

The Sarge

Order out of Chaos / Structure out of Nothing or The Illusion Thereof

Chapter 1 : The House on the Water (Spontaneous Symmetry Breaking)

Picture a house made of wood on a lake by a steep grassy knoll which meets the water almost vertically. Picture the foundations rising out of the grass almost tangent to it near the cold-looking water and almost perpendicular to it at the top of the hill, both versions doing their best to mimic the unshakable uprightness expressed by the surrounding woods on this side of the lake and the other, despite the varying topography of the ground beneath. The house has two rooms, one lies over the hill and the other over the water. There are four people standing at the top of the hill which is also near the entrance to the house and they are dressed for cold weather because the weather is cold and they are standing around a small pile of red yellow leaves that has accumulated at the top of the hill for a reason which they are discussing with less interest than that which they have for the discussion *an sich*. They are laughing. The social dynamic would best be explained as follows: there are two men and two women all of a similar age, one man with blonde hair and one with black, one woman with blonde hair and one with black. The blonde man is married to the black-haired woman and the blonde woman is married to the black-haired man. The blonde man envies the black-haired man for his money and the black-haired man envies the blonde man for his wife. The women are also full of envy but their envy is not so simple to describe. Indeed, there are many psychiatrists who would diagnose them as being envious of themselves, a twisted form of egomania that splits the personality in two, creating an unhappy, envious duplicate of every emotion in order to bring contrast against the former self and thereby elevate its emotional perceptions. The obvious logical repulsion created by holding such contradictory and nonsensical thoughts in one's mind forces the two personalities to separate temporally, and with the exact dynamics of a harmonic oscillator one can trace the two modes as they pop up—first the one, then the other, then the other. The black-haired man laughs aggressively into the wind, leaving his will with the fallen leaves to flail about vulnerably in front of them, including and especially in front of her who pulls him so; she who gives him the feeling of being anti-cross-eyed, not her the undesirable half-spin (up) occupier of the wife-state but the she conjugate (down), she the one from whom he has learned so much it feels like he's learned nothing at all, because he can't remember or even re-imagine what it was like not knowing those things.

“-wind eddy with the right speed against the fibered quasi-convexity of the hill in this wind pocket amongst the trees and a bit of Stokes drag, traps the leaves like so”

“-leprechauns I'm sure. Seen them scuttling around the shore there.”

“-an emergent attractive effect in a bosonic ensemble, a semi-statistical consequence like the student-teacher repulsion governing college classroom seating occupation rules”

“-Bosonic leaves? And you're teaching the leprechauns something?”

“-The leprechauns have, among other things, managed to transcend supersymmetry and spin-statistics. So all that's left is for me to teach them how to knit. Winter is coming.”

“-go inside, the wind is doing strange things to your heads it seems, making strange words come out”

The black haired man swats a fly against his leg as they move toward the cabin.

Inside the house there are, besides the two opposing rooms, a standing-room-only kitchen and a rashly-planned hallway that gave the impression the architect didn't even bother using a ruler to draw it. The only furniture in the house, besides the two polarized beds, is a couch at one end and two armchairs across the length of the hallway at the other, somehow giving the impression as if the furniture were being held captive here and was clawing at the walls, pressing out, trying to escape the hallway into which the black-haired man presently steps, whence he walks across the carpet and sits violently on the couch. The black-haired woman comes into view, walking across the carpet, studying the walls nervously as she is overtaken by her husband who feels acutely the currents at play and therefore makes the only (pro-monogamous) decision left to him, and soon he is sitting on the couch as well.

Chapter 2: Historical : The Meeting that Set up The Meeting (Gauge-Fixing)

The two men had met in the navy, on the USS Beacon where the blonde-haired man had been an officer, having mysteriously disappeared during Recruitment Week for the exact same 2 hours as one of the Recruitment Officials, the same Official who had coincidentally lost his brother in a childhood boating accident involving a bucket of ice-water and a mousetrap, in which (the incident, not the trap) the black-haired man, a boy at the time, had been rather nastily implicated, and so he (the black-haired man), whose CV by the time of Recruitment Week had grown longer than the jail sentence for deserting (and much more noteworthy, and also militarily relevant - Valedictorian of the most prestigious military academy with an award winning honors thesis on the interplay between military and war-time economic strategy), had boarded the Beacon as a navy-janitor, his once hand-picked officer's position occupied by the blonde-haired man, though this was unbeknownst to him (the black-haired man). About a month into his duties the boredom became unbearable despite his (rather on-point) request for a bayoneted mop being fulfilled, among other requests all fulfilled, and so he began to draft the first versions of a full-scale mutiny on the Ship in his spare time. Then one day he passed by a ventilation shaft which he always passed by and noticed a subtly strong smell of marijuana present now and not before. In the following days he found the same smell at the same vent and by sticking his face against the vent and prying open a crack in the stripes with his bayonette-mop large enough to stick his nose through he managed to get a little high, every day, the same way, for 5 months. His mutiny plans suffered a bit. In these same 5 months the blonde-haired officer, who fancied himself an underestimated, precocious leader and verifiable genius maritime tactician, but whom the stress and seawater gave ever worsening anxiety attacks that threatened to turn some of those lovely prized blonde temple-hairs grey, would use his genius maritime tactics to sneak into the lower levels of the Ship, specifically the Ventilation room, and smoke a good amount of marijuana which he got from the First Mate his father. The smoke he blew into a ventilation shaft which his maritime genius declared to be connected directly to the starboard outlet. It was a rather intimate meeting to say the least.

Chapter 3: In the Hallway (The Low-Energy Limit)

The blonde man:

"Having fun is a serious thing. You commit a floppy move on the dance floor for too long and it's punishable by frowning, inward or out. Nothing spoils fun more than seeing someone else having more of it."

His wife:

“I always dance like an imbecile and no one frowns at me, but I guess that’s perhaps because they’re busy frowning at you darling, or else perhaps they’re maybe busy drooling”

The women are sitting in the armchairs about 15 meters down at the other end of the hallway. If not for the ridiculously convenient distribution of hair color it would be impossible for either of the two pairs to identify their opposers’ configuration. The lights are dim, the air is warm and they are shouting. Shouting about the philosophy of attraction, a subject which had been brought up at dinner. Presently the blonde-haired man says, first at a volume inaudible at the armchairs, that he is often asked by his younger workmates who envy his more-than-reprobate-good-old-days stories (which take up 30 min of his subordinates’ ears per day) how in the world he overcomes the what-must-surely-exist-for-everyone degree of social awkwardness when hitting on a girl, growing in direct exponential correlation with the attractiveness of said girl (at least to 4th order in perturbation theory) and he says he always responds, now speaking in diaphragmatically emphasized gusts of wind equipped to make the trek across the hall, that he believes after somber reflection that social uncomfortability opposite a female *must* be a natural subconscious prefronto-cortical response to a *misalignment* between socially manufactured modes of attraction and true *natural* biological pheromonal evolutionarily groomed attraction, and the whole time he is staring at his wife. The wife listens, and as she does so, her mouth curling from neutral into banana at a (linear) rate timed perfectly to reach a stage-5 grimace at his last word, she glances at the black-haired man, once covertly and then again a little more slowly but not too slow, because she wants her husband to see but also think that he may be mistaken.

The blonde man:

“-only if it feels right. Attraction is a matter of feeling, that’s why philosophico-theoretical discussions like these always seem so *forced*. “

His wife:

“-certainly seems *difficult* to bridge reason and feeling, but to say that it *requires* force is a theatrical argument, darling, used for example by Huxley and Orwell and writers of old for its opiate properties, to wrap their subtler political ideologies in something that hits home with the generic individual: *force*.”

Blonde:

“There’s really nothing to say so we end up with a house-of-cards of concepts leaving us all sounding like idiots.”

Wife:

“Or perhaps mordantly insightful, there’s always that possibility. The pale fumes of a dialectic engine running on empty can be pretty eco-friendly.”

The black-haired man listens, leaning/sinking deeply into the couch with his head cocked to one side with the air of something like Bohr at a sixth grade science fair. In this spousal exchange he sees the familiar undertones of anti-self-duality and cannot help but recognize

his own words coming like funny synched-up echoes out of her mouth. The oscillator mode is about to shift.

His neighbor thumps the arm of the couch and begins to get to his feet, then sits down again because he realizes what a mistake that would have been. That's how far it's come.

The blonde man:

"The only way to get anywhere with the subject is through parables, you know, good old stories, workable examples."

His wife:

"Why don't you give us one then?"

The black haired man, all but inaudibly:

"The only way to get anywhere in *any* subject is through parables, good old stories and workable examples. The human mind can only comprehend specific examples, individual special cases, isolated events and concrete notions; and of course only ever a finite number thereof, derived (ostensibly) from the senses—with one exception: when it practices mathematics. The diligent among us would even define mathematics in this way: the act of reaching up out of the sludge of specificity and concreteness into the more restful scenery of generality and abstraction. Even then, the path out of the sludge is only traversable by humans if it is paved by concrete examples."

Blonde, ignoring the man and turning to his wife:

"I should start with you."

The blonde man punches the air inwardly, masterfully missing the fact that he's fallen into a rather blatant trap.

Wife:

"I could almost get offended, being made into an example, chopped into conversation-fodder. My husband should pay his wife more attention. Let's maybe stick to extra-marital examples to keep things running *unforced*, you know, feeling right."

And as his wife speaks, with the other pair of eyes under black hair fixed parallel to the hallway and glued to the moving mouth, the blonde man begins to sweat in earnest. It is warranted. As an impartial outside observer and indeed as something like the Creator in this setting, I can assure you the sweat is warranted.

But now black-hair-man begins to sweat as well, and to his disgust he watches helplessly like some observer without a psi-collapse-certificate as the phases rotate in his favor, his wife beginning to show signs of envying her own proximity to a comfortable bed and the other woman doing her thing with gusto and the eigen-sweat building under the blonde hairline, but his own Hamiltonian starts picking up a non-unitary term and he feels a sweat of a different kind, the cold-sweats of an unspecified chronic disease start pouring in as if from

some other hellish dimension inside him at such a “lamentable [sic] time”. He actually thinks that exact adjective/noun combo. I should have put some sort of *sic* thing in there I guess, and I did later.

The blonde woman speaks (sultry with fatigue):

"Look at us just sitting here in this cabin the four of us so cute planning to take over the world. It's been such a fun week I'll be so sad when it's over."

Her husband, jaw clenched (not with anger) forcing nonchalance:

"- take over the world at what, dear?"

And he is laughing inside like a fucking maniac dancing through some European wheat field with a dirndle and twin-braids doing twirls and curtsies to the wheat that looks on in disgust, bent to one side swaying in the wind like a crowd of neurotic back-up dancers who were promised Jennifer Lopez in front of them but find some creepy drag queen maniac instead. Wave after wave of happiness-overinflated-into-ugly ecstasy smashes against his usually frozen soul. (Remark: This has nothing to do with his possibly-about-to-get-way-more-interesting love life.)

His wife, mode-flipping as she (weirdly) speaks in iambic pentameter, and with paradoxical energy:

"- Why any of the things I'm so good at! And that's my cue to go retire, goodnight!"

(Remark: The iambic pentameter is now known to be caused by the afore-mentioned psychological stress from which the women suffer. Like an analytic continuation of the rhythmic nature of their psyches.)

As the waves keep crashing within the now visibly agitated black-haired man and the cold-sweats creep back into his attention, the prospects for the night are stamped, folded, and filed away, and the shuffling-off-to-bed is in a strictly monogamous permutation. But the black-haired man does not forget, and the blonde-haired man does not forget, and it's unclear whether the women forget (psychiatric evaluations are really out of the question for them at this point, their self-envy is late-stage).

Chapter 4: Murder at the Algebraic Beach House (Supersymmetric Localization)

Picture a wild expanse of knee-high grass, dark green and healthy and overgrown, bursting out of the ground with like subterranean power but then bent in submission to the wind, for below the earth its powers count for much more than here on the surface, the harsh and overbright alien territory. In the middle of the grass is an old solitary scraggly tree all grey with no leaves and with moss creeping up the sides. It's about half an hours past sunset, that time of day when the milky light comes sloshing up from below the horizon like honey out of a jar knocked over. A pair of telephone wires, pitch-black against the tropical sky, run mostly unseen in a soft arc (hyperbolic cosinusoid) from somewhere far beyond either side of the field and interlace with the branches. Now picture a house fifty yards from the tree as measured perpendicular to the wires, its chaotic angles and corners averaged into

a gentle dome (gaussian-damped inhomogeneous hermit polynomial of order 2) giving it the appearance of a pile of giant bricks, with one particularly well-oriented flat brick facing to the west having a full-length window running along all 20 meters of its breadth. This brick houses a spacious ballroom and, located at about $3/4$ of the full height of the dome, which equivalent to about the 5th or 6th story of a usual building, these windows boast a magnificent and once 17-star-rated view of the yawning plane reaching out in a gently saddled slope of the integral symplectic nature, the slope which reaches down to the ocean far in the distance being framed by two ocean-side mountains reaching up on either side, sitting like dark troll wardens against the glaring sun which sends its rays barreling down at the internationally popular beach between them (which is home to the world's largest, 4-fronded palm tree which pleasantly gives shade to like half the 2 mile-long beach, and whose fronds make a perfect X inscribed into the sun about an hour before setting as seen from the brick-pile house), and whose jagged rocky steep dark A frames together with the road which cuts from the beach up the sloping grass in a straight line to the gate and enclosed parking lot of the brick-pile-house, whose walls are themselves shaped like an A when viewed from the windowed room, give an impression to the observer at the window of standing at the corner of some natural coalgebra object spit out by the sea.

Our 4 characters are all here. It's the first time they're together since the house against the knoll against the lake. The blonde-haired man is wary of his marriage but doing a bad job of it because he has prospects at this party too. Some coworker's mother-in-law with a taste for ex-officers with ductile backbones. The black-haired man is leaning back against a hip-high ledge of some sort that cuts across the room diagonally, looking [sic] cyclically (not cynically) from the bottom his glass to the southwest corner to the back of the black-haired woman's head, who is staring at his reflection in those full-length windows that make up the western wall and through which the guests had recently been privy to a marvelous sunset which most of them had either missed or downright despised because it (literally and metaphorically) shone a light onto activities that they did not want light to be shone on. Every now and then a pair of 2 party-goers disappears down a staircase in the darkened far east corner of the room, and because at least one of these 2 people usually has an entangled partner-particle who is *not* the person they're currently walking down the stairs with, but who *is* at the party, to this $-\Delta N$ there is always a conjugate phenomenon which manifests itself as said partner-particle deals with the humiliation in one of three ways: storm out of the party, sulkily diffuse around the building, or hit the drinks and retaliate, and at this point it's worth pointing out that all three of these possible conjugates are manifestly $SU(2)$ invariant.

The social circle to which these people belong has some obvious problems with fidelity.

Suddenly the black-haired woman turns from the window, catches the black-haired man mid-stare, looks briefly at her feet, and makes for the darkened corner. The black-haired man watches her go, and invoking the full extent of his self-control to avoid premature timing he waits until she is out of sight, on the staircase, to make his pursuit. He doesn't seem to notice the two pairs of eyes under blonde-hair watching him through the reflection in the big window, but even if he had he would not have cared at this point. He's done his research.

Chapter 5 : A Glimpse of the Minister's Mind (Elliptic Cohomology)

Disembodiment. Just the white satin dress. White satin dress. Satin dress. Dress. Good. Stairs. Principle of Least Action. Causal Action. Transversal intersection in the cotangent space to the space of fields. Amplitude of encounter is perturbatively renormalizable and has been perturbatively renormalized. Low energy limit is promising and indicates that the blondes do not become massless. Symmetry restoration at the phase-transition reduces chance of backlash but requires a UV cutoff at time-scales. You have 30 min. End Stairs. Dark down here. There down the hall. White satin dress. Satin dress. Dress. Good. She turned her head. Good. She's waiting at the door. Good. Wait or go. Go. Hallway corridor. Spectrum shows mass-gap and existence of a massless spin-2 mode. Spin spin. Spin-statistics. She turned back to look this way before she went it. She did. Good. Go. Go. GO. Into the room, eyes slightly lowered, no up, up, you own the place, you own the place, dammit. Go in and close the door. What the hell is this. Darkened room, full of bodies. The smell. Temperature is high, humidity is high. Writhing, churning limbs. Transvestites. They're pulling me in. Prostitutes. Fight or flight. Niether. Been tricked. Plot to humiliate me. The wife. Found running out of a darkened room filled with transvestite prostitutes on his birthday. Witnesses waiting in the corridor just outside the door. Found in a darkened room assaulting a transvestite prostitute. Witnesses waiting for someone to come out. Where is she? There are alternative options. Now is as good a time as any. Give those who can get what they want what they can get and they will go without getting in the way of your wants.

Chapter 6: Murder at the Algebraic Beach House 2 (A Pushforward in K-Theory)

Outside in the corridor there is a complete press team waiting. The amount of equipment they brought is outrageous; some of the cameras barely fit into the hallway. There are already several scratch marks on the walls and ceilings from giant high tech tripods. The blonde-haired man and woman are standing in front of the team. Most of the other guests are standing behind the team watching. After exactly 5 minutes (the insane exactness was only later discovered, when the tapes of some of the more trigger-happy camera men were analyzed at the trial) the black-haired man bursts out of the room in a cloud of smoke followed closely by a transvestite prostitute clinging to his arm. The hallway turns hot molten bubbling white with high powered ultra-expensive tasteful flashes of light until it gets so unbearable even the most veteran cameramen have to look away and cease fire. In that time the black hair man has shoved the transvestite prostitute back into the room, locked the door, straighten his high conspicuously and combed his hair back with his hands and is standing ready to be interviewed.

The black haired man - "Before thanking you all for helping me celebrate this very special day which is so dear to me, and before congratulating the others and giving my general thanks to this or that for helping me get here, (under his breath: or there), I should like it to be known that setting up one's husband on his birthday with the implicit insinuation that he is having an affair with a dear friend, and doing so by colluding with said dear friend to lure him into the compromising circumstance which is a darkened room full of transvestite prostitutes, is an ingenious maneuver and hilarious party trick especially given the delicate connotations which these specific compromising circumstances have in regards to my public reputation, and I would have expected more of you to be laughing, or at least for there to be

more camera phones directed at me, but I suppose my reputation precedes me.” He is smiling, just short of hysterically.

The blonde haired man is so confused his face is blank and a couple fingers twitch subtly.

The black haired man continues - “ I would therefore like to thank my lovely wife, there she is, for organizing this wonderful event and its entertainment, and hope that you all will join me upstairs in 20 minutes for a toast and a ceremonial cutting of the cake.”

He smiles at her and she smiles back, but that reciprocal smile is soaked in mortal fear.

Someone, somewhere in the house, (it was later determined to have originated from the floor above) pulls the fire alarm, and all hell breaks loose.

Chapter 7: A Stark Contrast in Sunset Orange

The sergeant arrived on scene at 6 pm the next day. the full length window in the main room was found shattered. The window had been so big that there was so much glass that the deputy sheriff actually slipped and had his throat slit by a particularly large shard. He died seconds later. Most of the other troopers were too scared to investigate much further. It was a superstitious time in the history of man. A fisherman from a nearby village committed suicide a week later when he found a human elbow stuck in his net. It was only until several years later that the police managed to collect enough evidence to arrest the black-haired man in connection with the disappearance of his wife. Soon after he was formally charged with her murder.

Chapter 8: The Trial (String Compactification)

Because the beach town was a small one, and because its infrastructure had suffered over the past few years due to the combined pressure of some unfortunate weather and a shady city council which governed the coastal area by proxy from the nearest inland metropolis and had a primarily pescatarian community of campaign contributors, and because the 4 year elections were coming in the fall, and because salt water in the breeze makes the air corrosive, the local court room was deemed unfit to host a trial of such magnitude, and therefore the black haired man met his fate in the art history classroom at the local high school. The room was fairly large, the desks were enough to accommodate a few spectators from the fishing village along with all the press and legal teams. The two attending lawyers were perched at the front of the classroom in their undersized desks like gorillas sitting on coconuts. In between them, and behind the teacher’s podium, stood the judge, in his robes, not moving, just sweating, his wig perfect, his eyes closed, with a finger on the gavel, as if drawing from it some last minute inspiration for the trial to come.

A crowd had gathered in a courtyard outside the classroom to watch the evening show through the windows of the classroom. Most were friends or family of the fisherman who had taken his own life upon finding the blonde haired woman’s elbow in his net. For them the sea was a holy thing; they took their share of fish, sure, but never more than they needed to sustain themselves. Dumping an unwanted body part into the sacred waters was an act of high treason comparable to the evil city fishing vessels that sucked up all the sea creatures

and barfed blackness into the sky. The fisher people had set up blankets and a picnic, children had been allowed to bring their play things, which were mostly just different kinds of fishing instruments.

The black-haired man is calm throughout the whole trial. until the verdict of guilty is announced. He puts his hands on his hips in annoyance, spreading his waistcoat out to either side. He nods sarcastically with a look of the most sophisticated exasperation lightly tugging (upwards) at his eyebrows and (downwards) at the corners of his mouth. He looks in this way blankly down at the floor to his left as he turns absentmindedly, hands still on his hips. he turns back slowly and then back again. this time further, this time far enough to notice the painting on the wall near him. He reaches out and rips it of the wall in a furious gesture, just as the previously mild look on his face dissolves into pure loathing, his eyes contorted and vessels popping, lips drawn and teeth bared. but no one sees it for he is facing the painting. He turns and flings the paper out into the sea of desks before him, not with particular force, for his temper has once again been buried and transformed into what appears to his audience to me something closer to the exasperation you feel when your favorite sports team loses a match by scoring an own-goal. He makes a few loud and nondescript remarks about injustice before he is cuffed and ushered outside to be hanged. As they lead him out past the fishermen's picnic, the procession stops for a moment near 2 fisher children playing, one with a net and the other with a strange metal apparatus with funny bulging plates of steel which made it look like part of a fender. One boy, a weedy thing of not 11 years with shoulder-length black hair and a large nose seemed to have gotten his foot tangled in his net and in his flight from his playmate, an even weedier thing of not 10 with even blacker hair, he manages to go sprawling across the path of the black haired man, who is flanked by two officers. The black haired man bends down absentmindedly and helps the boy untangle his foot. The pursuant arrives at full speed and, his vision having been blocked by the large thing in his arms, goes sprawling. The strange metal apparatus flies out of his arms, travels a short distance to the air until it makes contact with the side of the black-haired man's reclined head, upon which it makes a strange snapping sound and suddenly contorts. A metal arm lashes out and strikes down into the vulnerably exposed back of the black-haired man's neck. The main body of the apparatus passes over the black-haired head, and after the device clatters to the officers turn to see a metronome between them counting out 54 beats per minute in lovely strokes of crimson launched into the deep blue sky and returning to the earth in a gentle rain upon the weedy boys of not 10 and 11 sprawled across a green grey fishing net in the courtyard of a high school not far from the sea.

A calamitous shout erupts from the crowd. The black-haired man's head had been swallowed neatly into one of the compartments of the strange metal apparatus.

Chapter 9: Atonement and Absolution (Reciprocity)

The child is running. Not a sprint; a sprint requires a sophisticated coordination of a sizable number of muscles that we take for granted, we who wallow in our comfortable lives free of fear or tragedy; this child is running with limbs flailing and feet flopping, head bobbing and eyes rolling, face twisted and chest heaving. It's really 90% stumbling, a prolonged faceplate

that has the virtue of pulling him forward, away from his ostensible doom. He is full of fear. He has seen the devil. He has seen death. The man whose head he had had in his fishing net just minutes ago has come for him. It is a devastating realization to meet one's own fate prematurely; to glimpse into one's own future, for there is nothing to be done but to follow it, and follow it knowingly. The child is being chased by someone he knows has already been killed. Someone who has already paid all of his debts in this world. Someone who cannot be vanquished. Not again. The black-haired man closes the distance slowly but easily, for he is truly sprinting, and his motor-neural function is not hindered by fear nor indeed the devastating affliction of decapitation from which he seemed to have suffered not minutes ago. The chase leads the two men out of the fishing village and into the world beyond.

Epilogue : Crime and Punishment (High Frequency Approximation)

Picture a blood-red desert at midday. Between the big red boiling dunes are cadaverous mounds of rock whose opacity is challenged daily by the blinding sun and its radiation, which seems to have acquired mass by some Higgs mechanism as it disperses through the desolate air shimmering above the red nothingness, and that bombardment makes the heat feel like liquid pouring down from above and makes the rocks and everything in sight start to look a little faded, transparent, and unreal. The whole scene seems to be stuck in stationary phase, the great waves of sand frozen like a life-size sand sculpture of an ocean caught mid-storm. A set of footprints winds down the side of one of the dunes.