

## Gulf War Journal (1991)

(1/7) At $7 / 11$ in the middle of the night, watching the clerk, halfinterested, leaning on the counter listening to someone, apparently a regular; a philosopher, waxing eloquent on the Fate of Man. Perfect as cinema, of course, but how many times must this already have been done?
(1/8) That curious vertigo you feel, working the night shift. Those occasional fainting spells, the flashbacks of the fallen angel.
(1/9) In the apartment building at 2227 Canyon, delivering newspapers. Stumbling down the hall in the usual 3 a.m. stupor, I seem to see a robot waiting for the elevator. - Taking a detour as I think about this - slowly; always very slowly - returning finally from the other side and discovering that it is, instead, some kind of oxygen-bottle-dolly contraption. - Rather disappointed. I had begun to hope for the robot.
(1/11) The comfort we take as paperboys, drinking coffee in the office at two in the morning; waiting for the truck to arrive from Denver, listening to Miser's stories. - Like characters in Led Miserables, galley slaves shooting the shit. - Shackled to our oars.
(1/12) Lepers from Saturn? ${ }^{1}$
The role of formal reasoning in mathematics: this only comes in later, after the blood has been hosed off the floors.
(1/13) Desperate men do weird things. - God, doesn't that explain everything.

[^0]Why is everyone named Mike? Walking through the campus, it is a constant chorus: "Hi Mike!" - "Hi Amy!" (Everyone else is named Amy.) - All so fucking bright and cheerful.

Not simply the same clothing, hats, haircuts, but also postures, expressions, attitudes. Like quanta of some field, created from the vacuum. - Bosons, of course; identical particles collect in fraternities. - So why not the same names.

Some poor geek standing out in front of the Engineering Center, handing out circulars. I somehow have the impression he's refuted quantum mechanics. - He seems a stock character, like the preacher on the soapbox who hung out in Sproul Plaza.
(I think it really was a soapbox. - Was that a deliberate affectation? I have to wonder.)
(1/18) Geekismo? How did that work? Engineer boots? Sliderule tieclips? - I might feel more confident about adopting this look if I'd ever known what "Engineer boots" really were.

Appealing to the statistician: what percentage actually are wearing baseball caps? of these, how many wear them backwards? - Science demands answers.

Walking along behind two girls pinning up notices for the teach-in. No sooner have they nailed one to a board than a passing meathead rips it down and crumples it, throwing it on the floor. - They are taken aback: "Excuse me?" they ask. - "Sir? Sir?" - Looking at one another, distraught.

Really, kids: it used to be worse. Much, much worse.
Another bad experience trying to audit a mathematics class: the
instructor is offended. Thus far we are batting about seven out of ten on insufferable assholes. I grind my teeth and persevere.
(1/19) Another group putting up antiwar posters. An older chick, a Boomer, coordinating the activity. She sees another of our coevals approaching; they exchange a look, lighting up with that inner glow of moral fervor - we're protesting again. - Reliving in the comfortable affluence of middle age the millenarian fantasies of their hippie youth. - It is like a panel out of Doonesbury. I want to draw bubbles over their heads.
(1/22) Another asshole, this time one of the computer morons. I ride up in an elevator with him, asking polite questions about his course. This annoys him so much that I pursue him to the cafeteria. The price of fame, dipshit. What was that they said about you in the Enquirer?

Another guy ranting on the plaza: the old-time religion. "The American flag is the flag of Technofascism!" he exclaims. - An absolute throwback. I can't help but smile.

Note to self: didn't I used to have a watch? I took it off one day when I was cleaning a toilet, sometime in the early Seventies, and never put it back on. I wonder what happened to it.

Later walking Franny and Zooey up the Flagstaff trail. Coming back down toward Chautauqua, a familiar female voice addressing her dog: "Casey... ." - Was that the dog's name? I can't remember. But it is the German shepherd, and the girl, up close, is quite as attractive as I had guessed from a distance. - Zooey stands extremely still while the stranger sniffs at her; Franny, more cautious, keeps her distance. The girl is apologetic: "We just got him spayed, but it doesn't seem to calm him down." - With atypical restraint, I manage not to retort that the same has held true for me. - An exchange of conventional pleasantries then. - She goes on up; I go on down.

A switchback or two beneath, I look back, to make sure I'll know who she is the next time; just at the moment she's looking back at me, perhaps with the same intent. - This will doubtless prove to be the high point of our relationship. ${ }^{2}$
(1/23) Hulahoop earrings.
(1/25) Distraught. - Really, I can't stand this. I simply can't.
A heart in nuclear winter.
(1/26) Talking pictures.
Scripts that play themselves. - Illustrations that come to life, and begin to speak and move. - The program and its execution. Beyond the graphic novel. - Continuity. As if to reduce the whole procedure to the programming of a machine: the execution of a screenplay.

Thus properly a screenplay should be a kind of program. Though in the direct equivalent of machine code, it would, obviously, be enormous.

A sort of flowchart might suffice.
Calling external procedures: "go out and shoot," for instance.
(1/28) Just before 7:30 in the morning, at Grant and College, we see the girl with the German shepherd again. Dressed in baggy Army fatigues. - Some parts, of course, are baggier than others. - We wave.

In class. Trying to be a good soldier. - Positioning myself in the last

[^1]row on the far right. As ever was.
(1/29) The ignominy.....
(1/30) Nature as a work in progress. - One could only have thought of this after the temporalizing of the Chain of Being.
(2/1) Contemplating the Bulwer-Lytton contest: "I wrote bad prose before it was fashionable, man."
(2/3) Paying the futility bill.
(2/8) Subsiding anxiety. It seems to help to have something else to think about. So I walk down the sidewalk, ignoring my environs, thinking about the transition to convection. About the Dirac periods. About anything but where I am and what I'm doing, and the abysmal depth of my humiliation.
"If everything goes well we'll be seeing a lot of the Moon." - Once again the Moon looks a lot like the California desert. - Rock men. Stolen from Flash Gordon, but now they look like giant Gumbys. Bullets bounce off them. Now there's a surprise. - "There's a cave! Let's head for it!" - Strange. I'd swear I've seen this cave before. A lost city underground, inhabited by beautiful women in revealing costumes. - Complications ensue. ${ }^{3}$
(2/14) Rounding the corner on a motorcycle, a guy in a black leather jacket with a longstemmed red rose clamped delicately between his teeth. - Here, I think, is someone who is having difficulty drawing the distinction between Life and MTV.
(2/19) "Joba?! Do you mean the hidden city beyond the Mountains of Despair? ...I always thought it was a legendary

[^2]city... ."4
(2/21) Limps. Hunchbacks. As they say, externalized character. A crowd at a party. They all wear knee braces on the left knee. - One guy with a knee brace on the right knee stands nervously drinking by himself.
(3/14) From the bottom of a deep enough well you can see the stars in daylight. - I think that was the secret of the janitor's closet.

A familiar trope: the serial/sequential slaughter of representatives of each of the most obnoxious types: in Commando, for instance, the first to go is a used-car salesman; the lawyer follows in due course. Every man in his own humor.
(3/21) Behind his house, in fact strictly speaking outside his yard entirely, an elderly man, rather unsteady, clearing a path through the ice still there in the shade, from the gate in the back of his fence to the alley. Fifteen or twenty feet, no more; still, it's obviously a considerable labor for him, and he's been at it for a while. - Wondering, why he's doing this; what the point could be. - But somehow this seems like what you always are doing: attempting some pointless task beyond your strength, carrying it through nonetheless. ${ }^{5}$
(3/22) On the shelf beneath the rear window of an elderly sedan, a sunbaked copy of the telephone book. - Aha, I think: the yellowed pages.
(3/27) Griffith invents softcore: "Mutoscopes directed in 1908 ... include such intriguing titles as The Girls' Dormitory, The Girld' Boxing Match, Too Many In Bed, Fluffy's New Corset, and The Soul Kiss, none of

[^3]which have been preserved." - Shannon Tweed begs to differ.
(3/28) Frieda I can understand. - But Helius? What kind of name is Helius? - Lieutenant Scheisskopf has the facts at his fingertips. "It's Helius's name, sir."
(4/1) Dirac periods - scattering - the global minimum of a functional - path integral - renormalization - phase transitions in the coupling constant - topological arguments from the functional equation - compare convection? - limit as box size vanishes Lagrangian - Schrodinger steady state - angular momentum observables; expectation values - conserved currents from the Lagrangian - Schrodinger is two pieces of information, Dirac eight, at least two currents - conjugates, topological commutators magnetic moment of the electron - spin current - effect of box size on accuracy -
(4/3) 2-SAT to 3-SAT, the former polynomial, the latter NP complete: suppose x -SAT, a phase transition somewhere between the two values (a continuous dimension trick) - probably at e. ${ }^{7}$
(4/11) The algebraic geometry of languages: a context-free language is analogous to the solution set of a polynomial equation; a finite intersection of CFLs is then analogous to a variety. - What is a scheme?
(4/12) Hydrodynamic interpretation of Schrödinger. Meaning of the "quantum-mechanical pressure" -
(4/14) Walking the dogs through the campus. Wet, rather chilly;

[^4]wind, the snow still melting.
Fermions and bosons: repulsion and attraction. These are intrinsically quantum-mechanical pseudoforces.

Very curious. If there is a quantal equivalent of the principle of equivalence - a principle that conjures forces out of nothing - it is here. And no accident this is essentially field-theoretic.
(Surely I have thought this before, and expressed it better.)
(4/15) That he may, in the end, perhaps, get the girl. - But what is that then? nothing more or less than that itself: he gets the girl.

Somehow this turned out to be the moral of the Sixties for me: a thing is simply what it is, and not some other thing.
(4/16) Tracking shot: the moon, reflected in a series of puddles.
(4/20) Wondering as always about the finite complexity of the monads. If the cellular automaton is a model of the field, then it is natural to expect this: the computational power of the vacuum is limited, in fact locally limited. In principle this should be observable.

In the bookstore, a title glimpsed out of the corner of my eye: Our Boners, Our Selves.
(4/24) First hummingbird of the season.
Wondering when the last time was I saw How to Stuff a Wild Bikini.
(4/25) A teeshirt: "You can always repeat a class, but you can never relive a party." With teddy bears, for some reason. - This does make perfect sense. In Boulder, at least, business is simply the continuation of the party by other means.
"High School With Money" is not at all a bad title. - For that matter "Photographs of People Talking."

Titled scenes, like chapters. (Woody did that one.)
Different timerates in different planes of the picture: in the foreground, a conversation upon a knoll; in the background, clouds gather with unnatural rapidity for a thunderstorm. - Gance did something like that with the triptych, but this feels more like Cocteau.

Without having overcranked, one could still reproduce slow motion by interpolating between frames. A sort of iterated morph.
(4/26) "The weird thing is..." - the definite article. As if there were ever only one weird thing.
(4/27) The Tractatus on logic and ethics: the stillness is part of the dance.
(4/28) "...the results obtained by the natives who live by the banks of the Orinoco, [who] bind the skulls of their children between boards to keep them from ever being able to think of things which are too lofty." [L'Eve Future.]
(4/30) Jay Ward and Bill Scott imagine Sleeping Beauty as reported in Variety: "Doze Doll Does Wiz Biz." - "Doze Doll Dull."
(5/1) This time it is a girl on the back of a motorcycle: black garments, lots of skin, tan like mahogany. I stop and stare, I can't help it, and then start laughing - literally, a living Frazetta, the warrior princess.
(5/5) Two dreams: in one, trying to get Rosanna Arquette's autograph; in the other, orbiting the Earth in a truck full of furniture.

- Re-entry, discontinuity, apparent transition to the afterlife, which (no surprise) turns out to be in California with my dogs. - Running in the grass. - Save that thought.
(5/21) An old observation: I know a great deal more about the structure and composition of the Milky Way than Herschel did, or Kant. But I don't know any more about sense-data than Hume did. Isn't this strange? after all these are supposed to be the most concrete and immediate entities. So how can they be so difficult to observe?

One advantage of the "objective" is that you can find out about such things; you focus your telescope upon the Milky Way, and resolve it into stars. The longer you look, the more of them you can catalogue.

But there is no telescope with an inner focus.
(Why is it you think that if there were one, you'd only see empty space?)
(5/22) As the conjectural landscape of cyberspace would have to be (in Gibson's phrase) a consensual illusion, so (and perhaps this is the strength of the idea, its resonance as metaphor) must be the internal landscape of the Self. An invention. - It would be interesting to go back and extract this point from Wittgenstein: that (as Bloom said) he insisted on the fact that the architecture of the self is largely constructed, learned - that introspection is circular, that you find there no more than what you brought in with you to look for it.

Though I suspect Wittgenstein was rather too disparaging of e.g. Descartes and Rousseau, who invented the game. And certainly the rules and the structure change from culture to culture; contra of course the Oxford epigones.
(5/24) Raketenflugplatz. - They don't make nouns like they used to.
(5/27) A walk along the creek. A redhead on rollerblades, smitten with me or more likely the dogs - tries a smile - draws a blank because with my usual sluggish reaction time, I cannot decide how to interpret this data - smiles again, more broadly. Belatedly I realize I am supposed to acknowledge her. - Finally smile back. - Success. - She and her companion disappear down the trail.

Trying to explain this to somebody later, why I don't respond correctly to these advances. Instead I am asking myself: Why is she baring her teeth? Is she preparing to strike?
(5/28) Tired, but persuaded by the dogs as far as the park at the mouth of the canyon. Here prepared to turn around and drag my carcass back, but a blonde crosses our path and steps into the restroom. Figuring, a few paces more, I walk along slowly, waiting for her to emerge. - Sure enough. - She passes. Zooey tries to hit on her. - She's not a blonde at all, I now perceive; chestnut-haired, actually, unbound, halfway down her back. Cutoff blue jeans, black sleeveless shirt tucked in, sunglasses which actually are (no shit) Wayfarers. By no means two-dimensional, but it isn't this at all, it's the walk, perhaps the air, remote and mysterious.

So we follow her to Four-Mile Canyon and back. She's paused to strike an arresting pose upon the rocks when we arrive at the end of the trail, so we start back before her. She passes while the dogs are taking a bath, and says hello; a perfunctory smile. Following her down the canyon a couple of miles at a distance of a hundred yards, I am thinking, foolishly, I could watch her walk forever. Pass her on the bridge over the creek (a great one for striking poses), noting the jeans are, in fact, Gloria Vanderbilts, the shoes lowcut white Reeboks, she isn't wearing socks. Looping indecisively around the park a couple of times, trying to make my mind up; she continues into the city, - I follow for a while and then give up. - So much for the birthday of the

Turing machine. ${ }^{8}$
(6/1) Dream: riding on a train, looking out the window, passing the station. The dopplered change of pitch: at the change precisely, out, in the scene - the alarm, and abruptly awake.
(6/4) Mose Allison: I'm not discouraged/But I'm gettin' there.
(6/6) As if you were to write down - no, hum - the notes of a chord one at a time, a week apart. Something that resonates, over time, which I cannot express.
(6/7) Entanglement of state with other worlds. Communication by telepathy. Note the implication that, just as with any means of stepping outside space to go elsewhere, whatever you overhear will be a signal from a totally alien world, and you won't recognize it as thought.
(6/14) Godard's advertisement: "Lonely artist wants a beautiful girl 18-20 to be in my film and be my friend." - Could this really have been answered by Anna Karina? surely too good to be true.
(6/16) Dream: turbulence. - On the one hand it seems embodied somehow in paper, perhaps paperwork, something like, sorting a mass of letters, and I have for some reason the feeling that I am master of this problem. - On the other, there is a plasma, I think in a rocket engine, somehow literally a living creature with which the pilot, the engineer must physically wrestle - arms extend from a torso, and

[^5]they grapple ${ }^{9}$ - momentarily he hides, and there is a very cinematic cut to the creature's point-of-view (it almost seems to be labeled, as if with a subtitle, P.O.V.), and the vision's grainy, like the Predator's, infrared.

Something lasting in this vision: the plasma as a living creature. Picture it as an organism, confined by a cell wall. Self-confining. Thinking about this afterward, I wonder, some kind of soliton? but it isn't quite this. - not to wave your hands and mutter, well, nonlinear. There's something more than that.
(Somewhere I have an old paper about ball lightning....)
Having wondered long ago what the defining equations for life might be. Perhaps that. Note that lately again I've spent much time staring with mathematical fascination at the forms of clouds. Can they be less tenuous than jellyfish?
(6/21) Once I discovered I was never going to get paid for the work I had done I dropped all consideration of the Generalized Macaulay Theorem, and haven't thought about it for a couple of years. No surprise then that yesterday while thinking about something else the solution abruptly popped into my head: sure enough, it follows from Möbius inversion; in fact after pursuing many other flights of fancy the solution is basically what I wrote down on the first page of the first notebook I devoted to the subject - consider the polynomial encoding all the information given by inclusion/exclusion, and then, etc.

It still doesn't generalize properly, viz., to the Gaussian case:

[^6]
no doubt because nothing about the idea of "lexicographic order" is invariant. - Subspaces as sets of vectors and relativize? please......

But I still don't give a shit about the result one way or the other. And is there any way I can paid for this? - No. ${ }^{10}$
(6/28) Andrew Sarris in passing on Godard: "The difference between American movies and European films - and I am not speaking here of a generically geographic distinction - is that American movies tend to correspond to reality while European films tend to comment on reality." - Wrong. - American movies, as Godard recognized, construct reality ${ }^{11}$ - what remains, then, is the

[^7](hermeneutic?) commentary upon the construction.
(7/1) Dream: unusual: a multiple personality. The curious thing, that the guy changes personalities in midsentence, as it were for comic effect. - What difference from an ordinary individual, I am wondering.

Waking up, the usual flurry of nonsense running through my head the mind moves laterally almost without (shear) friction in this state, a kind of superfluidity. - It occurs to me that this is a bit like the computer waking up, checking the modules. (The little chain of icons displayed at the bottom of the screen as it finishes booting each.) ${ }^{12}$ Running diagnostics.

For obvious reasons this line of thought, mechanization, has been frequent lately. Another: wondering (as I always have) why, when you're tired, you begin to subvocalize more. Or notice it more. Thinking: it's almost as if you could hear the programming instructions going out. Not necessarily from one half of the brain to the other, but from the CPU to the multiple processors; a sort of SIMP architecture.
(7/2) Walking down the creek. Girls out tubing in bathing suits that stop a couple of centimeters shy of a gynecological examination. I feel like an alien who has fallen out of the sky.
(7/4) A children's film: "The Littlest Ninja."
Précis of the Eighties: Babbitt on coke.
(7/12) Frankenstein. The girl dies, he brings her back from the dead. Of course she's now alien, uncanny, her spirit still lies on the other side. But it isn't the point that tampering with the Divine Will must lead to evil-rather, something different. - In fact he dies and

[^8]fades out as she stands at the controls of the apparatus, preparing to revive him as one like unto herself. Is this a happy ending?
"Your sense of humor is grotesque." - "Thank you."
(7/13) There is motion in apparent stasis, he thought. - And then forgot about it. - Once you have gained a certain facility in constructing these paradoxes, you are easily bored with them.
(7/21) The character of Owsley - designer drugs - Speculative chemistry. Metaphysical chemistry. The chemistry of consciousness, the chemistry of souls.

Making a note to nominate him for the Time Man of the Century when the decade runs out. Because who else.
(7/24) A man in his sixties, mediumfat, whitehaired, neatly bearded, bespectacled, pushing a shopping cart which seems to hold all his worldly goods - neatly packed, upper and lower levels, everything neatly folded, a couple of nice new packs. Dressed in tshirt and boxer shorts; whether these are meant to be outerwear or underwear it's hard to tell; perhaps he is a refugee from Woody Allen's banana republic. - He looks like Norbert Wiener. I imagine him a retired academic, cast off and cast out; the detritus of a university town. - Something like Bunyan's Man of Despair: "I was once a Professor... ."

Reading with one hand as he pushes his cart across the street muttering to himself in Latin - what? Ovid? Boethius? - Am I to think of him as a role model? a doppelgänger?
(7/26) "He was puzzled; everything about her puzzled him. Maybe, he thought, I've been living here alone too long. I've become strange. They say chickenheads are like that. The thought made him
feel even more glum." ${ }^{13}$
(7/27) Recalling the conversation in which I reminded him he had once been poor, and gloried in it. - "But I was young then," he said, "and my poverty was righteous." - "Poverty is wasted on the young," I said immediately. - And then of course we couldn't stop laughing.
(7/28) When I cleaned out the old apartment, I had an unframed full-length mirror left over and, figuring it was too easy to break, decided to leave it. It was dirty, and, having no better idea how to clean it, I stuck it in the shower and ran hot water over it. And there it stayed.

Somehow this seems appropriate, for an apartment in Boulder. Everyone should have a mirror in the shower.

- Found later, undated:


## A fool for love

- It doesn't take a rocket scientist to figure this out, he says.
- And, he continues, I am a fucking rocket scientist. I'm Hermann fucking Oberth. I'm Sigmund fucking Freud. I'm Ludwig fucking Wittgenstein. I'm Richard fucking Phillips Feynman. I'm Friedrich fucking Bubba Nietzsche. I'm the fucking Shadow, who knows what Evil lurks within the hearts of men. I'm the hurtling comet, the masked Avenger, the guy who washes chili down with Coca-Cola and never fucking farts. I'm the Silver fucking Surfer, the herald of Galactus. I'm Mister fucking Fantastic. I'm Ben Grimm, the orangeskinned fucking Thing. I'm the Human fucking Torch.

[^9]- And she, she's the Invisible Girl. I thought I saw her. But she disappeared.


[^0]:    ${ }^{1}$ An alternative title considered for The Adventures of Buckaroo Banzai Across the Eighth Dimension.

[^1]:    ${ }^{2}$ And, sure enough.

[^2]:    ${ }^{3}$ Cf. Misoile to the Moon [Richard Cunha, 1959].

[^3]:    ${ }^{4}$ Darkest Africa [B. Reeves Eason and Joseph Kane, 1936].
    5 Beckett: "With time, and nothing but my teeth and nails, I would rage up from the bowels of the earth to its crust, knowing full well I had nothing to gain. And when I had no more teeth, no more nails, I would dig through the rock with my bones." [Molloy.]

[^4]:    6 Scheisskopf is watching Frau im Mond [Fritz Lang, 1929].
    7 Why I would have thought this: thanks to the properties of the fast Fourier transform algorithm, the optimal base for floating-point multiplication would not be 2 or 3 but 2.718281828... .

[^5]:    8 A year or so later, I ran across her in the park beside the creek again. I didn't recognize her - something had changed - the hair, the outfit - but she obviously recognized me, and made a production of parading past me to allow me to admire her ass. I couldn't figure out the point of this exhibition, but then - with some effort - recalled the previous episode, recalled her manifest disdain, perceived that this was intended as some kind of gloating reaffirmation of power, and reacted with baffled indifference. - Yes, I'm a pathetic loser - Yes, I fell in love with you at first sight. - No, that has happened a hundred times before and since, and now I couldn't care less. - So fuck you, bitch.

[^6]:    ${ }^{9}$ This now seems like an anticipation of the fusion scheme of Doctor Octopus, in the second Spider-Man movie [Sam Raimi, 2004]. I don't recall whether Doc did anything similar in the comics, at least not consciously. But it seems rather a cinematic idea, like something Raimi would have made up. Thus a curious anticipation.

[^7]:    ${ }^{10}$ I did later go to __'s graduate advisor to discuss the problem, mentioning that I'd been commissioned to rewrite the never-completed thesis and had in the process discovered a number of new results. Which I outlined for him; but, as usual, big fucking deal - no time or energy to write them up, no reason to suppose they'd bring any useful return on investment.
    ${ }^{11}$ In the same sense that Harold Bloom credits Shakespeare with the invention of the human. Though here, I suppose, we would have to credit Irving Thalberg.

[^8]:    ${ }^{12}$ Characteristic of the old Mac OS through System 9.

[^9]:    ${ }^{13}$ Do Androids Dream of Electric Sheep.

