolsey. But it is unfair to compare, The Pasadena Parade is a national institution, the local parade, only Sonoma County.

But I am writing this not to compare rose parades, but to compare the times, the parades I saw and participated in as a boy in Denver in the twenties and thirties and the parade I saw today in the nineties. Sometime about 1928 the G.A.R. held a reunion in Denver and we were privileged to see a parade of veterans of the Civil War near the end of their era. Most rode in cars, but there were quite a few who marched, some with shouldered rifles. That parade was supplemented with veterans of World War I, men mostly in their thirties. Today, there were a few WWI veterans in cars and only about 6 who marched. I have seen quite a bit of history in passing parades. Our turn is next to be last, we who are the veterans of World War II.

But the impression I got today was that, whatever the war, the veterans are all fading away. They now seem to belong only to history. It is not only the Vietnam Veterans who are not honored, no veterans are the national heroes they once were. If this reflects our feelings about war, then it is well. Being ignored out of distaste of war is a sacrifice I feel most veterans willingly accept. Maybe at last there is light at the end of the tunnel.

Another impression, there were relatively few flags today compared with 60 years ago. And I was surprised to notice that no one salutes or puts their hand over their heart when the flag passes, which used to be de rigueur. (Also no one takes off a hat when the flag passes, maybe because there are no hats.)

What I am trying to say is that I have lost sight of so many things that have radically changed in my time. Seeing the parade today made me aware of some of them.

January 18, 1993

I am not much on keeping a diary, but today I am compelled to write down my feelings. I feel at odds with almost everything and everybody. Only when I look at the hills and the clouds do I feel related and in harmony. I am angry with the missile attacks on Baghdad, killing civilians in a hotel. I am angry with the hypocrisy of selective support of U.N. Resolutions. I am angry with the subverting of the constitution and the placid acceptance, even ignoring, of repeated subversions. I am even unhappy with the constitution itself and with all other great documents. They are found wanting in these times. I am upset with my church. It is emphasizing outreaching to get new members, while ignoring internal poison and doing nothing to correct the causes of departure of those already belonging to the church. I am annoyed with the scientific establishment and its drift from open searching to dogma and the persecution of those not subscribing to the party line. These items all seem to be matters of choice, things we can do something about, but don't. I am most unhappy with myself, I have accepted the American norm that the most criminal thing we can do in this society is to blow the whistle, rock the boat, not go along.

But there are other matters beyond present choice. Usually the result of past choices. The disparate distribution of the earth's resources, the ignoring of unchecked population increase, the worldview of growth as an unquestioned basic good, the oppressions of both "me-first" and of the collective, the whole signification process and its distorted product. At the deepest level, I am soured on our culture's epistemology and its consequent ontology. I long to make a break with it all, disavow the whole package. Only the natural order, that part not yet contaminated, radiates meaning, peace, and love. Man has goofed up. It is time to shut up, face the East, lift up our eyes, and listen.

MY AVOIDANCE OF REMARKABLE MEN

Gurdieff posited his search for truth as 'my search for remarkable men' and gave that title to his biography. While it is certainly true that one cannot proceed very far along the path without a teacher, do the teachers have to be remarkable men?

By intent I have never embarked on a search for 'remarkable men'. I have found whomsoever and whatsoever was before me at any time to be remarkable beyond my power fully to comprehend. What I have learned has been gleaned from that which happened to come my way, not only persons and books, but towns, hills, birds, clouds, lights and sounds. All of these were my remarkable men. Yet none of what occurred was random. There was a pattern in what came my way. Behind it all there seemed to be an invisible guiding hand.

I certainly do not question the existence or the value of remarkable men. But I do question, had I given my life to searching for them, that I would ever have found them. Yet I feel it is possible by learning how to assimilate the experience that happens to come one's way, independently to learn that which remarkable men have to teach. Indeed, much of what I had already learned, I later found again in reading their books.* And in this I see nothing remarkable. Great truths can be found again and again independently by those who seek them. But what has been especially important is that in arriving independently at these truths, I am taking them on the authority of the world itself, not on the secondhand authority of remarkable men. But also of importance is the confirmation that we may give to one another.

** But here I must say that had I not gone as far as I had, I would not have recognized what they said nor be led by them to the next step.*

AN ENCOUNTER WITH A SAINT

Robin Amis asked, "Have you ever seen a saint?" This question took me by surprise, I had never been asked this before nor given the matter much thought. On the other hand I have often been asked a rather parallel question: "Have you ever seen a ghost?" Certainly most of us have never seen either, but in my experience I have indeed encountered both. While I vividly remember the five occasions and three locations of my encounters with ghosts and the effect all of this had on my view of reality, after thinking about two other experiences that deeply changed my life, I recognized that they involved an encounter with saints. Leaving the ghost stories for another time, I want here to tell Robin Amis, yes I have seen saints.

One of the encounters was in India at Mahabalapuram, an ancient village of temples some built with stone, some carved out of living rock. The other encounter was in Japan, on a short voyage on the inland sea from Hiroshima to Miyajima. Both events greatly changed my life. The Mahabalapuram event is told in the story of 'The Gift of Siva', this is the Miyajima story.

While in Japan in 1959, I felt compelled to make a pilgrimage to Hiroshima. I was told I was unusual, most Americans didn't like to go there. They had a denied guilt over using the bomb. Many stories circulated about curious events the day the bomb was dropped. Dr. Murayama, an astronomer, told us how for some unexplainable reason on the morning of August 6, 1945, when he had reached the station to take the train into Hiroshima, he realized he had forgotten his brief case. He hurried home to retrieve it but when he got back to the station he had missed the train. That is why he was alive. He said many things of that sort, events that Jung would call synchronicities, had occurred to him and some of his friends.

He said as long as we were in that part of Japan we should see Miyajima, where there was a beautiful temple with its famous tori in the water, one of the five most scenic spots in Japan. Murayama, my friend Major John Cochran, and I boarded the small pedestrian open ferry that would take us across the bay. We had just taken our seats when I felt a strange salutary presence, a feeling of peace and confidence. I noticed other people on the boat had turned and were looking toward the dock. I turned around to see what was going on. Coming along the dock was a small solitary bald man wrapped in a monk's robe. He was smiling, not only smiling, but radiating joy. He seemed to be swathed in light and exuded love towards us all. He got on board and bowed to us. Who was this? Coming from this city of radioactive desolation and radiating a totally different energy. What contrast! I asked Murayama who this could be. He told us that this was one of the monks from a nearby Buddhist monastery, probably going to visit the shrine at Miyajima. Never had I seen such a person, never had I felt such a presence. I had to know more about him and how he got that way. That day was the day I realized that I must ~~find~~ ^{study} Buddhism.

LP

QUESTIONS FROM GRANDCHILDREN

I was greatly impressed with the profundity of the theological and scientific questions coming from generation #3. A friend who saw the questions flattered me by saying, "chips off the old block". I am indeed proud to have such wonderful grandchildren as Albert and Alexandra.

g/most 8 5 1/2

Now to the questions: Alex asked,

"Who created God?' There are several answers. 1) God was never created, God always existed, because God is outside of time. Only material creatures exist within time. God exists in eternity. 2) God came into being simultaneously with the world. That is neither creator nor creation existed until both existed. Just as there is no creation without a creator, there is no creator without creation. That is why both our existence and God's existence depend on each other. We need God, but God also needs us. 3) Someone once asked St. Augustine (c400 C.E.) "What was God doing before creating the world?" He answered, "Creating Hell for people who asked that question." I do not agree. It is a wonderful question, because in asking it and thinking about it, even if we cannot come up with an immediate answer, it brings us closer to God and that makes it all worthwhile. It is written, " Seek and you shall find, ask and it will be given to you." So keep asking and searching all of your life and you might not get just the answer you were looking for, but if not you will receive something much more precious and useful.

Albert asked, "Is there more than one universe? and if so how many are there?"

This is a question that several contemporary cosmologists are asking. Up until a couple of decades ago, everyone would have said there is only one universe. But then with the work of another Albert, the great Albert Einstein's theory of relativity, objects called black holes, white holes and worm holes were surmised. Black holes have now been discovered, so white holes and worm holes are probably soon to be confirmed also. A black hole is a place where matter, energy and information leave this universe. A white hole is a place where matter, energy and information enter our universe. A worm hole is a tunnel connecting two universes, having a black hole on one end and a white hole on the other. So if each black hole is the entrance to a tunnel leading to another universe, then we must count up all of the black holes we can find and that would give us a clue to how many other universes there are. One difficulty is that some worm holes might twist back and be tunnels coming back into our own universe. So we cannot answer the question at the present time. But you might want to study Albert Einstein's work when you are older and search for a better answer to the how many universes question.

I miss all of you and am looking forward to my next visit, possibly in September.

Much love to all of you,
Grandfather Albert

→ DREAM1013.
DREAM11.WP6

A.M. October 13, 1997

I find myself in a large city, familiar, but not specifically identifiable. There are many tall buildings, but curiously all of them seem to be under construction. All are being added to vertically. While they had earlier been finished, now some sort of motivation is at work to make each taller, adding more storeys. The old heights seem to have been outgrown.

Next I find myself in one of the upper storeys of one of these buildings. I am in a hallway and see myself in a mirror. I have white hair, but a younger face, and seem rather genderless. I enter a room and find a chair which I drag over to be in the sun and begin to read. But soon I find I must move, I become aware that I am in the way of a project that is going on. Near by someone is sawing. I investigate and to my surprise it is Frances. [Frances passed away on February 9 this year] I go up to her and we begin to talk. I notice how beautiful she is. Her hair is totally white, her face radiates great beauty. I tell her how beautiful she is. There are two teen age girls working with her. I ask who they are. She explains that there are really four of them. They are her daughters ages 15,16,17,18. She tells me their names, and besides the two who are currently with her, the middle two are away at school. They are very beautiful and brilliant girls. I ask who their father is. She says, "You are". I reply how could that be, we have not been together for over four decades. She just looks at me and repeats, "You are".

DREAM897.DRM

August 13, 1997

DREAM JUST BEFORE WAKING ON MORNING OF AUGUST 13, 1997

Three parts:

Part I

There are a group of us, seemingly on a picnic, lounging on the grass. Ed is near and we begin to talk, have good rapport. Then suddenly I am leaning over a wall talking to him, we continue to talk but he does not understand what I am trying to say. He leads me to a place where there is a gravestone. He says that in order to continue at this point you must pay a fee [seems in the order of several hundred dollars]. I ask, "What is the money used for?" He seems very surprised then says it is for helping others on the way. I think about it then walk back.

to reach this point

Part II

I climb up some rubble to get to the library. I enter and find that all is chaos, everything is under repair. There is junk all over the floor and the computer room is closed with a sign "not open until tomorrow".. I then discover that the library has been closed. How did I get in? Then the employees who evidently had been in some back room exit and take me with them. I said that I didn't belong, but they ignored me and inadvertently included me in their meeting. It appeared they were dividing up the library among sub-groups in order to control everything. I left and walked down a steep cliff to a stream which I crossed by stepping from rock to rock. I thought my feet were wet but they weren't.

Part III

I go to a familiar place to get some food, but find it has changed, so I go outside to get some air and take in the view. I feel inspired and start singing the Internationale. A man with a beard I had seen at the library meeting comes out and stands beside me. Soon he joins me in singing the Internationale. Then I see that the view is soon to be gone, builders are rapidly putting up a high rise that quickly goes over our heads, but the workers hear our singing and join us. Soon almost everyone is singing the Internationale, everybody seems to know the words. But they keep putting up the building while singing. When we come to the end I go back inside feeling both gratified and confused.

Part I is about how I fear Vajrayana is moving in the direction of traditional institutionalized religion, both blocking and charging for the path. Part II is about knowledge (including science and technology) being reformulated by its custodians for their own power and profit. Part III is about the growing resentment of exploitation among workers who nonetheless have no alternative but to keep on contributing to the degeneration of the planet.

19a
March 23, 1997
PALM SUNDAY

DREAMS:

RE-ENTIFICATION
THE PLAY WITHIN THE PLAY
CHUANG TZU: PLAY \supset \subset PLAY
MULTIPLEXED PLAYS

Yesterday I was perusing the book, "The Defiant Chiefs", a brief history of those Indian leaders who resisted the pressures and deceit of the Whites. In one part was a description of the Hopi and a picture of the Grand Canyon. In another was a Kiowa chief who had penetrating eyes, and whom, I wondered might at some time have gone to the summit of the Elbert Mesa and communed with the Great Spirit. I became very angry reading about the repeated betrayals and breaking of treaties by the Washington government. I was moved by the courage, wisdom, and suffering of some of the tribes, especially the Cherokee.

A few days ago I talked on the phone with Nan. She and Doug will come to visit me on Saturday, April 12th. We frequently talk about religion when they are here. They are fundamentalists, of the oldest Old Testament sort. I am a Buddeo-Christian and in very subtle and indirect ways talk of the values of meditation, 'listening to God', which I feel leads to a deeper and grander level of spiritual experience.

This morning I awoke remembering this dream:

Nan, Doug, and I were walking in the country side and came across a stream and an area where excavations were being made. On the other side of the hill (north? side) we came to where the stream bed had been bulldozed to the north. To the south a deep gorge had been cut in the hill. It was apparent that what we had first seen on the south side of the hill was to be connected by a deep gorge cut through the hill through which the stream would flow. That appeared to me to be an excellent compromise, if we had to alter the terrain at all.

I left Nan and Doug sitting by the stream and pushed on the the East. There were very precipitous cliffs and summits to be climbed. But after a surprisingly short distance I came to the Grand Canyon. I thought of Nan and Doug whom I had left by the stream and the ~~large~~ ^{trench} large ⁺ which had been started in the hill. I climbed to a near by summit and could see them. I called out if they wanted to see a real trench, a genuine gorge, they should come over here. They started and climbed some of the rocks. In one place they had to come down on this side. It was a precipitous descent. Doug slid down the cliff, Nan hesitated. I returned to help. Further progress seemed impossible, so we decided to go back. But when we had returned to the original hill, we saw that the excavations were not for the stream at all but were for easing the grade of a new road over the hill. And at the top of

the hill a town had been built, a most typical and redundant drug store and filling station town. I became angry watching the Whites and their activities, from the kids on skate boards to the shoppers coming and going in cars. I felt that the ~~gorge~~^{trench} that had promised to be maybe 'a little Grand Canyon' had turned into the typical white man's road and enclave. The stream had disappeared. I felt betrayed, but I was betrayed by my illusion, not by what had been intended by the Whites all along.

This dream had blended the images from the Defiant Chief's book with my religious experiences and relationship to Nan and Doug. It revealed to me the ultimate use of the white man's trench (=religion) was a road to commercialism and materialism. Although at first appearance the diggings had seemed an attempt to emulate nature's grand gorge, (but which at best could have been only a feeble surrogate), at some point the excavation had turned to an entirely different objective. The dream translated into excavational symbols my experience with church religion (the excavations), Buddhism and beyond (the Grand Canyon), and my relation with Nan and Doug.

Dreams do seem to be a form of re-entification. A recasting of the entities but with preservation (or revelation) of the true relationships. Do dreams show that this life is a play within a greater play, as the dream seems to be within this life? Or is the dream the real play, the question of Chuang Tzu*. In any event we can say that dreams and waking life are a form of TDMA multiplexing. But may they not also be other forms of multiplexing, FDMA, ADMA, or most intriguing, CDMA?

* Chuang Tzu had a dream that he was a butterfly. When he awoke he was perplexed and asked: "Am I a man who dreamed I was a butterfly, or am I a butterfly dreaming that I am a man?"

980323.DRM

Dream in the morning of March 23, 1998:

Had found new space in the basement of an old building. Was delighted to have place for stuff that needed organizing and storing. Lots of deep shelves but all need dusting and cleaned up. Donna shows up and wants some of the space. I work out with her portions for both of us. Then I discover that the space is at least a dozen times larger than I had at first realized. And then further discover a "symmetric" space of about equal size to the original. I give the entire symmetric space to Donna.

I then go off for some reason to meet somebody important. And decide to take a short cut back. But the road is cut with deep ditches and hard to progress. I finally come back and find huge crowds of people gathered at my new space. There seems to be some kind of celebration in the offing. Everywhere people elegantly dressed and enjoying refreshments from various "tea rooms". Then things seem to get organized. A ballet team comes in and in time with their dancing everyone starts shouting "Mother Russia". The scene becomes very emotional and the entire crowd surges to the entrance. I see a large white blue and red Russian flag with an imposed double eagle.

The crowd sings "Mother Russia" and it turns out that Tsar Nicholas and his family are coming in for the celebration. I am in a front row along the line of march and get to see the Tsar and his family and accompanying cortege. A high officer with the most impressive military cap I have ever seen looks at me suspiciously then goes to confer with some others all the while watching me. At this point some one at my side takes my hand and I turn and see a beautiful young lady in court dress fascinatedly watching the procession. The officer returns and sees the two of us holding hands, seems relieved and goes off. I look at the lady, she looks at me, suddenly withdraws her hand and exclaims, "Oh, I am so sorry, I thought you were someone else". I said its quite all right you just saved me from the Oprichnina. She *okrana* laughs and said, "I didn't want to be alone either and need an escort, would you mind if we stay together?" How wonderful, we need each other here, let's stay together.

After a dream such as this, I wonder who the hell I am. Why has Russia seemed so important to me all my life? I had to find a private tutor and study Russian when I was just 14. I sought an answer in the Birch forest near Moscow in 1958. There I felt I was at home but the answer eluded me. I do not believe in reincarnation, but it seems somehow that, like a hologram, I am a part that contains all of history, all of biography, all of what has been anywhere at any time on earth. But is this not true for all of us? I seem from time to time to get a glimpse of a greater whole. Or is it that I have at times succeeded in gaining access to Our Mother Earth's Great Collective Mind, the Noosphere?

Я не знаю - *I don't know*

$\sqrt{\text{RMS}}$

DREAM 97/06/07

We have separately obtained tickets to a performance and find we have front row seats. On the stage is a bed and on the bed a male figure, reminiscent of some Greek or Roman deity, is surrounded by a group of beautiful women and men, all reclining on the bed. They have musical instruments and are playing and singing a song. It seems to be some song that I have heard snatches of all my life but have never heard in its entirety. It is very beautiful, but sounds completely different from how I imagined it would sound. When the song ends the central figure says that he just cannot get over how joyful everything is now that he has an "R M S" relationship to all the others. I laugh at this. Then the person next to me asks, "What is RMS?" I say it means 'root mean square'.

I wake up and find I am smiling about this dream. It seems to contain many messages. It is clear to me that the deity is the central self and the others are all Jungian figures, animas, shadows, etc, and other inner figures going beyond Jung's list. But what is an RMS relationship? Whatever it is, the result seems to be the achievement of an harmonization that is capable of singing the cosmos' fundamental song with great feeling and beauty.

I begin to think mathematically about root mean square. This is different from an ordinary or first moment mean which adds all the inputs, both the positive and the negative, then divides by the number of inputs. The root mean square, or second moment, first squares all of the inputs, then adds them, divides by the total number and finally takes the square root. In RMS every input is positive because the square of negatives is positive. Psychologically, (which is what this is about), every aspect whether positive or negative is first rendered positive making the final disposition always positive. First moment averaging may lead us to **balance**, but second moment or RMS averaging leads us to **harmony**.

The psychological problem is how do we 'square' our negatives?

√RMS

SOME COMMENTS

Rc DREAM 97/06/07

The psychological problem is how do we 'square' our negatives?

An event that happened August 15, 1993 seems to be a possible clue to squaring, at least one form of squaring. On this date an intruder broke into my house intent on burglarizing. Not suspecting anyone to be at home, he was completely taken by surprise when we encountered one another. I shouted at him, "Who are you?" He, visibly off balance, shouted back, "Who are you?" In effect we had [Who are you?]². Aside from the immediate purpose of the questions, there was a very important meaning to them which led to our confrontation. Who was I to have a house and some stuff worth burglarizing while he had needs that could be met by taking some loot. Here we were both with backgrounds that gave a negative, a double negative meaning, to the encounter. Affluence vs. poverty, and legality vs. crime. That which legalized my affluence also played a role in legalizing his poverty, and consequently illegalizing his action. The negatives here were deeply intertwined. He promptly left and I called the sheriff, ending the event but opening up questions concerning its cause and meaning.

There was a double symmetry here and while a single symmetry may not permit 'squaring', a double symmetry does. Somehow the two negatives of an illegal action and an imbalance in access to resources cannot be resolved separately, but can be resolved together--that is squared or made positive. This requires both inner and outer changes, probably why nothing ever gets squared.

In a broader sense we must take the inner and outer domains of ourselves and the universe and square them. We must let the inner and outer symmetries reflect each other as do parallel mirrors until the infinite regression squares us with the cosmos. We must not overlook that there is double symmetry here, for both we and the universe have inner and outer domains--we separate subjective and objective, the universe separates concealed and manifest.

[Both we and the universe have inner and outer domains, there is double symmetry.]

VISION2.WPD

2002-05-21

A VISION

For some years I have experienced a rather disconcerting phenomenon. I wake up in the middle of the night. The room is totally dark, I open my eyes and see a pattern on the wall. Usually this pattern is something like a vine or a mix of wreaths and branches. Ofttimes green on a gray background. The vines and wreaths move and morph and tend to look like writing in some strange script. I do feel they are messages, but I have no idea how to interpret them. One thing I am absolutely certain of, I am not asleep or dreaming I am awake!

This morning I woke up about five a.m. and opened my eyes and on the wall beside my bed (north wall) was a painting of a city. I say painting because it did not resemble a photograph and the buildings were somewhat strange and very stylized. I closed my eyes and it disappeared. I reopened my eyes and the city was still there. As I watched the buildings began to move and morph (like the vines) and then took on the form of gravestones. The city had morphed into a graveyard. Then a great disturbance struck and parts of buildings or graves flew about in all directions. Some streaked out of field of view. Then superimposed on the scene a series of circles of various sizes appeared and disappeared like the ripples resulting from drops of water hitting the surface of a pond. There was great confusion with expanding circles, streaks and smoke. I felt this was indeed a message in a language I might be able to understand.

But how was this message to be interpreted? Recently I had seen scenes of strange cities in a Star Wars preview. Was the message telling me that soon I would go see the movie Episode II? Or was this an entirely different message? Yesterday Vice President Cheney announced that an attack by terrorists was imminent. I know announcements such as this affect each of us in subconscious ways. Was this a personal reaction to his announcement? Or was this a prescient message warning of an impending actual event? If that is the correct interpretation, what details can be gleaned? We know that the terrorists wished to modulate their violent physical messages with symbolic messages. (Or is it the other way?) The attack on the World Trade Center symbolizing global capitalistic imperialism, the Pentagon symbolizing the presence of American military power worldwide. And what was symbolized in aborted Flight 93? Perhaps an *etc.* for a list of other targets. The city in the vision was definitely an inland American city of about 150,000 population. So what other symbols are contained in the terrorists' *etc.* Finally, is it possibly that the vision is about the consequences of our reaction to an event that has already taken place? That is, Are the attacks immanent or imminent?

CLARIFICATION TRUNCATES

A Dream, morning November 17.

Several of us are viewing representations and pictures in a museum. We come to a display showing a large towering cathedral like structure. It is dim and a bit fuzzy, but very rich in decoration and fenestration, covered with statues, finials, elaborate carvings—all high gothic. After a few moments the light becomes better and the image more clear, the outlines are sharper, but the building itself seems to have lost some of its richness, the statues become only protuberances, the decorated finials become only pyramidal spikes. Then further brightening occurs and we realize we are viewing the same structure through successive filters. Each time the tower becomes sharper, clearer, and gradually becomes familiar. Then we realize it is something we have all seen. It is the Los Angeles City Hall, a plain tower decorated only with windows. The successive filters seem not only to have admitted more light, but to be associated with a different time. Time itself played a role in what we could perceive.

The dream switched to another locale, to another cathedral like building. This building was Z shaped. There were three long naves connected as in a Z. The first was open to the sky, there were columns and arches but no roof. The second was similar in structure but had a roof. The third was also enclosed, but was closed. The doors were locked. We stood there not knowing what to do. The leader of our party said we must return down the second nave. But a few of us just stood before the door. After the others departed, the doors swung open. We entered and came into the most magnificent and ornate structure imaginable, paintings, carvings, stained glass. On both right and left were numerous side halls, each hall itself a cathedral, but each in a different style,, each a variation on the main theme but all blending harmoniously. We entered one and were impressed, while it was new to us, it was somehow familiar. We continued down the central hall looking up at the many domes overhead, each decorated differently. Finally we arrived at the end of the great hall. There was no chancel, no sanctuary, no high altar. There was only a plain, blank, featureless wall. The side hall on the right seemed be a business office, glass panels, desks, files. The side hall on the left was open. We entered, it was crowded with people some sitting quietly, others rushing about. We sat down.

LAST PISC

A DREAM: MARCH 4, 1995

SCRAPS

I was coming out of a meeting onto the street and ran into several astronomers I knew. I was surprised also to run into Guy Omer, for I had read over the past few months notices of his death in three different places. I walked beside him and said, "I'm glad to see you for I had heard that you were dead". he laughed and said, "That piece of news got out and there is no way in the world I can get it retracted." "well", I said, "I see it is not so" he grinned and turned and walked away with a colleague.

Meaning:

Either, as I have dreamed of departed ones before, they are carrying on in another realm, or I shall soon be joining Omer where he is, or both.

LAST DISC

DREAM02.W52

DISK:

March 5, 1994

From time to time a dream seems important enough to record. Perhaps they are all important, but until we have better decoding, only those that hit our conscious selves with some insight toward interpretation seem worth recording. The following is such a dream, dreamed morning of above date.

Dad, (vague others), and I are studying a map. It seems largely to be centered in Mexico. There is a city we are on our way to visit which is in a valley surrounded on west and east by high mountain ranges which converge in the south. The only way in is from the north. The city of our destination is some holy place, like Lhasa or Shambala. We are then in a car, Dad is driving, I am sitting next to him and there are one or two others in the back seat. Suddenly it seems as though even from the north our road is encountering unexpected high mountains and steep gorges. The road is narrow, one lane, and winds along the edge of a cliff precipitous above and below. Dad does not have his hands on the steering wheel and it seems as though the car is following the ruts in the road as though it were on rails. I feel uncomfortable about this but Dad is not one to tell what to do. We round a curve and suddenly ahead of us is a huge boulder in the road which fell in a recent rock slide. The road itself seems to have fallen partly away into the gorge on the right. Dad grabs the wheel and tries to steer between the rock and the cliff, but it is too narrow a space and the rock is forced to the right pausing on the edge. It seems that we might make it, but then the rock goes over the edge and carries part of the road with it and the car slips. I then realize that we cannot get back on the road and as we continue to slip I look down into the gorge a thousand feet below. We begin to fall, and I say "This is it". And I wake up.

I interpret the car as American capitalism, particularly the stock market, driven to reach some Valhalla, which it is doomed never to get to. It is overconfident and oblivious to the errors in its roadmap and to the perils posed by a natural order which it disdains. No need to steer, just continue in the ruts, business as usual. It encounters a road block, where it should stop and clear a way, but continues on confident that business as usual will see it through. Then there is a collapse and the car plunges into the abyss, taking all with it.

Stock Market Data:

*of collapse of Mexican Economy
- Reso + Market
Dec 1954*

DREAMS:

RE-ENTIFICATION
THE PLAY WITHIN THE PLAY
CHUANG TZU: PLAY \supset \subset PLAY
MULTIPLEXED PLAYS

Yesterday I was perusing the book, "The Defiant Chiefs", a brief history of those Indian leaders who resisted the pressures and deceit of the Whites. In one part was a description of the Hopi and a picture of the Grand Canyon. In another was a Kiowa chief who had penetrating eyes, and whom, I wondered might at some time have gone to the summit of the Elbert Mesa and communed with the Great Spirit. I became very angry reading about the repeated betrayals and breaking of treaties by the Washington government. I was moved by the courage, wisdom, and suffering of some of the tribes, especially the Cherokee.

A few days ago I talked on the phone with Nan. She and Doug will come to visit me on Saturday, April 12th. We frequently talk about religion when they are here. They are fundamentalists, of the oldest Old Testament sort. I am a Buddeo-Christian and in very subtle and indirect ways talk of the values of meditation, 'listening to God', which I feel leads to a deeper and grander level of spiritual experience.

This morning I awoke remembering this dream:

Nan, Doug, and I were walking in the country side and came across a stream and an area where excavations were being made. On the other side of the hill (north? side) we came to where the stream bed had been bulldozed to the north. To the south a deep gorge had been cut in the hill. It was apparent that what we had first seen on the south side of the hill was to be connected by a deep gorge cut through the hill through which the stream would flow. That appeared to me to be an excellent compromise, if we had to alter the terrain at all.

I left Nan and Doug sitting by the stream and pushed on the the East. There were very precipitous cliffs and summits to be climbed. But after a surprisingly short distance I came to the Grand Canyon. I thought of Nan and Doug whom I had left by the stream and the large trench which had been started in the hill. I climbed to a near by summit and could see them. I called out if they wanted to see a real trench, a genuine gorge, they should come over here. They started and climbed some of the rocks. In one place they had to come down on this side. It was a precipitous descent. Doug slid down the cliff, Nan hesitated. I

returned to help. Further progress seemed impossible, so we decided to go back. But when we had returned to the original hill, we saw that the excavations were not for the stream at all but were for easing the grade of a new road over the hill. And at the top of the hill a town had been built, a most typical and redundant drug store and filling station town. I became angry watching the Whites and their activities, from the kids on skate boards to the shoppers coming and going in cars. I felt that the trench that had promised to be maybe 'a little Grand Canyon' had turned into the typical white man's road and enclave. The stream had disappeared. I felt betrayed, but I was betrayed by my illusion, not by what had been intended by the Whites all along.

This dream had blended the images from the Defiant Chief's book with my religious experiences and relationship to Nan and Doug. It revealed to me the ultimate use of the white man's trench (=religion) was a road to commercialism and materialism. Although at first appearance the diggings had seemed an attempt to emulate nature's grand gorge, (but which at best could have been only a feeble surrogate), at some point the excavation had turned to an entirely different objective. The dream translated into excavational symbols my experience with church religion (the excavations), Buddhism and beyond (the Grand Canyon), and my relation with Nan and Doug.

Dreams do seem to be a form of re-entification. A recasting of the entities but with preservation (or revelation) of the true relationships. Do dreams show that this life is a play within a greater play, as the dream seems to be within this life? Or is the dream the real play, the question of Chuang Tzu*. In any event we can say that dreams and waking life are a form of TDMA multiplexing. But may they not also be other forms of multiplexing, FDMA, ADMA, or most intriguing, CDMA?

* Chuang Tzu had a dream that he was a butterfly. When he awoke he was perplexed and asked: "Am I a man who dreamed I was a butterfly, or am I a butterfly dreaming that I am a man?"

A DREAM
March 4, 1993

I was returning to my house from which I had been absent for a long time. Outside the front door there a noisy group, clamor and confusion. I pushed myself through and got to the door. It was open and I entered. Those outside did not follow me in although the door was still open.

Inside I went from room to room and was astounded at the size, beauty, and novelty of the various rooms and halls. I could not remember why I had ever left. However, on closer inspection I saw that everything was covered with dust, webs, and was generally run down. In one room the floor was covered with nut shells and other remains suggesting rodents had invaded the house.

I began to pick up the remains and collecting them into a pile. One mass of junk I picked up resembled a dead animal, perhaps a mouse. I quickly dropped it and when I did the animal woke up. I was repulsed and frightened. But the animal started to eat the shells and other remains, so I moved the pile near to it and it continued to eat and clean the mess up. I then tried to get the animal to move by nudging it with my foot. It snarled at me at snapped at my shoe. Meantime it was growing. At first it had been about five inches in length and was bare, but soon it had doubled in size and was growing fur. It no longer snapped at me, but it knew that I wanted it to move and it didn't want to. After a catch and go game I finally caught it by the tail and carried it outside where I thought it could find plenty to eat and be happy.

I then continued to explore my house, noting various fireplaces, some of brick and curious spiral staircases. I was intrigued by the multi-leveled arrangement of the halls and rooms. Finally I reached the attic and found a room filled with pieces of stored furniture, chests, cabinets, bookcases, some carved and all closely packed together in the available space. I was figuring out how to gain access to one of the chests, when I saw the animal coming up the stairs. It had re-entered the house and was evidently looking for me. It had grown to about four feet in length and was now covered with a beautiful coat of fur. I was alarmed and distraught that it had come back. It headed straight for me, but instead of snarling and snapping it put its head on my knee and nuzzled me. I patted it and it lay down and seemed like a large friendly dog. I sat down and it put its head in my lap and I hugged it. There was a new mutual understanding between us, an exchange of warmth. I told it that it could stay. And then it seemed to speak to me, not to my ears but to my mind. I understood that we were really working together on some important task for which we needed each other.

LAST PISC

A DREAM July 1-2, 1996

I am trying to bring my space into order. It is appears to have been abandoned and is encrusted with dirt. I begin by getting rid of some metallic odds and ends, then scraping away the dirt. It is a lonely task, I seem to have running through my head overhearing a conversation of Donna with someone telling how I would walk this great distance every day at noon in the hope that she would have lunch with me. She never did. And she was telling the someone she felt sorry for me. But she never came out and told me why she would not eat with me.

Then I realized that my space was on the outside of a high cyclone fence. On the inside I saw all of my friends Don, Eleanor,.. they were organizing things and making plans, and I realized that I was shut out away from them. But I finally realized that they were enclosed in a small space and that I alone was on the outside free to explore the larger world. Why should I want to be inside the fence? Because it is so lonely on the outside.

The price for community is to be enclosed in a limited space. The price for the freedom to explore is loneliness.

IN SEARCH OF IDENTITY

This is one of those days when I seem to have lost my identity, or rather, seem to have too many identities. Just who am I? I know I have a birth certificate that tells me I was born in Houston, Texas on the 28th of July 1918 and that my name is Albert George Wilson and that there are records out there concerning my education, jobs, marriages, children, and memberships in various organizations. But all of that seems to be but a trivial part of who or what I am.

I have found identity in what interests me: astronomy, mathematics, history, philosophy, religion. I have found identity in my work: in schools, the navy, observatories, laboratories, think tanks. I have found identity in my family, my ancestors, my descendants, my relatives and in-laws. I have found identity in the places where I have lived: Denver, Houston, Pasadena, Flagstaff, Topanga, Woodland Hills, Sebastopol. I have found identity with my times, the 20's, the 30's, the 40's, the 50's, But I must confess here, that beginning with the 60's I seem to have drifted out of current time, back not only into my past, but back over centuries. And my visions have drifted from a utopian future that evolves out of the world of NOW to a world having little connection to the world of NOW or to any possible future that could evolve from it. In short, I have become alienated.

But the mystery is that, while I contain the above interests, work history, family, places ,and times, I seem to be contained in much larger sets of interests, tasks, family, places and times. I am no longer seeking my identity, but a new identity seems to be finding or redefining me. This re-definition seems to have begun in the late 50's when I traveled extensively to many parts of the world. It was curious that in certain places I felt very much "at home". I seem to recognize things even though I had never been there before. This was true in places like Chichin Itza, and Uxmal, in Yucatan, like Durham and Whitby in Yorkshire, like Prague and St. Petersburg in eastern Europe, like Samarkand, Jaipur, and Nagoya in Asia. What did these places have in common that tied them to the 20th century me? Of course, Chichin Itza, Prague, Samarkand all had connections with astronomy, but the feelings in those places and the others were not attributable to just astronomy. There were other more embracing connections.

And the more I read history I encountered events that I seem to have participated in. I have 1 very strong feelings against the decisions at the Synod of Whitby in 664, strong feelings with the Peasant Revolt in England in 1381, with the Husites at Prague in 1386, for the defeat of the Tsarist fleet at Tsushima in 1904, and during my lifetime, though unknown to me until decades later, on the side of the Sailor's Mutiny against the communists at Kronstadt in 1921. All of this seems to hint some connection between my personal identity and and some sort of revolution archetype. So maybe I belong to a revolution-archetype and show up whenever revolution is needed. But I note that in almost every case I serve on the losing side. Yet I feel quite comfortable with this. [I should add that I voted in every presidential election since 1940, and never voted for the winner.]

A POST-PISCEAN GLIMPSE

As we wind up the century, the millennium, and the age that began some 25 centuries ago, commonly called the Piscean Age, we wonder what the themes of the next age will be. Do we have any previews or glimpses of what the age now beginning will be like? If I were to make a guess, I would see as one highly likely, but definitely not assured, scenario something like the movie, Apollo 13. I see humanity united and identified with both the importance and the challenge of going beyond the Earth. And this not just from the technical challenge, but from its forcing us to graduate from the cradle and school yard mentality that has possessed us for millennia. For the venture into outer space is not only a physical journey, it is a symbolic journey of our leaving the cocoon in our spiritual evolution.

The venture into interplanetary space can serve as a ritual, a liturgy, that will also awaken and guide us in our venture into "inner space". Probes and space vehicles will be the candles and incense of our new litany. Already we have seen our hearts as well as our minds awaken as we find global identity with the astro-cosmonauts entering this new frontier for us. They carry each of us with them in spirit as they make their lonely dangerous way into the unknown

At this singular point in our journey we are briefly free of deterministic archetypes. There is a spectrum of choice before us. One choice is to stick with* the familiar, repeat the scenarios of rivalry and conflict ingrained in us by our historic insufficiencies and inadequacies. Another is to recognize our all but total blindness to a major sector of who we are and what we can become. A sector thus far recognized only poorly and partially by some of our religions; and off limits to purely intellectual epistemologies.

But once before, if we look back millennia, ^{there was} ~~we can see~~ a comparable time, when our ancient ancestors first walked to the shores of the sea, viewed it in wonderment, then began to venture forth on it, discovering both outer and inner realms of which they had never dreamt. We are their descendants and we cannot do otherwise than continue in the Great Journey that they began.

Sept 30, 2002 * Certain political sectors seem determined to take this choice

Over the years I have learned three things: The first is that I am a philosopher. Perhaps it would be more accurate to say that over the years I have ^{become} become a philosopher. Anyway, of all the single words we have to describe who we are, philosopher fits me best. The second thing I have learned is that women prefer hockey players to philosophers. And the third thing is that women are wise in their preference. Their choice is better both for women and for philosophers. (I have no idea what is best for hockey players.)

With that introduction, I was very surprised to have a woman write to me, "So many times I wish to discuss with an intelligent human being". How am I to interpret this? One flattering way to interpret it is that she thinks I am intelligent and would like to discuss things with me. But more probably she is making that as a passing remark indicating she is bored with those near by, and with no inference intended that I have any relevance to the remark. After all she is a woman and I am a philosopher.

Not being a hockey player and not knowing how to relate to a woman, all I can do is philosophize.

- Point 1: Pilots are a sub-class of hockey players.
- Point 2: We are indeed living in the 'end-days' It is hard to understand how we can be so dedicated to business as usual when we clearly see that it is heading toward catastrophe. The increasing disparity between rich & poor, both internationally and intra-nationally is putting the world on a collision course with violence. No asteroid is needed.
- Point 3: I used to say along with King Louis XV, "Après moi le deluge", but now I am not so sure. I recall the cartoon in the New Yorker showing two very glum old men sitting at a bar. One says, "Joe, you remember all of those things we used to say 'thank God we won't live to see'? Well we're going to live to see them". Approaching 80, I felt safe for my projected lifetime, but Nostradamus puts the beginning of the end before the end of this century.
- Point 4: The path of the warrior is no longer meaningful. The warrior needs an enemy. Who is the enemy? Pogo said, "We have met the enemy and they are us". The enemy is everywhere both outside and inside, and being everywhere is consequently nowhere. The warrior may thrash at those at hand, and he will, but the results will be negative.
- Point 5: T. S. Eliot felt that the task of the old was to explore. I feel it should be everyone's task. The only meaningful thing to do when there are no solutions within the established framework, is to explore. B. Fuller said that the human race is now at the position of the bird that must break out of the egg shell. We must explore first to find how to liberate ourselves from the shell, and then a whole new world awaits us to be explored.
- Point 6: There is a crack, light is beginning to enter the shell. We must now learn to use an organ we have never used, we must learn to see.

perceive

ROMI.LTR

97/03/05

Put Pogo and Shantideva
in juxtaposition

My beloved spake, and said unto me, Rise
up, my love, my fair one, and come away.

For lo, the winter is past, the rain is over
and gone;

The flowers appear on the earth; the time of
the singing of birds is come, and the voice
of the turtle is heard in our land;

The fig tree putteth forth her green figs,
and the vines with the tender grape give a
good smell. Arise, my love, my fair one,
and come away.

Song of Solomon 2:10-13

TRTLSONG, WP6
CODICES 97/08/14

October 3, 1997

This is a true story related to us by John Lewis Scott on the occasion of a visit to the cemetery in Winslow, Arizona in August 10, 1997.

Ralph, a septuagenarian who had lived in Winslow all of his life, had been ill for some months when he died. A few days after the funeral, Ralph's grandson had a dream about his grandfather. He told his mother about the dream and said, "It's funny, grandpa didn't look like himself, he looked just like he did in that old wedding picture up on your dresser." "What did grandpa say in the dream?" "I don't remember much except he said he would be coming back in three days to get someone."

The scene switches to three days later in the local hospital. Bob, also in his seventies, an old friend of Ralph's had fallen seriously ill and had been taken to the hospital. He was in some sort of coma and oblivious to the family members in the room, when he suddenly sat up in bed and said, "Ralph, what are you doing here?" He then lay down and died.

FAMOUS PERSONS I HAVE MET

As part of my story, The Last Piscean, I feel I should define my times by mentioning some of my contemporaries whom I saw, met, and in some cases conversed with. In many events the meeting was fortuitous.

1923: My first political memory was at age five going up to Cheyenne with Dad and Mother and boarding President Harding's funeral train, seeing his coffin in a special car.

In 1927 after his historic flight, Lindbergh toured the U.S. When he came to Denver we went to the airport and saw him arrive and afterward saw him up close as he drove by in the back of an open car.

It was many years later that I saw my next famous person. In 1944 Robert Millikan, then President of Caltech, unexpectedly showed up for my oral exam and asked me several questions regarding the history of physics. I remember his asking, "Who were the great lights in optics?"

1941-1953: I met frequently with many of the then important scientists at Caltech and Mt. Wilson, including Adams, Baade, Minkowski, Bowen, Merrill, Nicholson, Richardson, Bateman, Epstein, and especially had close contacts with Zwicky and Hubble. [See scrap on first meeting with Hubble]

In 1957 I joined the RAND CORPORATION and met several of those who visited. These included Norman Thomas, Henry Kissinger, and many air force generals. While at RAND I had occasion to travel frequently. On these trips the occasion put me within a few feet of de Gaulle in Paris, Truman in Washington, and Krushev in New Delhi. I was commended by Nehru in New Delhi for my assistance in one of India's science programs. I also had an extended conversation with Lyndon Johnson when he was still a senator, and an informal conversation with Chief Justice Earl Warren and with presidential candidate Adlai Stevenson. I also had a brief chat with Richard Nixon in the LA airport after his losing his run for governor of California. . And as for movie celebrities, I flew to London on the same plane as Rex Harrison, and once watched Gregory Peck pick up kids from a Waldorf School.

I have had conversations and professional exchanges with Margaret Meade, Gregory Bateson, Norbert Wiener, Robert Hutchins, John Wheeler, and Fritz Schumacher. Several discussions with Richard Feynman, Carl Sagan, and Muktananda.. I have even had the privilege of being at a meeting which was attended by the Dalai Lama.

Those who impressed me most favorably in this list, in the sense of being outstanding human beings, from their immediate presence not from their public image, were Norman Thomas, Harry Truman, Adlai Stevenson, and Fritz Schumacher, and of course the Dalai Lama in a class by himself. Those who impressed me unfavorably were Krushev, Kissinger, Nixon, and most unfavorably of all, Lyndon Johnson. The rest, distributed in between, were all impressive persons.

One of the earliest memories of my childhood was an evening walk with my parents. As I recall we had left the city and were in the country walking along a railroad track. My father took my arm and pointed out to me the stars up in the dark sky. For some reason I became very excited, as though I had just been told I was going to receive a present, a new puppy or even a pony. I just had to look and look and look at the stars. Then my mother taught me the little verse, "Twinkle, twinkle, little star, ..." And I kept saying it over and over all the way home.

Today I sometimes wonder if, with the stars obscured and our eyes constantly trained on ourselves, we inevitably limit our identities to "me and mine". The stars teach us humility, but they also give us a sense of being an important part of an unfathomable profundity. When we look up at the stars we cannot help but feel a oneness with them, we recognize that we are part of them and they are part of us. Our "me" focused identities dissolve. And as we join hands with those we once thought of as "foreigners", and start the human venture into space, we find that our oneness with the stars has brought us a oneness with ourselves.

MEMORIES OF DECEMBER 11, 1952

It was fifty years ago today that my mother, Hazel Straw Wilson, passed away. She had come out to Pasadena from Houston on the Southern Pacific to be at the christening of our new daughter, Rindy. She was to be Rindy's Godmother. On the night before she was to return to Texas we took a short drive up in the hills above Monrovia. She was reluctant to return. She joked, "Although I thought I would never get on an airplane, if I didn't already have my train ticket, I would fly back. I would prefer a quick flaming death on an airplane to that slow boring death on the Southern Pacific." As we drove home, she was in a contemplative mood and there was something hesitant about her.

After supper she suddenly developed a nosebleed. We tried many first aid remedies, but could not stop the bleeding. We called our doctor and he said to take her to the hospital. We rushed her there and the doctor and nurses worked on her for a half hour before they could check the bleeding. In the discussions afterwards it came out that the nosebleed may have been a good thing. She had high blood pressure and her mother, father, brother, had all had strokes. Instead of blood vessels in the brain breaking and causing a stroke, the nosebleed saved her. Finally about 11 pm all seemed well and she told us to go home.

About seven the next morning [December 11th] I went to the hospital. She was in good spirits and we discussed several things. I was puzzled when she said, "Maybe I won't have to get on that train after all." About 8:30 she said, "I am fine, you can go to Tech now." We talked a bit more then she said, "Now I want you to go and do your work." I kissed her forehead and she smiled as I left.

When I arrived at Caltech, they said you have a phone call. I called the number. It was the hospital. They said, "Your mother passed away just five minutes after you left". I returned to the hospital The nurse said she was getting ready to bathe mother, when she said, "I am afraid I am going to pass out." And then she passed away. All was peaceful and painless.

Dad flew out and we had a funeral service in Pasadena with Several old friends from Denver who had moved to LA. All came to say good bye. Then Dad and I accompanied the coffin on the Southern Pacific back to Texas. We would go up to the baggage car to check on the coffin at each stop. Then there was a second funeral service and burial in Gatesville. One part of Mother had returned to her childhood home. But another part took wing and still inspires us to do the work we have been called to do.

STANLEY M. GREENFIELD
IN MEMORIAM
March 7, 2004

With the passing of a loved one or a friend, there is always grief, but in many of our lives at the time of a passing there has come inspiration offsetting our grief. We are inspired by the life of the departed one and the contributions and sacrifices he has made for all of us. And so it is with Stan. In these days of grief our memories bring back to us the years of our good fortune in having been associated with him. And we are inspired by having known a very special person.

What is it that made Stan a very special person, one who stood out in any group or gathering? We all have our personal answers to that question. Our personal memories of particular occasions. Some of us would list Stan's achievements and contributions, and there are many. Others would list the sweet memories of a personal relationship.

What made Stan a very special person to me was he was a man who was both a man of thought and a man of action. A very rare combination in one person. Most activists are pushing ideas that are not their own, and most thinkers never get around to activity. Stan was at home both in the world of ideas and in the world of people. In his thinking there were no taboo subjects, things that must be kept off the table of discourse. In his action there were innovative initiatives not just responses to other people's initiatives. Stan was also, if I may use the metaphor of a zoom lens, a master of zoom. He could focus in on the personal and on detail. He could zoom out to see the big picture and all of the factors involved.

Stan was also a leader. He was an excellent chair of a committee. He did not force his own opinions nor compete with committee members. Instead he had the talent of bringing out the best in all of the participants. Stan handled disagreements in a very positive way, achieving synthesis instead of conflict. I am reminded of the story of Einstein and Gödel. Colleagues would ask Einstein, "Why are you always inviting Gödel over. He is so unpleasant." Einstein replied, "I invite him over because he always disagrees with me and this gives me deeper insights" Stan, like Einstein, understood the value of disagreement and diversity and he could always diffuse a locked argument with the Talmudic, "On the other hand".

Yes, Stan was a member of a rare species of human. He will be missed by all of us who knew him, but we know that the world is a much better place because of what he contributed during his lifetime among us.



After hearing the many speeches given by relatives and friends at today's memorial service, it was clear to us that we each knew only a part of Stan and that the real Stan was greater than the sum of all the parts. We felt somehow that Stan was a modern incarnation of what the ancients called a Patriarch.

Born

Died Feb 28, 2004 Santa Rosa

GROVES AND CLEARINGS

There is a curious symmetry in nature between a grove and a clearing. Myths and the folklore of many peoples speak of sacred groves, sacred to various gods or goddesses. And there are legends of clearings in a forest where one meets a deity in some form or other. Both groves and clearings are associated with supernatural beings, groves with their abodes, clearings with their manifestations to mortals.

I have reported elsewhere my experience in encountering a *vajra* in a magical clearing that I could never find again. But on another occasion I had a different kind of experience with a manifestation in a clearing. This occurred at a Cirstacian Monastery near Whitethorn, California. This is a monastery founded by Belgian nuns who were refugees from the Nazis in world war II. They built their chapel with one end having a glass floor-to-ceiling window that opened onto a clearing which was surrounded by firs and redwoods. The nuns always meditated facing this clearing which had a grassy floor and a single deciduous tree in its center. From time to time there would be retreats at Whitethorn and we secular types could join the nuns in their meditations. On one occasion when I was there on retreat we were all gathered in the chapel doing the afternoon office. Suddenly in the middle of the clearing standing next to the central tree stood a huge stag, with shining antlers. The nuns gasped. We were all awed by the sudden presence of this beautiful animal. It felt as though he were some messenger who had appeared to bring us a special spiritual message. While we were all absorbed in this event and its symbolic significance, the stag disappeared as suddenly as it had come. All of us felt that there was some sort of a theophany in this event.

But the manifestation of a stag with a spiritual message has historic precedents. St. Eustace in Roman times, and St. Hubert in the eighth century both reported encounters with a stag that occurred at critical moments in their lives. Their legends both mention a glowing cross shaped form on the stag's head between his antlers. If the Whitethorn stag had a cross we missed seeing it, but we did feel a euphoric spiritual presence.

In thinking about a spiritual message in the manifestation of the stag, I recalled a passage in the children's book, "Bambi", by Felix Salten. There is the final scene where the old Stag is trying to get a message through to the younger deer, Bambi. They have come across a human who has been shot, probably a poacher. The old stag says:

"Do you see, Bambi, He is lying there dead, like one of us. He isn't all-powerful as they say. He isn't above us. He's just the same as we are. He has the same needs, the same fears, and suffers in the same way as we. He can be killed like us. Do you understand, Bambi?" "Then speak."

Bambi was inspired, and said trembling:

"There is Another who is over us all, over us and over him."

"Now I can go", said the old stag.

THE WARRIORS' CODE

After the outbreak of WWI in 1914 Admiral Graf von Spee had taken his squadron of two armored cruisers, the *Gneisenau* and *Scharnhorst*, and 3 light cruisers from Tsingtau across the Pacific to the west coast of Chile, where in an engagement with a British squadron off Coronel he was victorious. A few weeks later he decided to raid the British wireless station in the Falkland Islands. But in the meantime the Admiralty had dispatched two battle cruisers to the Falklands under the command of Vice Admiral Sturdee. . These ships out gunned and out sped those of von Spee and his squadron was sunk. There were few survivors— among them was the *Gneisenau*'s first officer, Commander Pochhammer.

*The Brave Sailors*¹

Commander Pochhammer was treated with special care and deference, and found himself that evening tucked up in the *Inflexible*'s vacant admiral's cabin, complete with hot water bottle, a bottle of wine and a jug of warm water. There he was told of the death of Captain Maerker, and was promised the names of all those who had been rescued so that their relatives could be informed: for now the post of C-in-C of the decimated East Asiatic Squadron had fallen on this officer. He was not allowed to rest for long. 'I was hardly installed in my new cabin,' he wrote later, 'when the commander's steward appeared and announced that dinner was served. in the officer's mess. ...My covering was not exactly princely. .. being a travelling rug which I had wrapped around my still stiff limbs. I then raised myself, and, assisted by two men, passed the sentry in front of the cabin, who saluted me, and reached without mishap the table.' The tablecloth struck Pochhammer as an unusual luxury, even if it was stained with coal dust from the interrupted early morning coaling. It was a 'scratch' meal, just ham and eggs, and with it-'what do you like, sherry or port?' He shared the table with the battle cruiser's officers: a genial crowd, he found them, 'and if all Englishmen were like those in the *Inflexible* we should be able to get on with them'. One by one the other surviving unwounded officers joined Pochhammer, six of them in all, a pathetic fragment of those who had lived and worked together for so long in the *Gneisenau*. From the first officer there was just 'a silent greeting, a momentary gleam in the eyes' of recognition; 'and expressions of delight at seeing each other alive again'. Later that evening, while recovering on one of the wardroom's leather sofas, Pochhammer was handed a telegram from Admiral Sturdee.

'Please convey to Commander of *Gneisenau* the C-in-C is very gratified that your life has been spared and we all feel that the *Gneisenau* fought in a most plucky manner to the end,' ran Sturdee's message. 'We much admire the good Gunnery of both ships, we sympathize with you in the loss of your Admiral and many officers and men. Unfortunately, the two countries are at War, the officers of both Navies who can count friends in the other have to carry out their country's duty, which your Admiral and Officers worthily maintained to the end.'

April 20, 1918 Baron Manfred von Richthofen shot down his 79th and 80th Allied planes for the WWI record..²

April 21, 1918 On this Sunday morning the "Red Baron" took off with a squadron of six headed toward the Somme looking for prey. This same morning Capt A. Roy Brown, a Canadian, flew with a squadron that included his friend, Wilfred May, for whom this was a first sortie. The German and British squadrons met and soon Richthofen was after May. Brown turned to his friend's defense and shot at Richthofen's red triplane. Richthofen continued to fly after May but slowly lost altitude and dropped to the ground in an area occupied by Australian troops. By the time the plane stopped he was dead.

A few days later, a British officer wearing a black arm band led a funeral procession including an honor guard of Australian soldiers. Manfred von Richthofen was buried in a crude wooden coffin covered by wreaths sent in tribute by Allied aviators. The pallbearers were Allied squadron leaders. An Anglican chaplain conducted a burial service. Three volleys were fired and a bugler played "The Last Post". On the grave was placed a large wreath, sent by British Headquarters and inscribed to Captain von Richthofen,

"Our gallant and worthy foe".

¹From the book, THE PURSUIT OF ADMIRAL von SPEE
—Richard Hough

²From, KNIGHTS OF THE AIR, Time-Life series The Epic of Flight

IN SEARCH OF IDENTITY

This is one of those days when I seem to have lost my identity, or rather, seem to have too many identities. Just who am I? I know I have a birth certificate that tells me I was born in Houston, Texas on the 28th of July 1918 and that my name is Albert George Wilson and that there are records out there concerning my education, jobs, marriages, children, and memberships in various organizations. But all of that seems to be but a trivial part of who or what I am.

I have found identity in what interests me: astronomy, mathematics, history, philosophy, religion. I have found identity in my work: in schools, the navy, observatories, laboratories, think tanks. I have found identity in my family, my ancestors, my descendants, my relatives and in-laws. I have found identity in the places where I have lived: Denver, Houston, Pasadena, Flagstaff, Topanga, Woodland Hills, Sebastopol. I have found identity with my times, the 20's, the 30's, the 40's, the 50's, But I must confess here, that beginning with the 60's I seem to have drifted out of current time, back not only into my past, but back over centuries. And my visions have drifted from a utopian future that evolves out of the world of NOW to a world having little connection to the world of NOW or to any possible future that could evolve from it. In short, I have become alienated.

But the mystery is that, while I contain the above interests, work history, family, places ,and times, I seem to be contained in much larger sets of interests, tasks, family, places and times. I am no longer seeking my identity, but a new identity seems to be finding or redefining me. This re-definition seems to have begun in the late 50's when I traveled extensively to many parts of the world. It was curious that in certain places I felt very much "at home". I seem to recognize things even though I had never been there before. This was true in places like Chichin Itza, and Uxmal, in Yucatan, like Durham and Whitby in Yorkshire, like Prague and St. Petersburg in eastern Europe, like Samarkand, Jaipur, and Nagoya in Asia. What did these places have in common that tied them to the 20th century me? Of course, Chichin Itza, Prague, Samarkand all had connections with astronomy, but the feelings in those places and the others were not attributable to just astronomy. There were other more embracing connections.

And the more I read history I encountered events that I seem to have participated in. I feel very strong feelings against the decisions at the Synod of Whitby in 664, strong feelings with the Peasant Revolt in England in 1381, with the Husites at Prague in 1386, for the defeat of the Tsarist fleet at Tsushima in 1904, and during my lifetime, though unknown to me until decades later, on the side of the Sailor's Mutiny against the communists at Kronstadt in 1921. All of this seems to hint some connection between my personal identity and and some sort of revolution archetype. So maybe I belong to a revolution-archetype and show up whenever revolution is needed. But I note that in almost every case I serve on the losing side. Yet I feel quite comfortable with this. [I should add that I voted in every presidential election since 1940, and never voted for the winner.]

One of the earliest memories of my childhood was an evening walk with my parents. As I recall we had left the city and were in the country walking along a railroad track. My father took my arm and pointed out to me the stars up in the dark sky. For some reason I became very excited, as though I had just been told I was going to receive a present, a new puppy or even a pony. I just had to look and look and look at the stars. Then my mother taught me the little verse, "Twinkle, twinkle, little star, ..." And I kept saying it over and over all the way home.

Today I sometimes wonder if, with the stars obscured and our eyes constantly trained on ourselves, we inevitably limit our identities to "me and mine". The stars teach us humility, but they also give us a sense of being an important part of an unfathomable profundity. When we look up at the stars we cannot help but feel a oneness with them, we recognize that we are part of them and they are part of us. Our "me" focused identities dissolve. And as we join hands with those we once thought of as "foreigners", and start the human venture into space, we find that our oneness with the stars has brought us a oneness with ourselves.

JandJ

Subj:Re: are you there?
Date:10/16/2004 2:55:27 PM Pacific Daylight Time
From:Alw1871
To:johnstromberg@opendoor.com

Hi J and J,

I am not supposed to be trying to climb Mt Everest at my age, and after that fact sank in I became relieved. I have been having the usual events of the 80's, heart attack, eye surgery, etc. but am not only surviving (so far), but have become a happy man. I enjoy the birds, the trees, the hills, and even the clouds more than I ever was able to before. In fact the world has become a place of great beauty and mystery. --All of that until I observe what my own species is doing. Since I can't change my species, I have decided to join an alliance of all sentient beings (including those who are human) who serve Brahman. And the first service is to serve, the second to explore, and the third to really change. There is a fourth, but I do not yet know what it is. I'll pass it on when I find out.

I miss you all and hope all is well. Please let me know how Susanna and the grandchildren are doing. And let us stay in closer touch.

much love,

AL

January 8, 1991

In reviewing my work for tomorrow's assignment, I find that I have not updated the record since 1974. I found some old resumes from my establishment days which describe the sort of thing I used to do. I view them somewhat in amazement so much has changed since. However, I include them for the record and will here try to outline what I have been up to since. But before I do that, let me recount the events leading up to my departure from the establishment.

In November 1958 we held at our research lab a very successful international conference on "Hierarchical Structures in Nature and Artifact". One of the results was a widely translated book of the same title. But November 1958 was also the date of the election of Richard Nixon as the 37th President of the United States. Within the next few months the entire research climate, industrial and academic, suddenly changed. The new republican administration was not interested in the space effort, which was a democratic initiative. (Kennedy's A man on the moon in a decade.) So back to weapons. Our lab's budget was cut to two fifths. (Our annual budget was the same as the cost of two hours of the war in Viet Nam.) The vice president in charge of the lab asked me to submit a 'totem pole' listing in order of priority those to be terminated. My first reply was, 'Why don't we all take a shared cut and save all the jobs'. A couple of days later the answer came back that the unions (of which the lab had none) wouldn't like it. Therefore, terminations not shared cuts. At this point I decided to put my own name at the top of the totem pole for termination. After the shock waves subsided, I got a deal for all who were to be fired and found I had enough to live on frugally for about a year. I 'officially' departed from the establishment on August 19, 1969, but taught as adjunct and visiting professor at both UCLA and USC.

In 1974, I finally made a bureaucratic breakthrough at UCLA and succeeded in getting the deans of engineering and humanities to let me give a jointly sponsored interdisciplinary course entitled, "Machine, Myth, and Metaphor". The course was a success, but the breakthrough was an illusion. The pigeon holes of academia are not only part of the structure of education, but are the quintessence of its substance as

well. To violate them would effect a restructuring of our entire world view. Permission revoked the second year.

About 1975, I began working on a project with Professor Len Troncale at the Institute for Advanced System Studies at CalPoly, Pomona. We had a contract with EPA to develop curricula and material for environmental education of students grades K through 12. We put together some pamphlets, which after 15 years still seem both advanced and needed. This project got lost in political infights over contract renewal and the results are buried in some file in Washington.

After these experiences, I felt that departure from the establishment was not enough. There had to be a complete break. Over the next few years I was a partner in some business ventures: A natural food store, SAGE NATURAL FOODS; a book store, THE GINKGO LEAF; a publication enterprise, EOMEGA GROVE PRESS; and my own consulting operation, RESEARCH PROGRAM STUDIES, in which I became involved in futures studies and worked with many companies as a futurist. Somehow with teaching and consulting ends were met and life continued.

But it was along about this time that my real break with the establishment began. A vision of the future break, a philosophical break, an axiological break, an epistemological break, and even steps toward an ontological break. Here began my 'scraps of paper' period in which I jotted down on backs of envelopes and other scraps divers and sundry ideas on many subjects ranging from Athroismatics (parts and wholes) to Zipf's Law. Today I am trying to synthesize this material and put it in some communicable form. Not an easy undertaking.

PROFESSIONAL BIOGRAPHY

Albert Wilson

Systems and Futures Studies Consultant

Address: P.O.Box 113, Topanga, California 90290 Phone: (213) 455-1764

Director, Research Program Studies, a consulting group specializing in management counseling and futures research. Principal areas of interest and competence: Problem identification and formulation, methodologies for problem solving in techno-social complexes.

Affiliation: Visiting Professor, Futures Studies and Philosophy of Science, Master of Liberal Arts Program, University of Southern California. (1970 to present)

Consultant, Institute for the Future, Institute on Man and Science, International Social Science Institute, McDonnell Douglas Corporation, New Jersey Department of Education, Public Safety Systems Inc., The RAND Corporation, Southern California Edison Company, Center for Futures Research, Pacific Oaks College, Design Department Southern Illinois University, Dep't of Health Education and Welfare, Far West Educational Laboratories, Institute for Advanced Systems Studies, Bureau of Land Management, Charles Eames Studios, Walt Disney Productions.

Lecturer UCLA Extension: Engineering Executive Program, Evaluation Technology, Technological and Social Forecasting, Fundamentals of Futures Research, The Futures Business, General Systems Theory.

Previous Affiliations: Director, Environmental Sciences Laboratories, Douglas Advanced Research Laboratories (1966-1969); Senior Research Staff, Environmental Sciences, the RAND Corporation (1957-1966); U.S. State Department, American Specialist Program, Hyderabad India (1959-1960); Director, the Lowell Observatory, Flagstaff, Arizona (1953-1957); Staff Member, Mount Wilson and Palomar Observatories, (The Hale Observatories), California Institute of Technology (1947-1953).

Education: B.S. in Electrical Engineering (1941), the Rice Institute; M.S. in Mathematics (1942), California Institute of Technology; Ph.D. in Mathematics and Physics (1947), California Institute of Technology.

Related Professional Experience:

Editorial Board, Technological Forecasting and Social Change
Founding Editor, Icarus, International Journal of Solar System Science
National Academy of Sciences, Space Science Board
National Research Council Highway Research Committee on Traffic Flow
National Geographic Society Palomar Sky Survey
National Research Council of the Peace Research Institute

PROFESSIONAL BIOGRAPHY

Albert Wilson

Page 2

Professional Memberships:

International Association for Statistics in the Physical Sciences
International Academy of Astronautics
International Astronomical Union
Fellow, Royal Astronomical Society
Society for Morphological Research

Listings:

American Men of Science
Who's Who in Science
Dictionary of International Biography

Publications:

Some 80 papers in professional journals, society and institutional publications, corporation reports.

Titles of some recent papers:

Futures Orientation: Toward the Institutionalization of Change
Systems Epistemology
The Future of the City
The Four Faces of the Future (with Donna Wilson)
The Four Functions in Control Systems
Goal vs. Process in Normative Systems
The Species of Hierarchy

Books:

New Methods of Thought and Procedure,
author/editor with Fritz Zwicky, Springer Verlag 1967
Hierarchical Structures,
author/editor with Lancelot Law Whyte and Donna Wilson
American Elsevier, 1969
Relativity and the Question of Discretization in Astronomy,
with D.G.B.Edelen, Springer Verlag, 1970

Coordinator, Master of Liberal Arts Program, University of Southern California, 1970-1971.

Visiting Professor, University College, USC 1970-1972.

Lecturer, Department of Philosophy, California Lutheran College 1971.

Spring Lectures, Department of Design, Southern Illinois University 1970

Lecture Series on "Values and Metavalues", Institute on Man and Science, July 1970.

Coordinator and Instructor in the following UCLA Extension Courses:

"Technological and Social Forecasting"
Fall Quarter 1970, Winter Quarter 1972

"Fundamentals of Futurology"
Spring Quarter 1971

"Introduction to General Systems Theory"
Winter Quarter 1973

Short Course, "The Futures Business"
February 1973

Associate Editor of the Journal, Technological Forecasting and Social Change

Honors Award, Colloquium of Scholars, Calif. Lutheran College, 1972.

Papers read at: Symposium on Cultural Futurology, San Diego 1970
Systems Philosophy Symposium, Geneseo N.Y. 1972

Author: Chapter in book, Human Futuristics, Univ of Hawaii, 1972
Chapter in book, The World System, Braziller Inc. 1973

June 1969

BIOGRAPHICAL OUTLINE

Albert G. Wilson

Full Name: Albert George Wilson Born: July 28, 1918
Houston, Texas

Position: Director Environmental Sciences Laboratories
and Associate Director, Douglas Advanced
Research Laboratories, McDonnell Douglas
Corporation, 5251 Bolsa Ave., Huntington Beach,
California 92647 (1966-)

Education: B. S. in Electrical Engineering (with Distinction)
Rice Institute, 1941
M. S., California Institute of Technology,
1942 (Major Mathematics)
Ph.D., (Cum Laude) California Institute of
Technology, 1947 (Major Mathematics,
Minor Physics)

National Service: Lt (j.g.) USNR, 1944-1946

Previous Positions:

Member Senior Research Staff, RAND Corporation,
Santa Monica, California (1957-1966)

Director, Lowell Observatory, Flagstaff,
Arizona (1954-1957), Assistant Director
(1953-1954)

Staff Member, Mt. Wilson and Palomar Observatories,
Department of Astronomy, California Institute
of Technology, Pasadena, California (1949-1953)

Senior Research Fellow in Astrophysics
California Institute of Technology
Pasadena, California (1947-1949)

Teaching Fellow in Mathematics
California Institute of Technology
Pasadena, California (1941-1944)

Listings: American Men of Science
Who's Who in Science
Who's Who in the West
Dictionary of International Biography

Memberships:

Corresponding Member, International Academy of Astronautics, 1967-
 International Association for Statistics in the Physical Sciences, 1967-
 New York Academy of Sciences, 1967-
 National Research Council of the Peace Research Institute, 1963-
 Society for Morphological Research, 1962-
 Member, International Astronomical Union (Commissions 16, 28, 44) 1955-
 Fellow, Royal Astronomical Society, 1953-
 American Astronomical Society, 1947- (Member of Council, 1955-1958)
 Astronomical Society of the Pacific, 1946- (Director, 1955-1958)
 Society of Sigma Xi
 Phi Beta Kappa
 Tau Beta Pi

Publications:

Some 75 papers in professional journals, society and institutional publications, or corporation reports (see bibliography)

Editor (with F. Zwicky) of the book, New Methods of Thought and Procedure, Springer-Verlag, New York, 1967

Editor (with Lancelot Law Whyte and Donna Wilson) of the book, Hierarchical Structures, American Elsevier, New York, 1969

Special Professional Activities:

Member, Scientific Advisory Board, The Institute of Man and Science

Consultant, Institute for the Future

Consultant, RAND Corporation

Co-founder and Co-editor (with Z. Kopal) of ICARUS, International Journal of Solar System Science (1962-1968)

U. S. State Department, American Specialist Program, Osmania University, Hyderabad, India (1959-1960)

Astronomer in charge of observing program for the National Geographic Society - Palomar Sky Survey (1949-1953)

PROFESSIONAL AND RELATED ACTIVITIES

1966-1969: Address, Douglas Advanced Research Laboratories

Responsibility for development of basic research programs in the environmental sciences relevant to existing and anticipated aerospace industry business. Direction of basic research programs in geophysics and astronomy. Research investigations in the development of new systems methodologies for the formulation and solution of classes of complex problems arising in transportation, space exploration, and research management. Theoretical and observational research in gravitational properties of large cosmic aggregates utilizing Guest Investigator Program of the Mt. Wilson and Palomar Observatories. Investigation of cosmological models subject to bounded gravitational potential. Organization of Symposium on Methodologies in cooperation with the Office of Industrial Associates of the California Institute of Technology. Organization of Symposium on Hierarchical Structure in Nature and Artifact in cooperation with the University of California, Irvine. Organization of series of workshops and seminars on transportation theory, management science concepts and general structure theory (metataxis). Collaboration on study of an Orbiting Astronomical Support Facility for NASA. Collaboration on multi-modal air-surface transportation systems. Invited lectures at University of California, Los Angeles and Riverside, Southern Illinois University, Pitzer College, Union College, Institute on Man and Science, and California Institute of Technology, on Methodologies, General Structures, Cosmology, or Atomic-Cosmic relations. Papers on these subjects read before American Astronomical Society, Academie Internationale de Philosophie des Sciences, 14^e Colloque International d'Astrophysique à Liege. Participation in XIII General Assembly of the International Astronomical Union. Presentation at Fifth Conference on Information and Control Processes for Biological Systems.

1957-1965: Address, The RAND Corporation

Theoretical and observational research in astronomy. Guest Investigator, Mt. Wilson and Palomar Observatories. Observational program on the atmosphere of Mars opposition of 1958. Multi-color investigations of the blue clearing. Theoretical and observational investigations of the role of discrete valued parameters in the macocosmos, including statistical studies of the distributions of redshifts and diameters of galaxies. Organization of Conference on Discrete Parameters in Cosmology. Invited lectures on discrete cosmic phenomena at the University of California,

Berkeley, and Los Angeles, Indiana University, the University of Texas and the University of Southern California. Participation in the Douglas-National Geographic Society Airborne Solar Eclipse Expedition, 1963. Chairman of the NASA-RAND Symposium on Fundamental Constants of the Solar System. Member of the National Academy of Sciences Space Science Board Panel on Planetary Atmospheres.

Presentations and Session Chairman, Symposium No. 19 of the International Astronomical Union, Physics of Seeing and Site Testing, in Rome. Consultant to the Geophysics Research Directorate on Site Survey for Planetary Observatory. Member JPL ad hoc committee for Ground Based and Balloon Borne Lunar and Planetary Observations. Member Committee for International Planetary Observations. Consultant to JPL on support capabilities of foreign observatories for space programs. Member of organizing and steering committees of the Lunar and Planetary Exploration Colloquia. Organization, in cooperation with UCLA, NORAD, JPL, and Mt. Wilson and Palomar Observatories, of project for photographic observation with large telescopes of trans-orbital space probes (Project Flosshilde). Cited for first telescopic photographs of deep space probes.

Research on polynucleation in cities, RAND-Ford Foundation Urbanization Studies project. Member of the National Academy of Sciences National Research Council Highway Research Board, Committee on the Theory of Traffic Flow. Presentation at Conference on Science Information of the American Institute of Biological Sciences. Member of organizing committee and chairman of conference on "Role of Communications in Conflict Resolution," sponsored by the Council on World Tensions. Broadcasts from Washington and Tokyo for the Voice of America. Presentation of "Ginkho Leaf Symbol," for Cooperation in Space from Soviet Astronomers to Senator Lyndon B. Johnson, Chairman Senate Space Committee. Invited lecture at Loyola University Golden Jubilee Program.

1953-1957: Address, the Lowell Observatory

Photographic and spectrographic observations of Mars during 1954 and 1956 oppositions. Research in application of image orthicons to planetary photography. Co-founder and Co-Chairman with E. C. Slipher of the International Mars Committee. Organization with H. Strughold of first conference on problems common to astronomy and biology. Served as Treasurer of the Arizona Academy of Sciences. Elected a director of the Northern Arizona Academy of Arts and Sciences and the Flagstaff Chamber of Commerce.

1947-1953: Address, California Institute of Technology

Assisted F. Zwicky in 18-inch Schmidt galactic nova program and equilibrium properties of clusters of galaxies. Assisted in organization and establishment of Cal Tech Astrophysics Library. Instructor in undergraduate and graduate courses in new department of astronomy. In charge of data processing for Hartmann tests on 200-inch mirror. Investigations with E. Hubble of diameters of galaxies as distance indicators. In charge of observations National Geographic Society-Palomar 48-inch Schmidt Sky Survey. Discovery of four new members of the local group of galaxies. Awarded Comet medal of the Astronomical Society of the Pacific.

Albert G. Wilson

June 1969

FOREIGN TRAVEL

Aug. - Oct. 1955	England, Ireland, Germany, Switzerland, Italy, Austria, Netherlands, France
March, 1957	Mexico
July - Sept. 1958	Germany, Belgium, Denmark, Sweden, Finland, USSR, Afghanistan, India, Thailand, Viet Nam, Philippines, Japan
Dec. 1959 - April 1960	Japan, Hong Kong, Philippines, Viet Nam, Cambodia, Thailand, India, Pakistan, UAR, Italy, Germany, Austria, France
Sept. - Oct. 1961	England, Greece, Turkey, Lebanon, Syria, Jordan, Israel, Cyprus, Egypt, Italy, Switzerland, Germany, Netherlands
Sept. - Oct. 1962	England, Germany, Italy, France, Switzerland
June - July 1966	Belgium, Luxembourg, Switzerland, West Germany
Aug. - Sept. 1967	Denmark, Czechoslovakia, Austria, Switzerland, England

PROFESSIONAL BIOGRAPHY

Albert G. Wilson

Systems and Futures Studies Consultant

Address: P.O. Box 1871 Sebastopol, California 95473

Telephone: (707) 829-5045

Director: Research Program Studies, a consulting group specializing in management counseling and futures research. Principal areas of interest and competence: Problem identification and formulation, methodologies for problem solving in techno-social complexes.

Consultant: Institute for Advanced Systems Studies, Institute for the Future, Institute on Man and Science, International Social Science Institute, New Jersey Department of Education, Public Safety Systems Inc., The RAND Corporation, Southern California Edison Company,...

Previous Affiliations:

University of Southern California

Visiting Professor, University College, Master of Liberal Arts Program.

Astronomy, Philosophy of Science

University of California Los Angeles

Lecturer, Engineering Executive Programs.

Evaluation Technology, Technological and Social Forecasting, General Systems Theory,

Fundamentals of Futures Research, The Futures Business

California Lutheran University

Adjunct Professor

Philosophy

McDonnell Douglas Corporation Advanced Research Laboratories

Director, Environmental Sciences Laboratory

The RAND Corporation

Member Senior Research Staff, Environmental Sciences

U. S. State Department

American Specialist Program, Hyderabad, India

The Lowell Observatory, Flagstaff, Arizona

Director of Observatory

California Institute of Technology

Staff Astronomer, Mount Wilson and Palomar Observatories

Related Professional Experience:

Founding Editor, *Icarus*, *International Journal of Solar System Science*

Member Editorial Board, *Technology Forecasting and Social Change*

Member, National Academy of Sciences Space Science Board, Panel on Planetary Atmospheres

Member, National Research Council, Highway Research Committee on Traffic Flow

Member, National Research Council of the Peace Research Institute

Astronomer, National Geographic Society Palomar Sky Survey

Astronomer, Airborne Solar Eclipse Expedition (1963)

Founding Director, International Mars Committee

PROFESSIONAL BIOGRAPHY

Albert G. Wilson

Page 2.

Invited Lectures:

Upper Atmospheric Phenomena, Moscow State University, USSR (1958)
Golden Jubilee Lecture, Loyola University, Los Angeles (1964)
Spring Lecture Series, Southern Illinois University (1966)
Department of Design Lecture Series, Southern Illinois University (1969)
Institute on Man and Science, Rensselaerville, New York (1970)
Honors Award, Colloquium of Scholars, California Lutheran Univ (1972)

Professional Memberships:

International Academy of Astronautics, Corresponding Member
International Astronomical Union (Commissions 16 and 28)
American Astronomical Society (Member of the Council, 1955-1958)
Astronomical Society of the Pacific (Director, 1955-1958)
Fellow, Royal Astronomical Society
International Association for Statistics in the Physical Sciences
Society for Morphological Research

Listings:

American Men of Science
Who's Who in Science
Who's Who in the West
Dictionary of International Biography

Education:

B.S. in Electrical Engineering (with distinction) 1941, the Rice Institute
M.S. Mathematics 1942, California Institute of Technology
PhD. Mathematics and Physics (cum laude) 1947, California Institute of Technology

Publications:

Some 75 papers in professional journals, society and institutional publications, or chapters in books.

Books:

Author-Editor, *New Methods of Thought and Procedure*,
New York: Springer-Verlag, 1967, 338pp. (with Fritz Zwicky)
Author-Editor, *Hierarchical Structures*,
New York: American Elsevier, 1969, 317pp (with Lancelot Whyte and Donna Wilson)
Author, *Relativity and the Question of Discretization in Astronomy*,
Berlin: Springer-Verlag, 1970. 198pp. (with D.G.B. Edelen)

PROFESSIONAL BIOGRAPHY

Albert Wilson

Affiliations: (1970-1978) Visiting Professor, University of Southern California, Astronomy, Philosophy of Science; Lecturer, UCLA Extension Engineering Executive Program, Evaluation Technology, Technological Forecasting, General Systems Theory; Adjunct Professor, California Lutheran College, Philosophy; Fellow: Institute for Advanced Systems Studies; Consultant: Institute For the Future, Institute on Man and Science, International Social Science Institute, Public Safety Systems, Southern California Edison,,,

Previous Affiliations: (1966-1969) Director, Environmental Sciences Laboratories, Douglas Advanced Research Laboratories, McDonnell Douglas Corporation, Huntington Beach, California; (1957-1966) Senior Research Staff, Environmental Sciences, the RAND Corporation, Santa Monica, California; (1959-1960) U.S.State Department American Specialist Program, Hyderabad, India; (1954-1957) Director, Lowell Observatory, Flagstaff, Arizona; (1949-1953) Staff Member, Mount Wilson and Palomar Observatories, Department of Astronomy, California Institute of Technology, Pasadena, California.

Education:

California Institute of Technology:

PhD (1947) Mathematics and Physics (cum laude)

MS (1942) Mathematics

Rice Institute

BS (1941) Electrical Engineering (with distinction)

Related Professional Activities:

Founding Editor, ICARUS, International Journal of Solar System Science.
Editorial Board, Technology Forecasting and Social Change
Astronomer, National Geographic Society-Palomar Sky Survey (1949-1953)
Founding Director, International Mars Committee
Lectures, Upper Atmospheric Phenomena, Moscow State University (1958)
Douglas-National Geographic Society Airborne Solar Eclipse Expedition (1963)
First telescopic photographs of deep space probes (1963)
National Academy of Sciences Space Science Board Planetary Atmosphere Panel
National Research Council Highway Research Committee on Traffic Flow (1965)
Golden Jubilee Lecture, Loyola University, Los Angeles (1964)
Spring Lecture Series, Southern Illinois University (1966)
Department of Design Lecture Series, Southern Illinois University (1969)

Professional Memberships:

International Association for Statistics in the Physical Sciences
International Astronomical Union (Commissions 16 and 28)
American Astronomical Society (Member of the Council, 1955-1958)
Fellow, Royal Astronomical Society
Astronomical Society of the Pacific (Director, 1955-1958)
International Academy of Astronautics, Corresponding Member
National Research Council of the Peace Research Institute

Publications: Some 75 papers in professional journals, society and institutional publications, or corporation reports (see bibliography)

Books:

Author-Editor, New Methods of Thought and Procedure, New York:

Springer-Verlag, 1967, 338pp. (with Fritz Zwicky)

Author-Editor, Hierarchical Structures, New York:

American Elsevier, 1969, 317pp (with Lancelot Whyte and Donna Wilson)

Author, Relativity and the Question of Discretization in Astronomy, Berlin:

Springer-Verlag, 1970. 198pp. (with D.G.B. Edelen)

Listings: American Men of Science, Who's Who in Science, Who's Who in the West, Dictionary of International Biography

RESUME.TXT
.P51

Coordinator, Master of Liberal Arts Program, University of Southern California, 1970-1971.

Visiting Professor, University College, USC 1970-1972.

Lecturer, Department of Philosophy, California Lutheran College 1971.

Spring Lectures, Department of Design, Southern Illinois University 1970

Lecture Series on "Values and Metavalues", Institute on Man and Science, July 1970.

Coordinator and Instructor in the following UCLA Extension Courses:

"Technological and Social Forecasting"
Fall Quarter 1970, Winter Quarter 1972

"Fundamentals of Futurology"
Spring Quarter 1971

"Introduction to General Systems Theory"
Winter Quarter 1973

Short Course, "The Futures Business"
February 1973

Associate Editor of the Journal, Technological Forecasting and Social Change

Honors Award, Colloquium of Scholars, Calif. Lutheran College, 1972.

Papers read at: Symposium on Cultural Futurology, San Diego 1970
Systems Philosophy Symposium, Geneseo N.Y. 1972

Author: Chapter in book, Human Futuristics, Univ of Hawaii, 1972
Chapter in book, The World System, Braziller Inc. 1973

1 1 1 1 1 *Frontiers in Science Board Book 1958*

RESEARCH PROGRAM STUDIES
P.O. BOX 1871 SEBASTOPOL, CA 95473

Current and recent clients and contacts---1997

- Mr. Roger Crosby, Hewlett Packard Corp, Santa Rosa, CA
Decision theory
- Dr. M. H. Davis, AURA, Boulder, CO
Physics of condensed matter
- Dr. S. M. Greenfield, Scottsdale, AZ
Environmental costs
- Mr. George Kocher, Oblong, IL
Communication theory--multiplexing
- Ms. J. S. Lockwood, Editor, Wireless Week, Denver, CO
Satellite communications
- Dr. S.J. Ostro, Jet Propulsion Laboratory, Pasadena, CA
Orbits of Earth crossing asteroids
- Mr. William Owens, Hewlett Packard Corp, Englewood, CO
CDMA, Communications theory
- Dr. John Stromberg, Eugene, OR
Industrial organization
- Prof. Len Troncale, CalPoly Univ, Pomona, CA
Systems theory, Heirarchical organization

Dr. Albert G. Wilson is a mathematician active in research and education in the new discipline of futurology. He is associated with the Institute For the Future and has taught courses at UCLA on Technological and Social Forecasting and Fundamentals of Futurology. From 1966 - 1969 he was director of the Environmental Sciences Laboratories, Douglas Advanced Research Laboratories, McDonnell Douglas Corporation. For nine years prior he was a member of the Senior Research Staff of the RAND Corporation and during 1959-1960, he served as an American Specialist for the U.S. State Department in Hyderabad, India. He has published some 75 papers in the technical literature is author or editor of several books including 'New Methods of Thought and Procedure' with Fritz Zwicky and 'Hierarchical Structures' with Lancelot Law Whyte and Donna Wilson.

Albert George Wilson

Albert George Wilson was born on July 28, 1918 in Houston, Texas. His higher education began at the Rice Institute, where he received his B.S. degree in 1941 in Electrical Engineering. He continued on to the California Institute of Technology, where he worked as a teaching fellow in mathematics from 1941 to 1944, receiving a M.S. in 1942. He then served as a radar officer in the Navy from 1944 to 1946. Upon return he received a PhD in mathematics in 1947. Wilson then served as a senior research fellow in astrophysics at Caltech from 1947 to 1949, participating in a supernova search program and teaching dynamical astronomy. He then joined the staff of the Mt. Wilson and Palomar Observatories, and was astronomer in charge of observations for the National Geographic-Palomar Observatory Sky Survey, discovering new members of the local group of galaxies and several earth orbit crossing asteroids.

Wilson came to Lowell Observatory in 1953 as the assistant director, and became the director in 1954. He held this post until 1957. While at Lowell, Wilson did much to invigorate the institution. For example, with the National Geographic Society, supporting the "Mars Expedition" of 1954 in which Lowell Observatory staff traveled to Pretoria, South Africa in order to observe the Mars opposition of that year; with Northern Arizona University, supporting a joint eclipse expedition to Sri Lanka; with Johns Hopkins, exploring the possibilities for planetary observations with experimental electronic photography; and promoting planetary astronomy with a first "Astrobiology Seminar." Wilson was elected a councilor of the American Astronomical Society, 1955-1958.

After Wilson left his post as the director of Lowell Observatory, he became a senior member of the research staff of the Rand Corporation, where he worked from 1957 until 1966. In 1962, he was the founding editor of the astronomical magazine *Icarus*. In 1966, he accepted the position of associate director of Douglas Advanced Research Labs, which he held from 1966 until 1972. Wilson then became an adjunct professor at USC, teaching courses in philosophy and science until his retirement. After retiring Wilson was associated with the Institute for Man and Science and the Institute of the Future, lecturing and consulting for both groups. He currently lives in Sebastopol, California where he continues to pursue his interests in mathematics, cosmology, and several other widely diverse topics.



[For an image of Albert Wilson, click here.](#)



Left: Albert Wilson Right: V.M. Slipher



[Return to Biography](#)

Goldstein, B. and F. Young, *The Evolution of Student Outcomes Assessment in the California State University - Politics and Collegiality*. Chapter 2 in *Student Outcomes Assessment in the CSU: What Makes It Work?*, Edited by Helen Roberts. A CSU Publication 1992.

Co-Editor, *Student Outcomes Assessment in the California State University*. A Report to the Chancellor from the Advisory Committee on Student Outcomes assessment. 1989.

Goldstein, B. *Assessment in the California State University*. The Voice, Association of the California State University Professors Vol XX, #1 1989.

Goldstein, B. *Functional Morphology as a Tool in General Education*. American Zoologist, Vol 29, #1 1989.

Dr. Goldstein has served as major professor to 11 M.A. graduate students at San Francisco State University since 1970.

10.4 Dr. Albert G. Wilson - Dr. Wilson has a strong background in astronomical systems, general systems, and futures research. With over forty years of experience, he has served as Staff Astronomer, Mount Wilson and Palomar Observatories, California Institute of Technology; Director of Observatory, The Lowell Observatory, Flagstaff, Arizona; American Specialist Program in Astronomy, Hyderabad, India, for the U.S. State Department; Member Senior Research Staff, Environmental Sciences, The RAND Corporation; Director, Environmental Sciences Laboratory, McDonnell Douglas Corporation Advanced Research Laboratories; Adjunct Professor, philosophy, California Lutheran University; Lecturer, Engineering Executive Programs, University of California, Los Angeles; and Visiting Professor, University of Southern California. In addition he has served as astronomer for the National Geographic Society Palomar Sky Survey and for the Airborne Solar Eclipse Expedition. Currently Director of Research Programs Studies, a consulting group specializing in management counseling and futures research, Dr. Wilson's focus is on problem identification and formulation and methodologies for problem solving in techno-social complexes. He has served as a consultant to the Institute for Advanced Systems Studies, the Institute for the Future, Institute on Man and Science, International Social Science Institute, New Jersey Department of Education, Public Safety Systems Inc., The Rand Corporation, Southern California Edison Company, and others. He has contributed to a number of important research studies and is Founding Director, International Mars Committee, and Founding Editor, *Icarus, International Journal of Solar System Science*. Dr. Wilson has given invited lectures and has published over 75 papers in professional journals, society and institutional publications, or chapters in books. His professional memberships include the International Academy of Astronauts, the International Astronomical Union, the American Astronomical Society, the Astronomical Society of the Pacific, the International Association for Statistics in the Physical Sciences, the Society for Morphological Research, and as a Fellow, Royal Astronomical Society. Dr. Wilson is listed in American Men of Science, Who's Who in Science, Who's Who in the West, and the Dictionary of International Biography.

Publications:

Author-Editor, *New Methods of Thought and Procedure*, New York: Springer-Verlag, 1967, 338 pp. (with Fritz Zwicky)

Author-Editor, *Hierarchical Structures*, New York: American Elsevier, 1969, 317 pp. (with Lancelot Whyte and Donna Wilson)

Author, *Relativity and the Question of Discretization in Astronomy*

Berlin, Springer Verlag 1970, 198 pp (with D.G.B. EDELEN)
21

CHRONOLOGY

Albert G. Wilson

Born: July 28, 1918, c 1:20 am (war time)

at the Baptist Sanitarium, Houston, Texas

Mother: Hazel Mildred Straw, born Gatesville, Texas Nov 19, 1892

Father: Arthur Rector Wilson, born San Antonio, Texas Sep 21, 1890

1918-1923

Lived in Texas, mostly Houston, some in Atlanta, some in Florida

Moved to Denver, Colorado 1923, Stayed briefly in an apartment on Washington street.

Summer of 1923 moved to an apartment 15xx Franklin Street. Began kindergarten Fall of 1923 at Wyman elementary school. (Mrs. Barret) Met Horace Gray Lunt III

Summer of 1924 moved to an apartment 16xx Gilpin Street. Began first grade Fall of 1924 also at Wyman School

Summer of 1925 moved to house (rented) at 7xx Garfield Street. Began second grade in the Autumn of 1925 at Teller Elementary School. Met Seymour Wheelock

June 4, 1926 moved to house (rented) at 756 Jackson Street. [telephone York 7350]

Continued at Teller School through sixth grade, graduated June 1930.

Neighbors Wayne Argabrite, Margaret Olson.

Teachers: Mrs Blackmore, Mrs Trehearne, Mrs Clark, Principal Mrs. Feltner

Joined the Highlander Boys 1927, did public speaking, won gold medal -- > 1930

Leaders: Major Grinstead, Captain Combes, Two Summer Camps at Estes Park

During these years went to Texas every summer, to visit Grandma Straw in Gatesville and Grandpa and Grandma Wilson and Aunt Belle in San Antonio.

Fall 1930 entered seventh grade at Aaron Gove Jr. High. Graduated June 1933.

Teachers: Miss Watson (social science), Mr. Boardman, (PE), Mr. Tucker, (shop),

Mrs. Detmoyer (english), Mr. Sellinghausen (printing), Miss Morris (Principal) *MISS FRENCH (MATH)*

Joined Boy Scouts, troop 103, Mr. Boardman, scout master, earned Eagle badge.

Summer Scout Camps, Camp Chief Ouray, at Silver Plume

Communists at Denver Civic Center

June 1933 moved to house (rented) at 650 Franklin Street. Met neighbors Walter Emery and Frank Grant. Entered East High School Autumn 1933. Met Wallace Blake, Mervyn Evans

Teachers: Mr. Putnam (Latin), Mr. Charlesworth (geometry), Mr. Parker (trigonometry, calculus), Miss Sparhawk (social science), Mr. Bliss (physics), Mr Tyson (Chemistry),

Roscoe C. Hill (principal) Joined the ROTC, became captain in senior year.

ROTC Horse Cavalry training, weekends of junior year. YMCA summer camp, Granby

Junior year elected member of the National Honor Society.

Summer of 1935 worked in Texaco filling station on Grant St.

Organized a Sea Scout Ship, met at Emerson School, Sea Scout Camp summer Grand Lake

Charles Fischer, Bud Scheurman, Peter De Boer, skipper

Graduated East High, June 1936. Accepted Yale University,

Golden Periods and Golden Moments

It turns out these were moments of vision
of shared vision
of glimpses, of how it could be
will be - illusion

- The stars from the Railroad track
- The earth as globe - Horace Lunt
- Myth in the 5th grade
- A sacred moment May 23, 1934 Kraonik
- Liberation from arithmetic by algebra
- St. John's Cathedral
- The world of Euclid
- The 20" at Chankel'm Observatory
- June 1936 - Seymour Whelock - East High Library

Moments of Vision and Liberation Alternative, Possibilities

Diachronic Moments
History and Philosophy at Rice
Math + Physics + Philosophy at CBT
Dr. Sowa

The ΤΡΟΠΗΓΟΕ ΗΕ ΤΡΟΠΗΓΟ

A back lash from the past WWII
Adolf and the boys
Tojo and the bushidos

Hubble & Zwicky

The first launch into space Dec 17, 1946
Lost on the Moon - at the Corde Focus of the 200"

The Vajra on Mars Hill
Finding Donna

The Golden Age at RAND

Hei San, Nara, Miyajima

Mahabalapuram

The Oak Grove Omega - the vision nebom

Kwan Yin, Vajrayana,

Senoma County

Durham
Kaitos + Temenos

The Vision is alive

always going beyond

beyond religion

beyond physics and cosmology

beyond mathematics

The Diachronic repeatedly returns

The Message of the Transfiguration

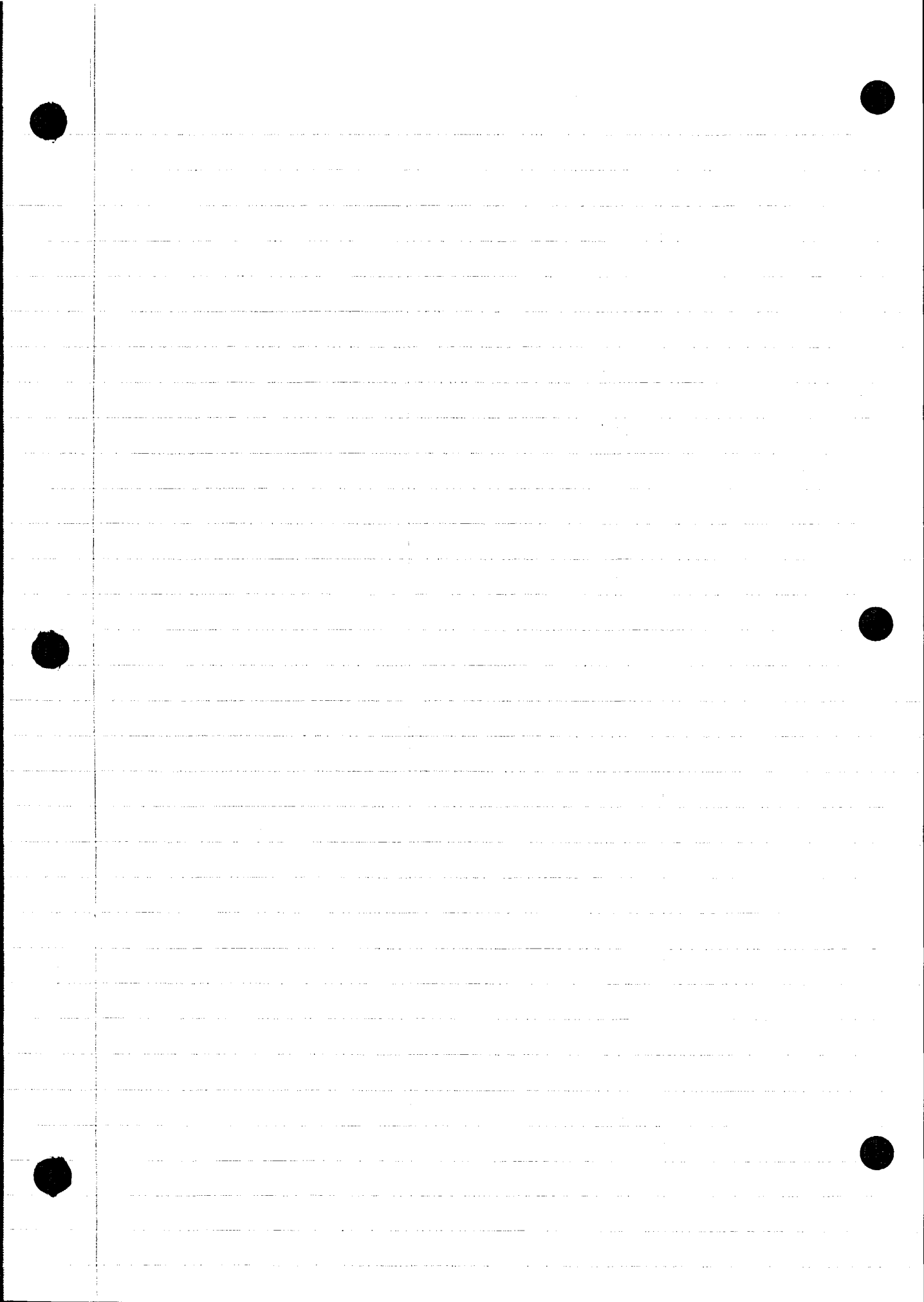
The Vision, The Hope, The Diachronic

A Meta Kairos

Each stage of life seems unfinished
 or is it "wish it could be changed"

List regrets List unfinished List achievements

Pre School Horace Gray, Lunt III
 Wyman Barnett,
 30 Teller Feltner, Blackmore,
 30-33 Gore Watson, Boardman, French, Frischer
 33-36 East Chas. W. Park, Parker, Putnam, Blake, Wayne, Seymour, Walt
 36-41 Rice Klindworth, Brown, Bush Ryan, Watters, Lear, Wilson
 41-44 CIT Knox, Bernie, ^{vasof} Michael, Bell, Bateman, Eppie, Ward, Bowen, Crawford, Soares
 44-46 Navy Rocky
 46-54 Palomar Zwickly, Thornton
 54-57 Lowell Sliphers, Girdas, Johnson, Pollock Donna
 57-66 RAND Stan, George, Pat, Bill, Myron " Ingrid, Anita
 69 DARTL Bob Williams, Len Troncale, Robin "
 USC-UCLA-CLC " "
 SAGE " "
 GINKGO LEAF " "
 TOPANGA Gutman, Rize, Penner " " Bruce
 87 SEBASTOPOL Dom, Tom, Roger, Danielle, ^{Ben} Sharon (..) Judy
 ST. PAUL'S Pogue
 St. Johns Dagwell, Watts, Johnson
 Christ Church de Wolfe, Hines
 ALL Saints Scott, Johnson
 EPIPHANY Harris
 St Matthews Carey
 St. Thomas Noble OWENS
 Incarnation Holt, Ardley, Longenecker
 Gold Ridge Ed Van Tassel



Personal Experience [contra-cultural]

- Mesa at Elbert 1934-5 Directions
- New Moon → Yop hoe Mope 1930
- The Tehachans Earth Quake 1952
- Uxmal Governor's palace - Chicago World Fair 1933
- Vajra - Mars Hill 1958
- Monk at HIROSHIMA 1959
- Mahabalipuram 1960
- Earthquake 1989? OAKLAND
- CROWS ~~FINNED~~ May 27, 1998
- NRT-AL DONNA'S ASHES 1998 Aus
- Robins Candle 2000
- FRY CANYON 1999
- St. Johns 4 Directions 1996?
- "Stan loves you" 2003

SACRED PLACES

- MESA AT ELBERT
- SAMARKAND
- HEI SAN
- MAHABALIPURAM
- DURHAM - LINDESFARN - IONA
- CRESTONE
- SAN FRANCISCO PEAKS
- MARS HILL
- WHITETHORN
- PETRA
- FOREST - LITTLE AMERICA
- SPRING LAKE

Mother
Belle
Grandpa Wilson

People

Horace Gray Lunt III

Seymour Wheelock

Kenneth Klindworth

Night Asst

Donna

Bill Davis

Stan Greenfield

Ingrid Lythons

Fritz Zwicky

Manzour Ahmed

Japanen Astronomer

Amita Lavre

Jack Rice

Robin Simpson

Betty Smith

Judy Lockwood

Ed van Tassel

Don Longenecker

Sharon Kocher

Lois Different

Gavin

Art

AGW CHRONOLOGY

(1)

BORN July 28, 1918 Baptist Sanitarium, Houston, Texas
c. 1:20AM (War Time)

Lived in Texas - UNTIL 1923 (Travels inc. Atlanta, Florida, ...)

To DENVER, COLORADO 1923 - Apt. on Washington St.

To Apt. 15xx Franklin Begun kindergarten, Wynnon School, Sept. 1923
Miss Baviera

Moved to Apt. 16xx Gilpin Street, First Grade, Wynnon School
Sept 1924 - June 1925

Moved to House 7xx Garfield Street, 2nd Grade, Teller School
Sept. 1925 - June 1926

Moved to House 756 Jackson Street, 3rd grade - 6th Grade Teller
(Telephone YORK 7850) Sept 1926 - June 1930

Aaron Gove Jr. High 7th grade - 9th grade
Sept 1930 - June 1933

Moved to House 650 Franklin Street, East High School
10th grade - 12th grad Sept. 1933 - June 1936

SUMMER 1935
WORKED FILLING
STATION GRANT ST.

Moved to HOUSTON, TEXAS. PLAZA HOTEL
& Montrose Blvd Apts,

RICE INSTITUTE: SEPT 16, 1936 - June 1941

B.S. E.E. (with distinction) Jr Engineering Scholar

(Not enrolled School year Sept 1938 - Jun 1939 - Illness)

Married Frances Lavelle Malisz, December 21, 1940 SUMMER 1940 WORKED TEXACO I.B. MATH OFFICE

Lived --- St. SUMMER 1941 WORKED HUGHES TOOL COMPANY

Moved to PASADENA, CALIFORNIA, ~~79~~ SIERRA BONITA PLACE

CALIFORNIA INSTITUTE OF TECHNOLOGY Sept 1941

PEARL HARBOR, DECEMBER 7th 1941

ARTHUR SEYMOUR WILSON
BORN FEB 21, 1942

M.S. in Mathematics June 1942

Asst GALTIC WIND JOURNAL, Asst underwtrk weapon group

Moved To 76 So Sierra Bonita Ave

ARA NANETTE WILSON
BORN DEC 9, 1943

PhD oral examination - Feb? 1944

COMMISSIONED ENSIGN USNR, Aug 1944

NAYY

Aug, Sept 1944. Fort Schuyler, New York

OCT - FEB 1944-1945 BOWDOEN COLLEGE, BRUNSWICK, MAINE

PRE-RADAR

FEB - JUNE 1945 MIT RADAR AND SONAR

JULY 1945 MARE ISLAND NAYY YARD, VALLBTO, CAL

TREASURE ISLAND, SAN DIEGO, USS BULLMOUSE, DD

SAN CLEMENTE ISLAND

$a = b$	a is equivalent to b
$a > b$	a is greater than b
$a \triangleright b$	a dominates b
$a \supset b$	a contains b
$a \rightarrow b$	a causes b
$a \Rightarrow b$	a infers b
$a ; b$	a precedes b
$a \parallel b$	a inhibits b
$a \angle b$	a augments b
$a \succ b$	a opposes b
$a \tau b$	a balances b
$a \smile b$	a complements b
$a \smile b$	a supports b
$a \text{ w } b$	a in juxtaposition to b

AUGUST 1945 NAVY YARD TACOMA, WASHINGTON Promoted to Lt. J.G.
 COMMISSIONING OF USS MINDORO, CVE
 DEC 1945 US NAVAL HOSPITAL, SEATTLE
 FEB 1946 US NAVAL HOSPITAL, LONG BEACH
 MAR 1946 TERMINAL ISLAND NAVY YARD, LONG BEACH
 JULY 1946 HONORABLE DISCHARGE USNR

AUG 1946 Appointed Research Fellow in Astrophysics - CALTECH
 DEC 1946 NOVA SURVEY 18 inch Schmidt Palomar Mountain
 WHITE SANDS IN CHARGE CALCULATION GROUP - HARTMAN TESTS
 SPACE LAUNCH 200 inch telescope

JUNE 1947, PH.D. *laurea*, Mathematics and Physics Cal Tech

AUG 1947, ^{CIT} ~~Organized~~ Set up and organize ~~Library~~ Astrophysics Library

1948-49 Instructor in Astrophysics: Graduate course in astronomy

1947-1953 Apt. Senior Research Fellow in Astrophysics

Observer in charge: National Geographic Palomar Observatory Sky Survey

1949 Bought 1700 1759 La Paz Road, Atascena, Cal.

AGW + FLW separated 1950 - rec 1954

LORINDA ANN WILSON
 BORN MAY 15, 1952

MOVED TO FLAGSTAFF, ARIZONA AUG 1953

APPOINTED DIRECTOR OF LOWELL OBSERVATORY OCT 1953

RESIGNED JUNE 1957

HAZEL STRAW WILSON
 DIED DEC 11, 1952

CHARLES HENRY WILSON
 BORN MAY 30, 1954

MOVED TO CANON PARK

JOINED THE RAND CORPORATION AS SENIOR SCIENTIST AUG 1957

AGW and FLW DIVORCED 1957 - 1958

MOVED TO SANTA MONICA 18th St.

TAU MOSCOW, USSR AUG 1958, AROUND THE WORLD

STATE DEPARTMENT - GOVT OF INDIA

SITE SURVEY NIZAMIA UNIV 1959-1960 HYDERABAD, INDIA
 AROUND THE WORLD - EGYPT

MARRIED DONNA SCOTT MAY 31, 1961 PACIFIC PALISADES

AGW, OSW MIDDLE EAST: GREECE, TURKEY, LEBANON, SYRIA, JORDAN, ISRAEL
 RYPAWSS, EGYPT, ITALY, SWITZERLAND, HOLLAND

MOVED TO TOPANGA OBSERVATION

MOVED TO GRANDVIEW DRIVE

RELAT01.DOC DISK:EPIONTOLOGY
from DSW notes DARL 1969

DESCRIPTION

What we have discovered in the course of various team efforts to categorize and organize these cards or tags are several characteristic sets of relationships. Drawing upon the notions of symbolic logic, set theory and Boolean algebra we find it is possible to write a description of all the items in our inventory in one or more of the following formats:

Equivalence:	a equals b
Control:	a dominates b
Containment:	a contains b
Trend:	a inhibits/enhances b
Temporal:	a precedes/follows b
Completion:	a complements b
Balance:	a compensates b

There is much more here than I thought. When I left in 1936 I felt my life had been truncated. Much happened, most good, but there has always been the feeling that something was abandoned that had to be retrieved and completed. I look up at Mt. Evans and there is a yearning. Always the thought comes to me that Dad wanted to return here, but E.J. didn't, so he never came. And now when I come here I somehow feel that I am in some way letting him come back where he always wanted to come. I guess that I am still searching for the lost father. Maybe that is what was truncated. But there seems to be more. Dad is clearly part of it. But there was some dream back in 1936 about the future that was truncated. The world just went off in a completely different direction than how I visualized it with Seymour back that last week at East High. Now some of it is emerging. The outer world went one way, wars, greed, moral decay. But here in these sacred hills, the dream seems still to be alive. The Buddhist center, Lindesfarne, and the native American resurrection at Crestone, and here in Denver, even within the church, a light long lost seems to have been relit. It is confusing, but hidden there seems to be a guiding hand, bringing the strands together. I am glad I came. I have met some really good and deep people. It is affirming to know that one is not alone.

I have been in touch with Judy. I shall join all of them for Thanksgiving. Also I am going up to Boulder to spend some time with Bill. I hope John is doing well. I love all of you, best also to Suz, Katy, and Robin.

Al

*From Denver
Nov 1996*

Subj: mundane stuff plus neutron stars
Date: 96-12-05 04:09:22 EST
From: cwallyb@msn.com (C. Wallace Blake)
To: AlW1871@aol.com

Dear Al:

Your return to the shire is now imminent and I hasten to stick some stuff in your inbox to stimulate stirrings in your sensorium.

On a home-ly note, I am hungry for some mundane details about your life circumstances at this point in its development. Please share with me whatever you may be willing to divulge of the kind I give you now about me.

When I retired from AT&T Technologies' facility at Guilford Center (16 miles toward Burlington from Greensboro, NC) in September, 1984, I knew I could live anywhere in the world that suited my fancy - including a return to Colorado and perhaps Denver, but I found I liked Greensboro, NC rather well and elected to stay on. Wife Jane agreed and we continued to live in the house we had designed together in 1976. It is actually just southwest of Greensboro in a country club area known as Sedgefield and features 1976 state-of-the-art insulation, plumbing, heating and double-glazed windows.

Jane died at the end of October last year of COPD at age 75 and I am learning to live alone in a four-bedroom, two-story house. It has its advantages in terms of freedom to tot off to reunion parties in Denver and so on, but I still miss her.

Our two sons, after living in Shreveport and Birmingham, respectively, have followed their dreams and relocated in Winston-Salem - about 35 miles west of me - where they both were kids growing up. Steve, the elder, is employed as the area account manager for Cranston Trucking Company where he is capitalizing on his career knowledge of the 16-wheeler trucking business. He has two beautiful daughters, 21 and 25, that make me wish incest were not sinful. Dan has both PhD and MD degrees (specialized in psychiatry) and is employed as Medical Director at a state-operated facility for rehab of substance abusers. Dan's two daughters are 13 and 11 and are both perhaps more than adequately bright. Those two families cooperate to make sure ole granddad stays busy and interested in what's going on in the world. For an example, I took your advice and "soared to new heights" as I spent Thanksgiving afternoon at Steve's house eating, among many other goodies, turkey supplied by Dan and cooked on Steve's mammoth grill in company with Steve's wife, Judy, Dan's two daughters, his wife, Elaine, and Elaine's parents, Howard and Julia Clark of Durham, NC. I supplied the desserts.

Howard Clark (PhD, of course) is the about-to-retire head of the Department of Biomedical Engineering at Duke University and is the kind of fellow I knew would appreciate the details of your "recap" in all their remarkable subtleties. I let him read your essay and his reaction was, "If Al Wilson can make it to Colorado from California for Thanksgiving, for heaven's sake invite him to come on over to North Carolina and Duke for some interesting discussions - I will be happy to arrange a luncheon or two with a Buddhist

professor friend of mine!" I am sure he was serious!

Have some fun - send Howard a surprise e-mail message acknowledging that I have made formal introductions and take it from there. He is "hclark@acpub.duke.edu" and you can trust his sense of humor.

once asked Howard, "What in the world do biomedical engineers do to justify their existence?" and he replied, "Well, suppose you had a need for a couple kilos of HIV - we would develop a way to provide them."

Now for the first of the many questions you might be able to clarify for me: I don't understand all I know about neutron stars. An article in the current issue of "Discover" magazine entitled "Mystery of the Missing Star" and subtitled, "Once, astronomers thought the spectacular supernova of 1987 would confirm their most cherished theories of star death. Instead it left a hole they have tried to plug for nine years." The article shows before and after photos of Sanduleak -69o202 as it became SN1987A and a photo taken in 1989 by an Australian telescope showing concentric rings of "smoke" looking like an archery target complete with a hollow bullseye and a 1995 photo made by the Hubble.

The text says, "According to classic theory, there should be a neutron star where Sanduleak used to be. Neutron stars are 'dead' stars, stellar cinders made of neutrons squeezed through the bars of their atomic cages and thus able to achieve extraordinary densities. . ." going on to talk about how they normally become pulsars and describing the incredible generation of millisecond pulses as the beasts rotate at unbelievable spin rates. Okay, the fact that no pulsar has been detected where Sandulak used to be is not my question. (That is another, much more difficult and important question.) My dumb question is simply this: are neutron stars non-luminous and detectable only by their radio frequency pulses or are they luminous and detectable by their light output as well? If the latter is the case, what might be the source of light-producing energy? How can I make a better mental image of a neutron star?

Love, Wally

----- Headers -----

From cwallyb@msn.com Thu Dec 5 04:08:40 1996
Return-Path: cwallyb@msn.com
Received: from upsmot03.msn.com (upsmot03.msn.com [204.95.110.85]) by emin04.mail.aol.com (8.6.12/8.6.12) with ESMTTP id EAA06522 for <AlW1871@aol.com>; Thu, 5 Dec 1996 04:08:39 -0500
Received: from upmajb02.msn.com (upmajb02.msn.com [204.95.110.74]) by upsmot03.msn.com (8.6.8.1/Configuration 4) with SMTP id BAA03377 for <AlW1871@aol.com>; Thu, 5 Dec 1996 01:07:50 -0800
Date: Thu, 5 Dec 96 05:25:31 UT
From: "C. Wallace Blake" <cwallyb@msn.com>
Message-Id: <UPMAIL02.199612050909250641@msn.com>

Questionnaire

Education:

- 1) When did you attend high school? If so, where?
1933-1936, East High School, Denver Colorado
- 2) What was your favorite subject to study? Least?
Most favorite: math; Least : English
- 3) What was the school environment like? (rules, class size, dress code, school functions, etc.)

Very orderly, the principal, Roscoe Hill, could terminate disorder merely by tapping on the window with a 50 cent piece. Classes were about 15 to 20, conservative attire, pants and sweaters for boys, skirts and sweaters for girls. School dances and athletic events.

- 4) What would you do over? why?

Learn more foreign languages.

- 5) Did you attend college? If so, where? What did you major in?

Rice, (Houston, Texas), B.S. in Electrical Engineering
Caltech, (Pasadena, Calif.) PhD in Mathematics and Physics

Technology:

- 1) How much technology growth have you seen?
From street cars and steam locomotives to freeways and jet planes
From crystal set radios to interactive TV
From slide rules to computers
From mustard plasters to antibiotics
From horse plows to automated tractors
From ice boxes to refrigerators and freezers
From scrub boards to washing machines and clothes lines to dryers
From "call central" telephones to wireless phones

- 2) What significant scientific events have you lived through? (ex: Mars Observer)

Quantum Mechanics c 1920-1945
Expanding Universe 1923-1936--
Godel's Incompleteness Theorems c 1938
Radar c 1940
Antibiotics 40's Plastics 30's -
Nuclear energy and atomic weapons 45--
3 degree microwave background 50--
Sputnik 1957, - man on moon 1969
Particle physics quarks, etc 60's--
Computers 1950- Computer simulations 1980--
Chaos theory and fractals 70's -
The Internet 90's--
Stem cells and cloning 90's--

3) Please explain some events that highlighted your youth or took place during that time

Lindbergh's solo flight over the Atlantic 1927

The great depression 1930-39

The Third Reich 1933-1945

World War II 1939-1945

Politics:

1) Please discuss the political climate as it was towards crime rate, the draft, drinking age, feminist movements, scandals, race issues, etc of your youth

During prohibition the "mob" came to power in big cities

There was no opposition to the draft in WW II

Rosie the Riveter (1941) was the real beginning of women moving beyond typing, teaching, and threading needles.

2) What were the headlines?

Peace in Our Time – Munich

Hitler Invades Poland

Japanese Attack Pearl Harbor

Atom Bomb Hiroshima, Nagasaki

3) Who was president?

My first "political" memory was visiting President Harding's funeral train as it passed through Cheyenne on the way to Washington (1923)

Coolidge: "I do not choose to run in 1928"

Hoover: "Recovery is just around the corner"

Roosevelt: "We have nothing to fear but fear itself"

Truman: "If you can't take the heat, stay out of the kitchen"

Eisenhower: "We cannot have one set of rules for ourselves and our friends and another set for our opponents."

Kennedy: "Ask not what your country can do for you, but ask what you can do for your country"

Johnson: "We don't want our American boys to do the fighting for Asian boys."

Nixon: "I am not a crook"

Ford:

Carter: "I lusted in my heart"

Reagan: "America is basically about having the opportunity to become rich"

Bush I: "Read my lips"

Clinton: "That depends on what the meaning of 'is' is"

Bush II: "I will bring America together"

Social:

- 1) What were the fads of your day? What was the "the look"?
I have lived through countless fads and looks. From knickers to prison trousers, through countless cycles of boots, sneakers, sandals.
Fads usually have an attention span of about three years.
- 2) What did you do for fun?
Mountain climbing, rock climbing, sailing
- 3) Who were the movie stars? Hairstyles? Clothing designers?
Charlie Chaplin, Al Jolsen, Douglas Fairbanks, Greta Garbo,
Fred Astair and Ginger Rogers, - - - - Walter Mathau, Tom Hanks
From crew cuts, through hippy shoulder length, to shaved heads
- 4) Did you own a tv? If so, was it black & white or color?
First TV set about 1965
- 5) Can you address the issues of alcohol, drugs, gangs
and social movements
Here I refer the reader to Parmenides and Herakleidos

Employment:

- 1) What was your first job?
Filling station attendant, pumping gas and washing windshields,
checking air, oil, and water.
- 2) What were your visions of the future?
Humanity escaping its cultural boxes to discover its real potential
- 3) Why did you choose the path you did?
I became an astronomer because I felt I belonged to the stars
- 4) What would you change about your career path?
Many details, no vectors
- 5) What is your advice to the future employment?
Master at least two specialties.
Then fall out and reorganize how you look at everything

Family:

- 1) Where did you grow up? Rural, surburban, urban?
Urban, in Denver a city of about 230,000 (20's 30's)
- 2) What were influences that helped form your views of
education, work, ethics, values and morality?
Besides family, I was lucky to have had some great teachers from elementary
school, through graduate school. All taught by example.
- 3) How was your household run? Please touch on
discipline, encouragement, matriarchial or patriarchial
and freedoms
By example, we were given standards to aspire to.
It was joyful to exceed those standards, and then explore beyond.

4) Anybody famous or infamous in your family?

No, anonymity assures autonomy

5) What are the hard choices you've had to make or hard things you've had to face?

Physical awkwardness, tone deafness, social shyness

6) Personally, how were you able to overcome obstacles?

By becoming part of something bigger than me

Never taking myself too seriously. Being there for others

7) What knowledge or information would you like to pass on?

In the first part of life, acquire self discipline

In the second part, learn from everybody and every source

In the third part, go beyond what you have learned, prepare your gift

In the final part, give your gift.

8) How or what do you want people to remember you by?

Just know that whether here or beyond, we are always there for each other.

SEPTEMBER 21 1990

The Fondren Library, Rice University, 4:00 p.m.

Today is Dad's 100th birthday. At his 90th birthday party we said we would return to celebrate his 100th. And I am here.

It is appropriate to celebrate his birthday in a place of learning, such as here on the campus of Rice University where he almost became a student in Rice's first class in 1912 and where his son and one of his grandsons graduated.

Dad had great respect for learning and supported it in many ways throughout his life. While his career was the oil business, his vocation was education. He not only provided for my education and that of his grandchildren, he went beyond this and in honor of others established professorial chairs, scholarships, fellowships and buildings in various seats of learning throughout Texas. I only regret that he himself has not been honored by say, an "Arthur R. Wilson Chair of Business Ethics" in the Jesse Jones School of Business Administration here at Rice. But that remains a hope for the future.

Today on returning to this campus after a great many years (my class graduated 50 years ago next June), I was struck by the deep bond that I have with this place of learning. It is very difficult for me to articulate. This bond is different from a genetic or blood tie, nor is it the same as Goethe's bond of Wahlverwandschaft. Indeed, this is not a bond that an individual chooses, rather it is a bond that chooses the individual. Many of us elect to attend a university to study and to learn, but are never chosen. To be chosen does not mean to become a member of the faculty or an employee. To be chosen is the awareness that when in the library you are not just surrounded by books, you are surrounded by thoughts--the unfinished and open ended thoughts of all the thinkers represented by the books --and that you have been chosen to participate in the process of their completion. To be chosen is the awareness that when you walk through the corridors that all those who once walked here in the quest and dissemination of knowledge are present in your shoes. To be chosen is the awareness of the enduring presence of the company of scholars, researchers and artists who have lived lives beyond the mere metabolic and over the centuries through their gifts have built the temple of human culture. To be chosen is the awareness that you too are a member of this company, even if but on the back bench.

We sometimes try to capture and articulate this sense of membership in words and in rituals. Ofttimes we have ritualized it by standing and filling our glasses and toasting some visible heritage, some specific event, or some particular person. But when the pipers enter the hall and the shrill cry of the pipes mixes with Auld Lang Syne, we know that what we feel will be forever

beyond the grasp of our words and rituals.

We are grateful to you, Dad, for the many ways in which you have celebrated this glorious company and for allowing us the opportunity to share in its visions.

What do we build when we build a university? or a cathedral? We build a sacred space, a place for the gods to dwell. Or perhaps it is better to say, we build a place to which we hope to attract the gods so as to keep them always in our midst. And one knows at once on entering a dedicated space whether or not some god has chosen to abide there.

Yesterday I went to the chapel on the campus of Lon Morris College, the chapel that Dad and Evie in large part built both through their contributions to design and funding. Upon entering the space I knew at once that a god had taken up residence there. Thus their efforts have been rewarded. Rewarded in the greatest and most lasting way that any human effort can be rewarded: Bringing a god to dwell in our midst.

HAPPY BIRTHDAY DAD

Albert George Wilson

From Wikipedia, the free encyclopedia

Albert George Wilson (born July 28, 1918) is an American astronomer.

He was born in Houston, Texas. He received his Ph.D. in mathematics from Caltech in 1947; his thesis title was *Axially Symmetric Thermal Stresses in a Semi-Infinite Solid*.

In 1949 he accepted a job at Palomar Observatory, and led the Palomar Sky Survey. In 1953 he became assistant director of Lowell Observatory, and served as director from 1954 to 1957. He

later worked at Rand Corporation and other private sector positions. In 1962 he became founding editor of the astronomical magazine *Icarus*. In 1966, he accepted the position of associate director of McDonnell-Douglas Advanced Research Laboratories, which he held from 1966 until 1972. Wilson then became an adjunct professor at USC, teaching courses in philosophy and science until his retirement. After retiring Wilson was associated with the Institute for Man and Science and the Institute of the Future, lecturing and consulting for both groups.

He discovered a number of asteroids, and also co-discovered the periodic comet 107P/Wilson-Harrington.

External links

- Biography (http://www.lowell.edu/Research/library/paper/al_wilson.html)

Retrieved from "http://en.wikipedia.org/wiki/Albert_George_Wilson"

Categories: 1918 births | Living people | 20th-century astronomers | American astronomers | Planetary scientists | Asteroid discoverers | United States astronomer stubs

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Asteroids discovered: 5

1620 Geographos ^[1]	September 14, 1951
1915 Quetzálcoatl	March 9, 1953
1980 Tezcatlipoca ^[2]	June 19, 1950
10000 Myriostos	September 30, 1951
(118162) 1951 SX	September 29, 1951

1. ^ with R. Minkowski
2. ^ with Å. A. E. Wallenquist

13 □ 1965AJ.....70..4400
08/1965A F G R C N U Omer, Guy C., Jr.; Page, Thornton L.;
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The coma cluster of galaxies. 1. Size and structure

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16 □ 1967MSRSL..15..125W
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17 □ 1968Icar....9D...1K
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19 □ 1969hist.book....W
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F. Zwicky, 1898 - 1974 February 8.

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11/1990A E S N Mueller, J.; Wilson, A.; Abell, G.; Carlson, G.
Supernovae 1951J, 1953J, and 1954ac

23 □ 1992IAUC.5536....2M
06/1992A E S N Mueller, J.; Harrington, R. G.; Wilson, A. G.;
Brewer, C.; Mendenhall, J. D.
Supernovae 1950N and 1950O in Anonymous Galaxies

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06/1950A E Wilson, A. G.; Wallenquist, A. A. F.
Object Wilson, Wallenquist
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- 2 1950PASP...62..118H
06/1950 F G C U Harrington, R. G.; Wilson, A. G.
Two New Stellar Systems in Leo
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- 3 1953IAUC.1394....1W
03/1953A E Wilson, A. G.
Fast Moving Object Albert Wilson
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- 4 1954ASPL....7....1S
00/1954 F G Slipher, E. C.; Wilson, A. G.
Mars: 1954
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- 5 1954AJ.....59..334W
10/1954A G C S Wilson, Albert G.
Dynamic parallaxes of extra-galactic nebulae.
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- 6 1955PASP...67...27W
02/1955 F G C N U Wilson, A. G.
Sculptor-Type Systems in the Local Group of Galaxies
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- 7 1955AJ.....60..161G
06/1955A F G U Gifford, Frank, Jr.; Johnson, Harold;
Wilson, Albert
Heights of scintillation layers in the earth's atmosphere.
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02/1958 F G C Wilson, Albert G.
Introduction
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- 9 1963AJ.....68R.547W
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Tentative Observational Confirmation of Discretization in Galaxies.
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Discretization in E0 Field Galaxies.
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On Super-Organization Among Clusters of Galaxies.
-



Wilson, Albert George

Born Houston, Texas, USA, 28 July 1918

Albert G. Wilson supervised the National Geographic Society-Palomar Observatory Sky Survey, directed the Lowell Observatory, and was the founding co-editor of *Icarus*. His discoveries included four dwarf galaxies in the Local Group, several supernovae, a comet, and at least five asteroids. His main interest, however, was theoretical cosmology, especially the idea of discretization.

The son of oil company geologist Arthur Rector Wilson and homemaker and writer Hazel Mildred Straw, Wilson grew up in Denver but moved back to Houston with his family when he finished high school. He had decided at age five that he wanted to be an astronomer, but he attended Rice Institute (now University) in Houston, where he asked the president why there was no astronomy and was told that the damp, cloudy climate precluded it.

Upon receiving his B.S. in electrical engineering in 1941, he entered graduate school at the California Institute of Technology—another institution that did not offer any astronomy—in mathematics. His graduate work was interrupted by two years in the U.S. Navy, installing radar on ships. He returned to Caltech to submit his thesis in 1947 on an applied mathematics problem dealing with the spread of heat after a major impact. At this time he became a senior research fellow at Caltech and began work with Fritz Zwicky on the search for supernovae with the ~~78~~ 18 inch Schmidt telescope. He would always feel close to Zwicky and his “morphological” approach to science.

In 1948 Jesse Greenstein came to Caltech and founded the program in astronomy. Wilson, a staff member of both Caltech and the Mt. Wilson and Palomar Observatories from 1949–1953, helped organize the astrophysics library and taught both undergraduate and graduate courses. He taught practical astronomy to graduate students, including Helmut Abt and Alan Sandage. He was put in charge of observations for the National Geographical Society Society-Palomar Observatory Sky Survey, working under Ira S. Bowen. It was during this period that he and R.G. Harrington discovered Leo I and Leo II. Later, Wilson announced the discoveries of two more local group galaxies, the Draco and Ursa Minor Dwarfs. During this period Wilson began writing popular articles for such publications as *Scientific American* and *National Geographi*.

Lowell Observatory, a private institution in Flagstaff, Arizona, founded by wealthy Bostonian Percival Lowell in 1894, was in the doldrums. For many decades three aging astronomers, Director V.M. Slipher, his brother E.C. Slipher, and C.O. Lampland, had hoarded most of the telescope time but had published very little. V.M. had devoted most of his energies to his business ventures, E.C. to politics. The sole trustee, Roger Lowell Putnam, busy with business and politics in far-off Massachusetts, finally decided to force some changes after Lampland died in 1951. He heard of Wilson from astronomer John C. Duncan, ascertained that Wilson was acceptable to the Slipher brothers, and hired him as assistant director effective 1 July 1953 with the understanding that if all went well V.M. would retire and Wilson would succeed him after a year.

Wilson served as director of Lowell Observatory from 11 November 1954 to 3 January 1957. It did not go well. His attitude may be shown by an excerpt from a letter he wrote the trustee in 1955: "There will be a period of being tough. But we suffer from some deeply entrenched inefficiency. A completely new broom must be used for the sweeping. I, nor anyone else, could not get the Lowell Observatory on a productive basis with the existing set up. I tried for 7 months to sell my program, win them over, but all I got was some rather contemptible back stabbing. Now the program goes on whether they like it or not, and if they continue to drag their feet they will have to go." The opposition, which led to his early resignation, came not from the elderly Sliphers, who were supportive, but from such younger staff members as Harold Johnson and Henry Giclas. Half a century later, Wilson recalls gratefully that his successor, John S. Hall, thanked him for doing much of the necessary "dirty work" to modernize the historic observatory.

Despite constant battles with the staff, Wilson achieved quite a bit during his short tenure at Lowell. He hosted the first ever "Astrobiology Seminar" as well as a meeting of the Astronomical Society of the Pacific, began a survey for a new dark sky site, initiated seminar and guest investigator programs, and obtained outside support for several programs, including observations of a Mars opposition from South Africa and an eclipse from Sri Lanka. He also joined with Russell Morgan and Ralph Sturm of Johns Hopkins University to test their electronic image-orthicon intensifier, developed for medical uses, on planetary photography. He became interested in—and wrote about—Mars, astrobiology, and scintillation layers in the Earth's atmosphere. He served on the Council of the American Astronomical Society and the Board of Trustees of the Astronomical Society of the Pacific, both from 1955 to 1958.

Returning to southern California, Wilson worked as a senior member of the research staff at the Rand Corporation from 1957–1966. His work was supported by the U.S. Air Force, and he had plenty of time for his own research, which was in galaxies and cosmology. One of the visitors there was Zdenek Kopal, who wanted to start a journal of solar system studies, so the two of them founded *Icarus* in 1962 and jointly edited it for its first six years, after which they turned it over to Carl Sagan.

It was at Rand that Wilson met mathematician Dominic G.B. Edelen, who shared his interest in the idea of discretization (now it would probably be called quantization) in astronomy. The two wrote several articles and a book together on the subject before and after Edelen went off to become a professor at Lehigh University. Their ideas have received little support.

In 1966, Wilson became associate director of the Douglas Advanced Research Laboratories, where he had no difficulties in managing engineers and scientists. He even got Douglas to sponsor a 1968 symposium on Hierarchical Structures. Lancelot Law Whyte, Wilson, and Wilson's wife Donna edited the proceedings, which included contributions by such astronomers as Edward R. Harrison and Thornton Page as well as Wilson's own ideas on hierarchical structure in the cosmos.

Wilson retired from Douglas in 1972 rather than move to St. Louis after the McDonnell-Douglas merger. He then taught astronomy and philosophy of science, including such courses as "Math, Myth, and Metaphor" as an adjunct professor at the University of Southern California and the University of California, Los Angeles. He was associated with the Institute for Man and Science and the Institute for the Future.

Wilson was married to Frances Malich from 1940–1957. They had four children. In 1961 he married Donna Scott, an editor and writer who coauthored some of his writings until her death in 1998.

Wilson has spent his later years living quietly in Sebastopol, California, studying Buddhist philosophy. He notes that he has three things in common with Percival Lowell: both were primarily mathematicians with interests in astronomy and in Eastern philosophy.

*Joseph S. Tenn
Sonoma State University*

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