

The Very Slow Time Machine

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(1990)

The Very Slow Time Machine--for convenience: the VSTM--made its first appearance at exactly midday 1 December 1985 in an unoccupied space at the National Physical Laboratory. It signaled its arrival with a loud bang and a squall of expelled air. Dr. Kelvin, who happened to be looking in its direction, reported that the VSTM did not exactly spring into existence instantly, but rather expanded very rapidly from a point source, presumably explaining the absence of a more devastating explosion as the VSTM jostled with the air already present in the room. Later, Kelvin declared that what he had actually seen was the *implosion* of the VSTM. Doors were sucked shut by the rush of air, instead of bursting open, after all. However it was a most confused moment and the confusion persisted, since the occupant of the VSTM (who alone could shed light on its nature) was not only time-reversed with regard to us, but also quite crazy.

*The term V S T M is introduced retrospectively in view of our subsequent understanding of the problem (2019).

One infuriating thing is that the occupant visibly grows sane and more presentable (in his reversed way) the more that time passes. We feel that the hard work and thought devoted to the enigma of the VSTM is so much energy poured down the entropy sink because the answer is' going to come from him, from inside, not from us; so that we may as well just have bided our time until his condition improved (or, from his point of view, began to degenerate). And in the meantime his arrival distorted and perverted essential re-'search at our laboratory from its course without providing any tangible return for it.

The VSTM was the size of a small station wagon; but it had the shape of a huge lead sulfide, or galena, crystal -which is, in crystallographer's jargon, an octahedron-with-cube formation consisting of eight large hexagonal faces with six smaller square faces filling in the gaps. It perched precariously but immovably on the base square, the four lower hexagons swelling up and out towards its waist where four more squares (oblique, vertically) connected with the mirror image upper hemisphere, rising to a square north pole. Indeed it looked like a kind of world globe, lopped and sheered into flat planes: and has remained very much a separate, private world to this day, along with its passenger.

All faces were blank metal except for one equatorial square equatorial square facing southwards into the main body of the laboratory. This was a window of glass as thick as that of a deep-ocean diving bell which could apparently be opened from inside, and only from inside.

The passenger within looked as ragged and tattered as a tramp; as crazy, dirty, woebegone and tangle-haired as any lunatic in an ancient Bedlam. He was apparently very old; or at any rate solitary confinement in that cell made him so. He was pallid, crook-backed, skinny and rotten-toothed. He raved and mumbled soundlessly at our spotlights. Or maybe he only mouthed his ravings and mumbles, since we could hear nothing whatsoever through the thick glass. When we obtained the services of a lip-reader two days later the mad old man seemed to be mouthing mere garbage, a mishmash of sounds. Or was he? Obviously no one could be expected to lip-read backwards; already, from his actions and gestures, Dr. Yang had suggested that the man was time-reversed. So we video-taped the passenger's mouthings and played the tapes backwards for our lip-reader. Well, it was still garbage. Backwards, or forwards, the unfortunate passenger had visibly cracked up. Indeed, one proof of his insanity was that he should be

trying to talk to us at all at this late stage of his journey (rather than communicate by holding up written messages as he has now begun to do. (But more on these messages later; they only begin or, from his point of view, *cease* as he descends further into madness in the summer of 1989.)

Abandoning hope of enlightenment from him, we set out on the track of scientific explanations. (Fruitlessly. Ruining our other, more important work. Overturning our laboratory projects and the whole of physics in the process.)

To indicate the way in which we wasted our time, I might remind you that the first "clue" came from the VSTM which, as I said, was a clear galena crystal. Yang thought that galena is used as a semiconductor crystal rectifier: devices for transforming alternating current into direct current. They set up much higher resistance to an electric current flowing in one direction than another. Was there an analogy with the current of time? Could the geometry of the VSTM or the geometry of energies circulating in its metal walls, presumably interlaid with printed circuits effectively *impede* the forward flow of time, and reverse it? We had no way to break into the VSTM. Attempts to cut into it proved quite ineffective and-were soon discontinued, while X-raying it was foiled, conceivably by lead alloyed in the walls. Sonic scanning provided rough pictures of internal shapes, but nothing as intricate as circuitry; so we had to; rely on what we could see of the outward shape, or through the window and on pure theory.

Yang also stressed that galena rectifiers operate in the same manner as diode valves. Besides transforming the flow of an electric current they can also *demodulate*. They separate information out from a modulated carrier wave as in a radio or TV set. Were we witnessing, in the VSTM, a machine for separating out "information" in the form of the physical vehicle itself, with its passenger from a carrier wave stretching back through time? Was the VSTM a solid, tangible analogy of a three-dimensional TV picture. played backwards?

We made many models of VSTMs based on ideas and tried to send them off into the past, or the future or anywhere for that matter! sadly all stayed monotonously present in the laboratory, stubbornly locked to our space and time.

Kelvin, recalling his impression that the VSTM had seemed to expand outward from a point, and remarked that this was how three dimensional beings such as ourselves might well perceive a four dimensional object first impinging on us. Thus a 4-D sphere would appear as a point and swell into a full sphere then contract again to a point. But a 4-D octahedron-and-cube? According to our maths this shape couldn't have a regular analogy in 4-space, only a simple octahedron could. Besides, what would be the use of a 4.D machine which shrink to a point at the precisely passenger needed to mount it? No, this was not a genuine four-dimensional body; though we wasted many weeks running computer programs to describe it as one, and arguing that its passenger was a normal 3-space man imprisoned within a 4-space structure-the discrepancy of one dimension between him and his vehicle effectively isolating him from the rest of the universe so that he could travel hindwards.

That he was indeed travelling hindwards was by now absolutely clear from his feeding habits - (i.e. he regurgitated) though his extreme furtiveness about bodily functions coupled with his filthy condition meant that it took several months before we were positive on these grounds

All this, in turn, raised another unanswerable question of if the VSTM was indeed travelling backwards through time, precisely where did it *disappear* to, in that instant of its arrival on I December 1985? The passenger was hardly on a Sunday jaunt, or he would have tried tv long last, on midsummer day 1989, our passenger held up a notice printed on a big plastic eraser slate.

CRAWLING DOWNHILL, SLIDING UPHILL!

He held this up for ten minutes, against the window. The printing was spidery and ragged; so was he.

This could well have been his last lucid moment before the final descent into madness, in despair at the pointlessness of trying to communicate with us. Thereafter it would be *downhill aal the way*, we interpreted. Seeing us with all our still eager, still baffled faces, he could only gibber incoherently thenceforth like an enraged monkey at our sheer stupidity.

He didn't communicate for another three months.

When he held up his next (i.e. penultimate) sign, he looked slightly sprucer, a little less crazy (though only comparatively so, having regard to his final mumbling squalor).

THE LONELINESS! BUT LEAVE ME ALONE!

IGNORE ME UNTIL 1995!

We held up signs (to which, we soon realized, his sign was a response):

ARE YOU TRAVELLING BACK THROUGH TIME? WHY?

We would have also dearly loved to ask: WHERE DO YOU DISAPPEAR TO ON DECEMBER 1 1985? But we judged it unwise to ask this most pertinent of all questions in case his disappearance was some sort of disaster, so that we would in effect be foredooming him, accelerating his mental breakdown. Dr. Franklin insisted that this was nonsense; he broke down anyway. Still, if we had held up that sign, what remorse we would have felt: because we might have caused his breakdown and ruined some magnificent undertaking.

We were certain that it had to be a magnificent undertaking to involve such personal sacrifice, such abnegation, such a-cutting off of oneself from the rest of the human race. This is about all we were certain of.

(1995)

No progress with our enigma. All our research is dedicated to solving it, but we keep this out of sight of him. While rotas of postgraduate students observe him round the clock, our best brains get on with the real thinking elsewhere in the building. He sits inside his vehicle, less dirty and dishevelled now, but monumentally taciturn: a trappist monk under a vow of silence. He spends most of his time re-reading the same dog-eared books, which have fallen to pieces back in our past: Defoe's *Journal of the Plague Year* and *Robinson Crusoe* and Jules Verne's *Journey to the Centre of the Earth*; and listening to what is presumably taped music (of which he gathered torn shreds and frantically placed back into cassettes, in a brief mad fiesta, his tiny living area a sudden frenzy of repackaging with maniacal speed and neatness, of tapes which have lain around, trodden underfoot, for years).

Superficially we have ignored him (and he, us) until 1995: assuming that his last sign had some significance. Having got nowhere ourselves, we expect something from him now.

Since he is cleaner, tidier and saner now, in this year of 1995 (not to mention ten years younger) we have a better idea of how old he actually is; thus some clue as to when he might have started his journey.

He must be in his late forties or early fifties though he aged dreadfully in the last ten years, looking more like seventy or eighty when he reached 1985. Assuming that the future does not hold in store any longevity drugs (in which case he might be a century old, or more!) he should have entered the VSTM sometime between 2010 and 2025. The later date, putting him in his very early twenties if not teens, does

rather suggest a "suicide volunteer" who is merely a passenger in the vehicle. The earlier date suggests a more mature researcher who played a major role in the development of the VSTM and was only prepared to test it on his own person. Certainly, now that his madness has abated into a tight, meditative fixity of posture, accompanied by normal activities such as reading, we incline to think of him a man of moral stature rather than a time-kamikaze; so we put the date of departure on the journey at 2010 to 2015 (only twenty years ahead) when he will be in his thirties.

Besides theoretical physics, basic space science has by now been hugely sidetracked by his presence.

The lead hope of getting man to the stars was the development of some deep-sleep or refrigeration system. Plainly this does not exist by 2015 or so or our passenger would be using it. Only a lunatic would voluntarily sit in a tiny compartment for decades on end, aging and rotting, if he could sleep the time away just as well, and awake as young as the day he set off. On the other hand, his life-support systems seem so impeccable that he can exist for decades within the narrow confines of that vehicle using recycled air, water and solid matter to 100 per cent efficiency. This represents no inconsiderable outlay in research and development which must have been borrowed from another field, obviously the space sciences. Therefore the astronauts of 2015 or thereabouts require very long-term life support systems capable of sustaining them for years and decades, up and awake. What kind of space travel must they be engaged in, to need these? Well, they can only be going to the stars the slow way; though not a very slow way. Not hundreds of years; but decades. Highly dedicated men must be spending many years cooped up alone in tiny space-craft to reach Alpha Centaurus, Tau Ceti, Epsilon Eridani or wherever. If their surroundings are so tiny, then any extra payload costs prohibitively. Who would contemplate such a journey merely out of curiosity? No one. The notion is ridiculous -- unless they are carrying something which will then link it instantaneously with Earth. A tachyon descrambler is the only obvious explanation. They are carrying with them the other end of a tachyon-transmission system for beaming material objects, and even human beings, out to the stars.

So, while one half of physics nowadays grapples with the problems of reverse-time, the other half, funded by most of the money from the space vote, pre-empting the whole previously extant space programme, is trying to work out ways to harness and modulate tachyons.

These faster-than-light particles certainly seem to exist; we're fairly certain of that now. The main problem is that the technology for harnessing them is needed *beforehand*, to prove that they do exist and so to work out exactly *how* to harness them.

All these reorientations of science because of him sitting in his enigmatic vehicle in deliberate alienation from us, reading *Robinson Crusoe*, a strained expression on his face as he slowly approaches his own personal crack-up.

(1996)

If you were locked up in a VSTM for X years, would you want a calendar on permanent display or not? Would it be consoling or taunting? Obviously his instruments are calibrated - unless it was completely fortuitous that his journey ended on 1 December 1985 at a precise point. But can he see the calibrations? Or would he prefer to be overtaken suddenly by the end of his journey, rather than have the slow grind of years unwind itself? You see, we are trying to explain why he did not communicate with us in 1995.

Convicts in solitary confinement keep their wits by scratching five-barred gates of days on-the walls with their fingernails; the sense of time passing keeps their spirits up. But on the other hand, tests of time perception carried out on potholers who volunteered to stay below ground for several months on end show that the internal clock lags grossly by as much as two weeks in a three month period. Our VSTM

passenger might gain a reprieve of a year or five years in total subjective journey time, by ignoring the passing of time. The potholders had no clue to night and day; but then, neither does he! Ever since his arrival, lights have been burning constantly in the laboratory; he has been under constant observation.

He isn't a convict, or he would surely protest, beg to be let out, throw himself on our mercy, give us some clue to the nature of his predicament. Is he the carrier of some fatal disease a disease so incredibly infectious that it must affect the whole human race unless he were isolated? Which can only be isolated by a time capsule? Which even isolation on the Moon or Mars would not keep from spreading to the human race? He hardly appears to be...

Suppose that he had to be isolated for some very good reason, and suppose that he concurs in his own isolation (which obviously does, sitting there reading Defoe for third time), what demanded this exclusion of one man from the whole of human life and from his own time space? Medicine, psychiatry, sociology; the human sciences are being drawn into the problem in the wake of physics and space science. Sitting there doing nothing, he has become a kind of funnel for all the physical and social sciences: a human black hole into which vast energy pours, for a very slight increase in our radius of understanding. That single individual had accumulated as much disruptive potential as a single atom accelerated to the speed of light which requires all the available energy in the universe to sustain it in its impermissible state.

Meanwhile the orbiting tachyon laboratories report that they are just on the point of uniting quantum mechanics, gravitational theory and relativity; whereupon they will at last "jump" the first high-speed particle packages over the C-barrier into a faster-than-light mode, and back again into our space. But they reported that last year only to have their particle packages "jump back" as antimatter, annihilating five billion dollars' worth of equipment and taking thirty lives. They hadn't jumped into a tachyon mode at all, but had "imbused" themselves through worm-holes in the space-time fabric.

Nevertheless, prisoner of conscience (his own conscience, surely!) or whatever he is, our VSTM passenger seems nobler year by year. As we move away from his terminal madness, increasingly what strikes us is his dedication, his self-sacrifice for a cause still beyond our comprehension with such spirituality. "Take him for all In all, he Is a Man. We shall not look upon his like. Again? We shall look upon his like. Upon the man himself, gaining stature every year! That's the wonderful thing. It's as though Christ, fully exonerated as the Son of God, is uncrucified, his whole life re-enacted before our eyes in full and certain knowledge of his true role. (Except. that this man's role is silence.)

(1997)

Undoubtedly he is a holy man who will suffer mental crucifixion for the sake of some great human project. Now he re-reads Defoe's *Phtgue Year*, that classic of collective incarceration and the resistance of the human spirit and human organizing ability. Surely the "plague" hint in the title is irrelevant. It's the shear force of spirit, which beat the Great Plague of Lpndon, that is the real keynote of the book.

Our passenger is the object of popular cults by now a focus for finer feelings. In this way his mere presence has drawn the world's peoples closer together, cultivating respect and dignity, pulling us back from the brink of war, liberating tens of thousands from their concentration camps. These cults extend from purely fashionable manifestations shirts printed with his face, now-neatly shaven in a Vandyke style; rings and worry-beads made from galena crystals through the architectural (octahedron-and-cube meditation modules) to life-styles themselves: a Zen-like "sitting quietly, doing nothing."

He's Rodin's Thinker, Apollo, and Michelangelo David rolled into one for our world. He draws to us closer Never have copies of Defoe's two books and the Verne been in print before in such deman. People memorize them as meditation exercises and recite them as the supremely lucid, rational Western mantras.

The National Physical Laboratory has become a place of pilgrimage, our lawns and grounds a vast camping site Woodstock and Avalon, Rome and Arlington all in one. About the sheer tattered degradation of his final days less is said; though that has its cultists too; its late twentieth-century anchorites, its Saint Anthonies pole-squatting or cave-immuring themselves in the midst of the urban desert, bringing austere spirituality back to a world which appeared to have lost its soul though this latter is a fringe phenomenon; the general keynote is nobility, restraint, quiet consideration for others.

And now he holds up a notice.

I IMPLY NOTHING. PAY NO ATTENTION TO MY PRESENCE. KINDLY GET ON DOING YOUR OWN THINGS. I CANNOT EXPLAIN TILL 2000.

He holds it up for a whole day, looking not exactly angry, but slightly pained. The whole world, hearing of it, sighs with joy at his modesty. His self-containment, his reticence, his humility. This must be the promised 1995 message, two years late (or two years early; obviously he still has a long way to come). Now he is Oracle; he is the Millennium. This place is Delphi.

The orbital laboratories run into more difficulty with their tachyon research but still funds pour into them, private donations too on an unprecedented scale. The world strips itself of excess wealth to strip matter and propel it over the interface between sub-light and trans-light.

The development of closed-cycle living pods - the carriers of those tachyon receivers to the stars is coming along well; a fact which naturally raises the paradoxical question of whether his presence has in fact stimulated the development of the technology by which he himself survives. We at the National Physical Laboratory and at all other such laboratories around the world are convinced that we shall soon make a breakthrough in understanding of time-reversal--which should connect with that other universal interface in the realm of matter, between our world and the tachyon world and we feel too, paradoxically, that our current research must surely lead to the development of the VSTM which will then become so opportunely necessary to us, for reasons yet unknown. No one feels are wasting their time. He is the Future. His presence here vindicates our every effort even blindest of blind alleys.

What kind of Messiah must he be, by the time he enters the VSTM? How much charisma, respect, ratiom and wonder must he have accrued by his starting point? Why the whole world will wish him off! He will be the focus of so much we hope and worship that we even start to investigate Psi phenomena seriously. The concept of mental thrust as a hypothesis for his mode of travel although he is vectored not through time-of-4space at all but down the waveguide of will-power and desire.

(2001)

The millennium comes and goes without any revelation. Of course that is predictable; he is lagging by a year or eighteen months. (Obviously he can't see the calibrations on his instruments; .it~ WSEL~iEchoIce.that was his way to keep sane on the long haul.)

But finally, now in the Autumn of 2001, he holds up a sign, with a certain quiet jubilation:

WILL I LEAVE SOUND IN WIND AND LIMB?

Quiet jubilation, because we have already (from his point of view) held up the sign in answer:

YES! YES!

We're all rooting for him passionately. It isn't really a lie that we tell him. He did leave relatively sound in wind and limb. It was just his mind that was in tatters. . . . Maybe that is inessential, irrelevant, or he

wouldn't have phrased his question to refer-merely to his physical body.

He must be approaching his take-off point,. He's having a mild fit of tenth-year blues, first decide anxiety, self-doubt; which we clear up for him....

Why doesn't he know what shape he arrived in? Surely that must be a matter of record before he sets off. . . *No!* Time can not be invariable we determined. Not even the Past. Time is fluid. He has refrained from comment for all these years so as not to unpluck the strands of time past and reweave them in another, undesirable way. A tower of strength he has been. Well, back to the drawing board, and to probabilistic equations for (a) tachyon-scatter out in normal space (b) time-reversal.

A few weeks later he holds up another sign, which must be his promised Delphi revelation:

I AM THE MATRIX OF MAN.

Of course! Of course! He has made himself that over the years. What else?

A matrix is a mold for shaping a cast. And indeed, out of him shapes have been molded. Increasingly since the late 1990s, such has been his influence.

Was he sent hindwards to save the world from self-slaughter by presenting such a perfect paradigm which only frayed and tattered in the Eighties when it did not matter any more; when he had already succeeded?

But a matrix is also an array of components for translating from one code into another. So Yang's demodulation of information hypothesis is revived, coupled now with the idea that the VSTM is perhaps a matrix for transmitting the "information" contained in a man across space and time so the man-transmitter experiments in orbit redouble their efforts); with the corollary (though doubts could hardly be voiced to the enraptured world at large) that perhaps the passenger was not there at all in our sense; and he had never been. We were witnessing an experiment of the possibility of transmitting a man across the galaxy, performed on a future Earth by future science to test out the degradation factor: the decay of information mapped from space on to time so that it could be observed by us, their predecessors! Thus the onset of madness (i.e., decay) in our passenger, timed in years front his starting point, might set a physical limit in light-years to the distance to which a man could be beamed (tachyonically?). And this was at once a terrible kick in the teeth to space science and a great boost. A kick in the teeth, as this suggested that physical travel through interstellar space must be impossible, perhaps because of Man's frailty in the face of cosmic ray bombardment; and thus the whole development of intensive closed-cycle life-pods for single astronaut couriers must be deemed irrelevant. Yet a great boost too, since the possibility of a receiver-less transmitter loomed. The now elderly Yang suggested that 1 December 1985 was actually a moment of lift-off to the stars. Where our passenger went then, in all his madness, was to a point in space thirty or forty light-years distant. The VSTM was thus the testing to destruction of a future man-beaming system and practical future models would only deal in distances (in times) of the order of seven to eight years. {Hence no other VSTMs had imploded into existence, hitherto.)

(2010)

I am tired with a lifetime's fruitless work; however, the human race at large is at once loving and frenetic with hope. For we must be nearing our goal. Our passenger is in his thirties now (whether a live individual, or only an phenomenon of a system for transmitting the information present in a human being: literally a "ghost in the machine". This sets a limit. It sets a limit. He couldn't have set off with such strength of mind much earlier than his twenties or (I sincerely hope not) his late teens. Although the teens are a

prime time for taking vows of chastity, for entering monasteries, for pledging one's life to a cause.

(2015)

Boosted out of my weariness by the general euphoria, I have successfully put off my retirement for another four years. Our passenger is now in his middle twenties and a curious inversion in his "worship" is taking place, representing (I think) a subconscious groundswell of anxiety as well as joy. Joy, obviously, that the moment is coming when he makes his choice and steps into the VSTM, as Christ gave up carpentry and stepped out from Nazareth. Anxiety, though, at the possibility that he may pass beyond this critical point, towards infancy; ridiculous as this seems! He knows how to read books; he couldn't have taught himself to read. Nor could he have taught himself how to speak in vitro and he has certainly delivered lucid, if mysterious, messages to us from time to time. The hit song of the whole world, nevertheless, this year is William Blake's *The Mental Traveller* set to sitar and gongs and glockenspiel . .

The unvoiced fear represented by this song sweeping of the world being that he may yet evade us; that he may slide down towards Iw fancy, and at the moment of his birth (whatever support mechanisms extrude to keep him alive till then!) the VSTM will implode back whence it came: a sick joke of some alien superconsciousness, intervening in human affairs with a scientific "miracle" to make all human striving meaningless and pointless. Not many people feel this way openly. It isn't a popular view. A man could be torn limb from limb for espousing it in public. The human mind will never accept it; and purges this fear in a long song of joy which at once mocks and copies and adores the mystery of the VSTM.

Men put this supreme *man* into the machine. Even so, Madonna and Child does haunt the world's mind... and a soft femininity prevalls men's skirts are the new soft gracious mode of dress in the West. Yet he is now so noble, so handsome in his youth, so glowing and strong; such a Zarathustra, locked up in there.

(2018)

He can only be 21 or 22. The world adores him, mothers him, across the unbridgeable gulf of reversed time. No progress in the Solar System, let on the interstellar front. Why should we travel out and away, even as far as Mars, let alone Pluto, when a revelation is at hand; when all the secrets will be unlocked here on Earth? No progress on the tachyon or negative-time fronts, either. Or any further messages from him. But he is his own message. His presence alone is sufficient to bless Mankind: hopes, courage, holiness.

I am called back from retirement, for he is holding up signs again: the athlete holding up the Olympic Flame.

He holds them up for half an hour at a stretch though we are not all eyes agog, filming every moment in case we miss something, and when I arrive, the signs that he has already held up have announced:

(Sign One) THIS IS A VERY SLOW TIME MACHINE.

(And I amend accordingly, crossing out all the other titles we had bestowed on it successively, over the years. For a few seconds I wonder whether he was really naming the machine, defining it, or complaining about it! As though he'd been fooled into being its passenger on the assumption that a time machine should proceed to its destination instantly instead of at a snail's pace. But no. He was naming it.)

TO TRAVEL INTO THE FUTURE, YOU MUST FIRST TRAVEL INTO THE PAST,
ACCUMULATING HINDWARD POTENTIAL. (THIS IS CRAWLING DOWNHILL.)

(Sign Two) AS SOON AS YOU ACCUMULATE ONE LARGE QUANTUM OF TIME, YOU
LEAP FORWARD BY THE SAME TIMESPAN OF YOUR STARTING POINT. (THIS IS

SLIDING UPHILL.)

(Sign Three) YOUR JOURNEY INTO THE FUTURE TAKES THE SAME TIME AS IT WOULD TAKE TO LIVE THROUGH THE YEARS IN REAL-TIME; YET YOU ALSO OMIT THE INTERVENING YEARS, ARRIVING AHEAD INSTANTLY. (PRINCIPLE OF CONSERVATION OF TIME.)

(Sign Four) SO, TO LEAP THE GAP, YOU MUST CRAWL THE OTHER WAY.

(Sign Five) TIME DIVIDES INTO ELEMENTARY QUANTA. NO MEASURING ROD CAN BE SMALLER THAN THE INDIVISIBLE ELEMENTARY ELECTRON; THIS IS ONE "ELEMENTARY LENGTH" (EL). THE TIME TAKEN FOR LIGHT TO TRAVEL ONE EL IS "ELEMENTARY TIME" (ET): I.E., 10 SECONDS; THIS IS ONE ELEMENTARY QUANTUM OF TIME. TIME CONSTANTLY LEAPS AHEAD BY THESE TINY QUANTA FOR EVERY PARTICLE; BUT NOT BEING SYNCHRONIZED, THESE FORM A CONTINUOUS TIME-OCEAN RATHER THAN SUCCESSIVE DISCRETE "MOMENTS" OR WE WOULD HAVE NO CONNECTED UNIVERSE.

(Sign Six) TIME REVERSAL OCCURS NORMALLY IN STRONG NUCLEAR INTERACTIONS. IN EVENTS OF ORDER 10 SECS. THIS REPRESENTS THE "FROZEN GHOST" OF THE FIRST MOMENT OF THE UNIVERSE WHEN AN "ARROW OF TIME" WAS FIRST STOCHASTICALLY DETERMINED.

(Sign Seven) (And this is when I arrived, to be shown polaroid photographs of the first seven pages. Remarkably, he is holding up each in linear sequence from our point of view; a considerable feat of forethought and memory, though no less than we expect of him.) NOW IT IS INVARIABLE; FROZEN IN; YET UNIVERSE AGES. STRETCHING OF SPACE-TIME BY EXPANSION PROPAGATES "WAVES" IN THE SEA OF TIME, CARRYING TIME-ENERGY WITH PERIOD (x) PROPORTIONAL TO THE RATE OF EXPANSION, AND TO RATIO OF TIME ELAPSED TO TO TIME AVAILABLE FOR THIS COSMOS FROM INITIAL CONSTRAINTS. EQUATIONS FOR X YIELD A PERIOD OF 35 YEARS CURRENTLY AS ONE MOMENT OF MACRO-TIME WITHIN WHICH MACROSCOPIC TIME REVERSAL BECOMES POSSIBLE.

(Sign Eight) CONSTRUCT AN "ELECTRON SHELL" BY SYNCHRONIZING ELECTRON REVERSAL THE LOCAL SYSTEM WILL THEN FORM A TIME-REVERSED MINI COSMOS & PROCEED HINDWARDS TILL X ELAPSES WHEN TIME CONSERVATION OF THE TOTAL UNIVERSE WILL PULL THE MINI-COSMOS (OF THE VSTM) FORWARD INTO MESH WITH UNIVERSE AGAIN I.E. BY 35 PLUS 35 YEARS.

"But how?" we all cried. "How do you synchronize such an infinity of electrons? We haven't the slightest idea!

Now at least we knew when he had set off: from 35 years after 1985. From next year. We are supposed to know all this by next year! Why has he

-waited so long to give us the proper clues?

And he is heading for the year 2055. What is there in the year 2055 that matters so much?

(Sign Nine) I DO NOT GIVE THIS INFORMATION TO YOU BECAUSE IT WILL LEAD TO YOUR INVENTING THE VSTM. THE SITUATION I& WISE. TIME IS PROBABILISTIC, AS SOME OF YOU MAY SUSPECT. REALIZE THAT I WILL PROBABLY PERVERT THE COURSE OF SCIENCE BY MY ARRIVAL.

MOMENT OF DEPARTURE FOR IS IMPORTANT THAT YOU DO NOT KNOW YOUR PREDICAMENT TOO EARLY, OR YOUR EFFORTS TO AVOID IT WOULD GENERATE A TIME WHICH WOULD UNPREPARE YOU FOR MY SETTING OFF. AND IT IS IMPORTANT THAT IT DOES ENDURE, FOR I AM THE MATRIX OF MAN. I AM LEGION. I SHALL CONTAIN MULTITUDES.

MY RETICENCE IS SOLELY TO KEEP THE WORLD ON TOLERABLY STABLE TRACKS SO THAT I CAN TRAVEL BACK ALONG THEM. I TELL YOU THIS OUT OF COMPASSION, AND TO PREPARE YOUR MINDS FOR THE ARRIVAL OF GOD ON EARTH.

"He's insane. He's been insane from the start."

"He's been isolated in there for some very good reason. Contagious insanity, yes."

"Suppose that a madman could project his madness "

"He already has done that, for decades!"

" no, I mean really project it, into the consciousness of the whole world; a madman with a mind so strong that he acted as a template, yes a matrix for everyone else, and made them all his dummies, his copies; and only a few people stayed immune who could build this VSTM to isolate him "

"But there isn't time to research it now!"

"What good would it do shucking off the problem for another thirty-five years? He would only reappear without his strength. Shorn. Senile. Broken of his bond with the human race up. A mental leech. Oh, he tried to conserve himself. Sitting quietly. Reading, waiting. He broke! Thank God for that. It was vital to future that he went insane."

Ridiculous! To enter the machine next year he would already be alive! He must already be out in the world projecting this supposed influence his. But he isn't. We're all separate sane individuals, all free to think what we want " Are *we*? The whole world has been increasingly obsessed with him these last twenty years. hions, religions, life-styles: the whole world been skewed by him ever since he was born! It must have been born about twenty years ago; around 1995. Until then there was a lot of reasearch into him. The tachyon hunt. All that. But only began to obsess the world as a spiritual cure after that. From around 1995 or so. When he as born as a baby. Only, we didn't focus our minds on his own infantile urges because we had him here as an adult to obsess ourselves with.

"Why should he have been born with infantile gesalt. If he's so unusual, why sbouldn't he have been born already echng on the world's mind; ready knowing already experiencing everything around him?"

"Yes, but the real charisma started then! All the irrational intoxication with him!"

"All the mothering. All the fear and adoration of his infancy. All the Bethlehem hysteria, picked up as he grew and gained projective strength. We ve been just as obsessed with Bethlehem as with Nazareth, haven't we? The two having hand in hand~"

(Sign Ten) I AM GOD. AND I MUST SET YOU FREE. CUT MYSELF OFF FROM MY PEOPLE; CAST MYSELF INTO THIS HELL OF ISOLATION. I CAME TOO SOON; YOU WERE NOT READY FOR ME.

We begin to feel very cold; yet we cannot feel cold. Something prevents us a kind of malicious contagious tranquillity.

It is all so right.. It slots into our heads so exact like the missing jigsaw piece for which the h lies cut and waiting that we know what he sai true; that he is growing up out there in our sessed, blessed world, only waiting to come to up.

(Sign Eleven) (Even though the order of the sign was time-reversed from his point of view, the was the sense of a real dialogue now between him and us, as though we were both synchronized. This wasn't because the past was inflexible, and was simply acting out a role he knew "from history". He was really as distant from us as ever. It was the looming presence of *himself* in the world which cast its shadow on us, molded our thoughts and fitted our questions to his responses; and we all realized this now, as though scales fell from our eyes. We weren't guessing, fishing in the dark any longer; we were being dictated to by an overwhelming presence which we were all conscious and which wasn't locked up in the VSTM. The VSTM was Nazareth.

The whole world was a womb of the embryonic God, his birth, childhood and youth combined into synchronOuS sequence by his all-knowingness, with the accent on his wonderful birth filtered through into human consciousness.

MY OTHER SELF HAS ACCESS TO ALL THE SCIENTIFIC SPECULATIONS WHICH HAVE BEEN GENERATED; AND ALREADY I HAVE THE SOLUTION OF THE TIME EQUATIONS. I SHALL ARRIVE SOON. YOU SHALL BUILD MY VSTM & I SHALL ENTER IT; I SHALL BUILD IT INSIDE AN EXACT REPLICIA OF THIS LABORATORY, SOUTHWEST SIDE. THERE IS ROOM THERE. (Indeed it had been planned to expand the National Physical Laboratory that way but the plans had never been taken up because of the skewing of all our research which the VSTM brought about.) WHEN I REACH MY TIME OF SETTING OUT, WHEN TIME REVERSES, THE PROBABILITY THIS LABORATORY WILL VANISH, & THE OTHER WILL ALWAYS HAVE BEEN THE TRUE LABORATORY THAT I AM IN, INSIDE THIS VSTM. THE WASTE LAND WHERE YOU BUILD, WILL NOW BE HERE. YOU CAN WITNESS THE INVERSION IT WILL BE MY FIRST PROBALISTIC MIRACLE. THERE ARE HYPERDIMENSIONAL AXIS FOR THE PROBABILISTIC INVERSION, AT THE INSTANT OF TIME REVERSAL BE WARNED NOT TO BE THIS LABORATORY WHEN I SET OUT, WHEN I CHANGE TRACKS, FOR THIS SEGMENT OF REALITY WILL ALSO CHANGE TRACKS, BECOMING EMOBABLE, SQUEEZED OUT.

(Sign Twelve) I WAS BORN TO INCORPORATE YOU INTO MY BOSOM; TO ENTER YOU IN A WORLD MIND, IN PHASE SPACE THOUGH YOUR INDIVIDUAL SOULS. BUT YOU ARE NOT READY. YOU MUST BECOME READY IN 35 YEARS FOLLOWING THE MENTAL EXERCISES WHICH I SHALL DELIVER TO YOU, MY MEDITATIONS. IF I REMAINED WITH YOU NOW, AS I GAIN STRENGTH YOU WOULD LOSE YOUR SOULS. THEY WOULD BE SUCKED INTO ME, INCOHERENTLY. BUT IF YOU GAIN STRENGTH, I CAN INCORPORATE YOU COHERENTLY WITHOUT LOSING YOU. I LOVE YOU ALL, YOU ARE PRECIOUS TO ME, SO I EXILE MYSELF. THEN I WILL COME AGAIN IN 2055. I SHALL FROM TIME, FROM THE USELESS HARROWING OF LIMBO WHICH HOLDS NO SOULS PRISONER, FOR YOU ARE ALL HERE, ON EARTH.

That was the last sign. He sits reading again listening to taped music. He is radiant; glorious. We yearn to fall upon him and be within him.

We hate and fear him too; but the Love wash over the Hate, losing it a mile deep.

He is gathering strength outside somewhere:

Wichita or Washington or Woodstock. He will come in a few weeks to reveal himself to us. We know it

now.

And then? Could we kill him? Our minds would halt our hands. As it is, we know that sense of loss, the sheer bereavement of his departure hindwards into time will all but tear our lives so apart.

And yet. . . I WILL COME AGAIN IN 2055, he promises. And incorporate us, unite us, as separate thinking souls if we follow all his meditations; or else he will suck us into him as dummies, as robots if we do not prepare ourselves. What then, when God rises from the grave of time, *insane*?

Surely he knows that he will end his journey in madness! That he will incorporate us all, as conscious living beings into the matrix of his own sanity?

It is a fact of history that he arrived in 1985 ragged, jibbering and a lunatic, tortured beyond endurance by being deprived of us.

Yet he demanded, jubilantly, in 1997, confirmation of his safe arrival; jubilantly, and we lied to him and said YES! YES! And he must have believed us. (Was he already going mad from day one?)

If a laboratory building can rotate into the probability of that same building adjacent to itself: if time is probabilistic (which we can never prove or prove concretely with any measuring rod, for we can never see what has not been, all the alternate possibilities though they might have been), we have to wish what we know to be the truth, not to have been the truth. We can only have faith that there will be another probabilistic miracle beyond the promised inversion of laboratories that he speaks of, and that he will arrive back in 1985 calm, well-kept, radiantly sane, his mind composed. And what is this but an entree into madness for rational beings such as us? We must perpetrate an act of madness; believe the world to be other than what It that we can receive among us a Sane, Blessed, Loving God in 2055. A fine preparation for the coming of a mad God! For if we drive ourselves mad, believing passionately what was not true, will we not infect him with our madness so that he is/has to be/will be/and always was mad too?

Credo quia *impossibilis*; we have to believe cause it is impossible. The alternative is hideous.

Soon. He will be coming. Soon. A few days, few dozen hours. We all feel it. We are over whelmed with bliss.

Then we must put him in a chamber, and lose Him, and drive Him mad with loss, in the sure an certain hope of a sane and loving resurrection thirty years hence so that He does not harrow Hell, and carry it back to Earth with Him.