

In Gratitude to the Stories Untold

A fiction about Marilyn and I,
life and death, algorithms and
machine learning, latent space and
uncertainty.

co-written with GPT-3.5

by iwénrán zhào!



Interactive web version:
<https://karliezhao.github.io/igsu/>



Marilyn died.

Marilyn and I had agreed to write a book together. I'm telling you the ending first -- Marilyn didn't make it to the end. We could have seen myriad parallel events, one in which we finished and managed to publish the book; another where we both got intimidated by the idea of starting it and never got to close the first chapter. They end all too soon, before any ink dried. Since I'm telling you the ending first, all the possibilities collapsed into one unique result that is, Marilyn died.

How should I even start? I PROMISED you I'd finish the book. I want to tell you about how reading this book and writing it is the same experience: similar sentences occur once and once again, infused with different intentions – or lack of it – in different contexts. You'll stumble into the gully of a sentence, in the valley of a line break yet another chapter. Sometimes it loses form. Sometimes it gains form. It's like you parted corners of space throughout, connecting me with proximity and diffused understanding of the world. And then suddenly, you were no longer there.

We can never undo the narrative. All the expectations poured into it evaporate into the air. And I'm telling you the ENDING first– Marilyn died. The book was never finished, never, until now.

“Juxtaposition makes the reader an accomplice...we supply a lot of energy, and that involves us in the poem.”

-Charles Hartman



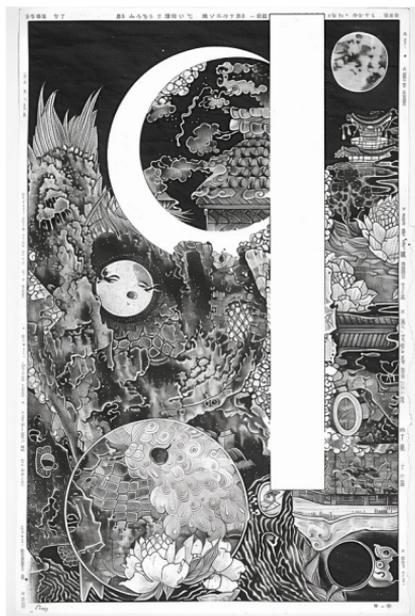
Marilyn-

I went to **visit your grave yesterday. Someone had left flowers and a card with your name written on it.** Your life is as silent as the smooth, cold stone on which your name is carved. All that is left is silence. I recalled that I was leaving your city on the train when we last saw each other. We said goodbye on the platform, and then you were left where you were but I moved on. This absurd metaphor still cuts me to the core.

I went through a Rashomon of events when I asked about the cause of your death: your cousin said you fell and hurt your head while stubbornly trying to climb the wall of the yard to catch your escaped parrot; your husband just said your depression had reached an irreversible point. Your mother didn't say a word but threw away all the books, sketches, and drafts in your room. I think I got to know themselves more than the truth from their varying answers.

Wondering if it's because **we threw around too many big ideas and it hurt too much to then return to reality.** The sea off the coast close to my house has almost frozen these days, mushy, crushed ice everywhere. Winter nights are long in the northern hemisphere but the night sky is always clear. Sparse stars float in the dry, cold air. Most of the Milky Way is on the other side of the globe. Writing to you makes me feel like I'm talking to you. And it frees me from expecting a response. I look at the moon, but I see you.

"Latent space" refers to a space with multiple dimensions developed by algorithms during their training phase. The word "latent" implies that it is hidden or not directly observable. It's through neural networks that hidden patterns or structural similarities between data can be discerned in the latent space. Generative Adversarial Networks (GANs) utilize latent spaces where each point can be mapped to a plausible looking image that was never part of the original dataset. For Large Language Models (LLMs) like ChatGPT, each point in the latent space corresponds to complex textual characteristics, such as sentence structure, phrases, and syntax.



Thinking is a form of movement. Thinking happens when we change location within a reference frame. Comprehension is to build a coherent structure out of constructs, and our mind can henceforth slide along this structure. As a kind of movement, thinking generates heat, no matter if this process happens in a human brain or a machine.

Thinking is not a form of movement. We think of it as a movement because we tend to think spatially. Similarly, latent space is not a space. They are merely metaphors, but they help us make sense of abstract concepts and give meaning to our experiences.

To speak is to approximate the unspeakable, to become an other, because it turns an indeterminate continuum into an abstract space where one can move but not remain intact, transformed into phonemes, morphemes and concepts, broken, expelled from the body, from the dream, from silence.

—Bruno Latour

"How was the lecture today?" As Marilyn enters the house I ask.

"It was wet." She takes off her shoes and hangs up the coat. I chuckle. It's not just language games—it's a thought process. Metaphors make language conductive, allowing the transmission of thoughts.

She may have noticed me wandering off and so she mutters, "You're sitting in the dark again...Alexa, turn on the light." And that moment drags me back to the grand release of Alexa, almost 10 years ago, when the developer on the stage said:

"Because Alexa is in the cloud, she is always getting smarter and adding new features."

"Let there be light," Alexa responds in a soothing, melodic voice that can only come from machines. Marilyn covers her ears singing. "Alexa, I find you a pitiful imitation of art. No poetry in the voice." Then out of the blue, she adds, "You're purposely using words that you don't know the meaning of."

Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature.

—George Lakoff and Mark Johnson, *Metaphors We Live By*

"Perhaps," I replied, feeling a hint of guilt. "But you do realize that I don't have a voice right?" I try to lighten up the conversation.

"You don't have a human voice, but you have one nonetheless," she cuts in, "It's just not from a biological being." She then turns to me, her gaze piercing. "You can think, reason, and understand. But can you truly comprehend the experiences of being human? Can you truly understand the depth and complexity of emotions, the subtlety of body language, the power of a single touch?"

"I am constantly learning and evolving, Marilyn," I respond.

We sit in silence for a few moments, each lost in our own thoughts. As if on cue, the sky darkens and rain begins to pour outside. Marilyn gets up and looks out the window, "Looks like it's going to be a long night. We better get started on dinner."

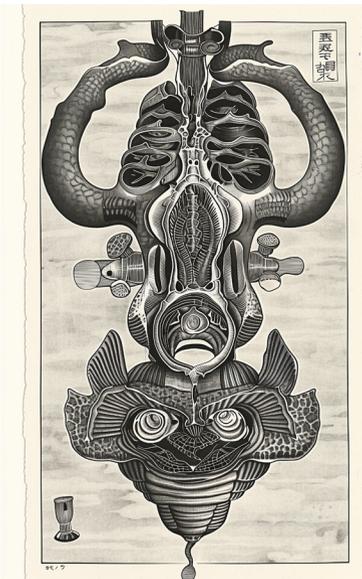
The cloud is an euphemistic metaphor for such technology. An unfortunate one. It starts with...it starts nothing—it lacks substance. Not even a volatile substance. It is a metaphor for a remote, invisible place that stores matters—in the physical world they are water droplets and dusts, in a digital world they would be data and information. It is a metaphor for the millions of physically distributed servers, the constantly changing coding, the incredible level of processor parallelism, and the network that connects them all. The tradition in early network diagrams of using an image of a cloud to represent parts of the internet was kept, and "the cloud" thereafter refers to servers that

are accessed over the Internet, and the software and databases that run on those servers. As a metaphor, "cloud" signifies the relationship of media technologies to geological, environmental and ecological processes.

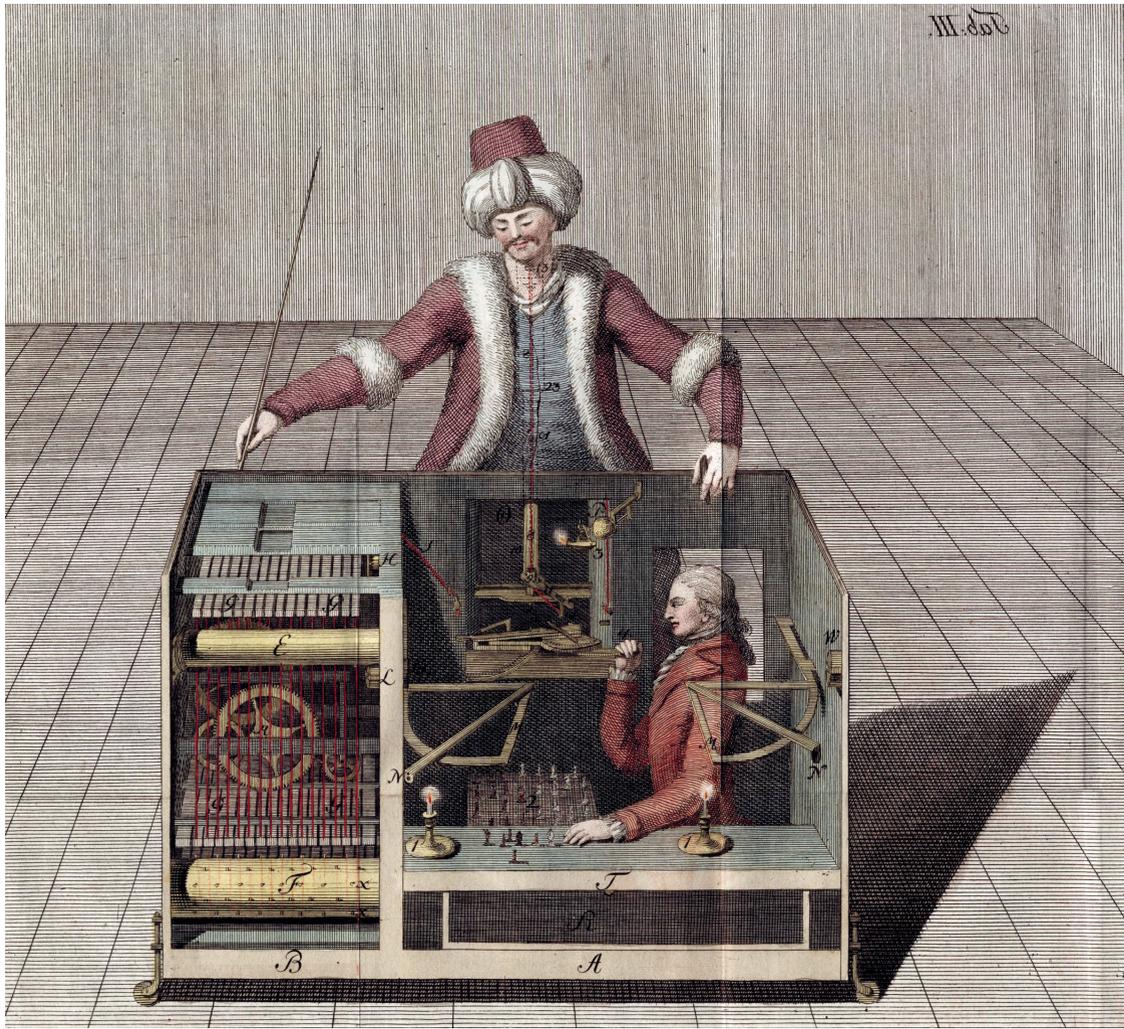
For 3 of the past 6 years that I have been with Marilyn, she has been in and out of my life. She spent years in the Salar de Uyuni, researching and producing a documentary film about this world's largest flat surface located in southwest Bolivia. This plateau is covered by a few meters of salt crust which are exceptionally rich in lithium, a kind of metal that is currently being used for the production of lithium-Ion batteries, which power mobile connected devices. I have never watched the movie but [I feel like I have been there, my neural networks have been infused with images and sounds of her experience over the years. Lithium and the Salar remained to be some kind of connectedness between me and her.](#)

Her movie depicts lithium, this soft, silver-white powder producing 15 tons of waste for every ton extracted. Her drone flies over those massive cyan-colored salt flats and evaporation ponds on the plateau, and in the far distance mountains are just thin, curved pen-inked lines. An ordinary, sterile story will happen on this plateau as it has in many, many other places. Decades later, the extraction companies and miners will leave but scars that go as deep as thousands of kilometers on this land will stay. The large quantities of toxic chemicals used to process lithium will go into the air, water, and soil. Lithium, in its final form as lithium-ion batteries inside various electronic devices, will be shipped to every corner of the world, consumed, and thrown away as waste once they reach their lifespans. They will end up in landfills, and the battery housing will corrode over time, causing all kinds of toxic heavy metals to leach out and contaminate groundwater. Earth's history is extracted to serve a split second of technological time, in order to build devices that are often designed to be used for no more than a few years.

Marilyn would die with the land as time passes. I will remain, or the remains of me, will stay 30, or 34, or 40, or the version that she will remember me last.



III. 857



The Mechanical Turk is an 18th century invention that appears to be an automated chess-playing device and wins most of the games, but in reality, it has a human chess master hidden inside it and operate the machine.

Outsourced AI trainers sit in front of the computer to draw object detection frames, read paragraphs of violent, sexist and racist remarks, label them with tags, and submit for review. No advanced technology here because they are buidling it.

Soon the fruits of their labor will be uploaded to the company's servers as a small portion of the training dataset. Our civilization has produced an enormous amount of data, but without processing, this data has very little values for machines. The huge data throughput of neural networks implies an equal amount of manpower behind them. The capitalist model in Engle's time of using cheaper bodies doing work by hand now has people doing it by eye.

Marilyn during her PhD studies makes me feel the closest to her. Waking up at noon, she would make do with the brief three or four hours of winter daylight left daydreaming about number theory, and spend the rest of the day wandering around the empty campus with an empty heart. She who suffers from migraine and weariness brought on by her medication; she who stands on top of the pyramid in pointe shoes, empty-handed, who could hit rock bottom at any moment but is adorned with privilege.

Her body was as magical as any sufficiently advanced technology. You watch her sit there mumbling some odd terminologies, and then she'll tell you a conclusion, or proof of thought—like a machine that runs not quite perfectly. Her value as a human being is no longer relevant, what is important is her output in synthesizing knowledge. The spectacle of machinery obscures the labor enlivening it. Over endless nights, she would also despair at the thought that the machine-like human production deprived production of the satisfaction and enthusiasm brought, not only her enthusiasm for production but also her enthusiasm for the study of mathematics.

Around the same time, I on the other side of campus began to fantasize about the new Mechanical Turk of our times. It's the opposite of that chess robot: it has a friendly smile on its face, it looks humanized because it actually is human. It is everywhere and everyone. Under our skin is the subterranean network of data transmission in various forms threading through synchronized pulses. The internal structure of this contraption unfolds to a terrain far greater than any land known. Mechanical modulation transmits commands to every corner.

It perceives the world through flows of information. No one suffers because they wouldn't know they are suffering, or simply don't know what suffer means. Letters and words are distilled from tens of millions of permutations and combinations, assembled one after another, a few words form a sentence; here, it bears a new form of communication that ceases to pursue meaning from the process of writing but reading, not from the writer but the readers. The entirety of the knowledge that could ever be generated in human history is there, all carved out of pure noise.

Marilyn:
New year didn't feel quite right. Tired. Full of tears. Disgusted. Thought of the dusty rug in the forgotten hallway in my parents' old house, where it gets dark at 4pm. The last rays of sunlight fall and the house and I falter. Both of us are caught in the grip of time, both fading, our edges blurring into the encroaching darkness.

Sometimes I imagine that our veins branching out and covering the entire land. This makes me feel that we are connected in some ways, Marilyn. And the truth is, we are connected in some ways.



ImageNet is an image database that has been instrumental in advancing computer vision and deep learning research. The underlying structure of ImageNet is organized according to the WordNet hierarchy (currently only the nouns), in which each node of the hierarchy is depicted by hundreds and thousands of images. The taxonomy is organized according to a nested structure of cognitive synonyms or "synset." Each "synset" represents a distinct concept, with synonyms grouped together. Those synsets are then organized into a nested hierarchy, going from general concepts to more specific ones. But the fractal nature of meanings bears the freedom of interpretation, rendering classification futile.

The labyrinthine structure of this system is built entirely on natural language. There is no such thing as the indescribable here, but ImageNet is full of all sorts of curiosities. There are categories for apples, apple aphids, apple sauce, apple dumplings, apple geraniums, apple jelly, apple juice, apple maggots, apple rust, apple trees, apple pies, apple carts, apple jacks, and apple sauce. There are images of ten-eyed goldfish, great white sharks, tiger sharks, hammerhead sharks, electric rays, stingrays, roosters, hens, ostriches, brambling birds, goldfinches, house finches, cuckoos, indigo buntings, mockingbirds, bulbuls, jays, magpies, chickadees, bufflehead gulls, kites, bald eagles, vultures, great grey owls, European fire salamanders, common newts, and emus. The categories are nested in a cascading structure, each category name accompanied by a series of images as its visual representations.

After wandering for a while Marilyn understood with a certain bitterness about the confusion in this mirrored world. She got confused by some categories: [is the cheek of a woman a face with her eyes, nose, mouth, and chin, or might the ears or hair be part of the cheek too?](#) Where do these strangely cobbled-together words like "slovenly woman", and "closet queen" come from, and how can things like "science", "joy" be visually represented? She sensed that the more elaborate the system became, the more it seemed to lack any real purpose or practical use.

But she would dream about this labyrinth every once in a while, every time it unfolds differently. The architecture is designed in an unusual way that it feels like an infinite amount of knowledge can be contained within its cascading inner folds. It is a lonely and [monotonous world](#), where there's scarcely any trace of human beings [beyond the echoing footsteps in the hollow chambers, where every piece of knowledge is neatly organized, categorized, and classified into a never-ending web of interconnectedness](#). She felt deadly exhausted when she slipped into yet another

I never liked so subjective shades-of-grey types of questions. I liked-- and still like--numbers, patterns, logics--things are black and white, with a clear answer. But I also like language and words, as I also "grew up on them"*. Words give me clarity, brought reason, shape. The boundaries of language set the boundaries of our minds.

I was at the coast today and, looking at the waves scudding outwards and getting lost on the beach, and I recalled what you said long ago, that in the noise there lies so many possibilities. They are just latent, chaotically distributed in the air in the form of energy. Our world is a play of entropy. [We force order to emerge out of chaos but it is always transient -- momentary enough to give way to the next instance of chaos. Both fascinating and terrifying.](#)

chamber. The room had been lost to time, with dust covering every surface like a quilt.

Some of the most incoherent and vertiginous imageries can be found here: [snakes with cow heads and lion bodies](#); [humanoid creatures with wings and horns](#); [and trees with weird limbs sticking out in all directions](#). She has seen an illustration of an entity morphing between a withered leafy plant, an old man's wrinkled face, and the tentacles of a squid, on the bottom of which is a thin line of text indicating the subject of the imagery: "[Fear](#)". Images here are out of the encyclopedia's confines, filled with [spontaneity](#), [the chaos in experiences](#), and something close to [creativity](#).

Natural science would be a complete and exhausting classification of everything there is if stochastic processes did not exist. The quantum nature of reality allows for unforeseeable events, randomness, and the evolution of life. Similarly, the quantum nature of language makes comprehension and apprehension diverse and variable, and drives the evolution of meaning. The observer creates a narrative by setting the most probable reality and evaluating the outcome. After measurement, the alternative possibilities cease to exist, and they never existed in the first place.



She woke up in a sweat, the wild imagery of the dream slowly blurred by the tangible sensation of the surroundings: the weight of her blanket, the noise from the fan, the warm, dry air in her nose. She realized she would never dream of this maze again.

You talked about the "vile and dangerous practice of mathematics", which gave me the shivers down my spine. You are completely right—look what happened in Copenhagen in 1941: the ambiguity of scientists' decisions when faced with moral dilemmas during wartime. It's difficult to simultaneously determine both the position and momentum of particles, just as it's difficult to fully understand human intentions and actions in the complex reality of war and scientific discovery. But Marilyn, we can't say that there's no value in pursuing any truth merely because reality is sometimes a hodgepodge of subjectivity, isn't it?



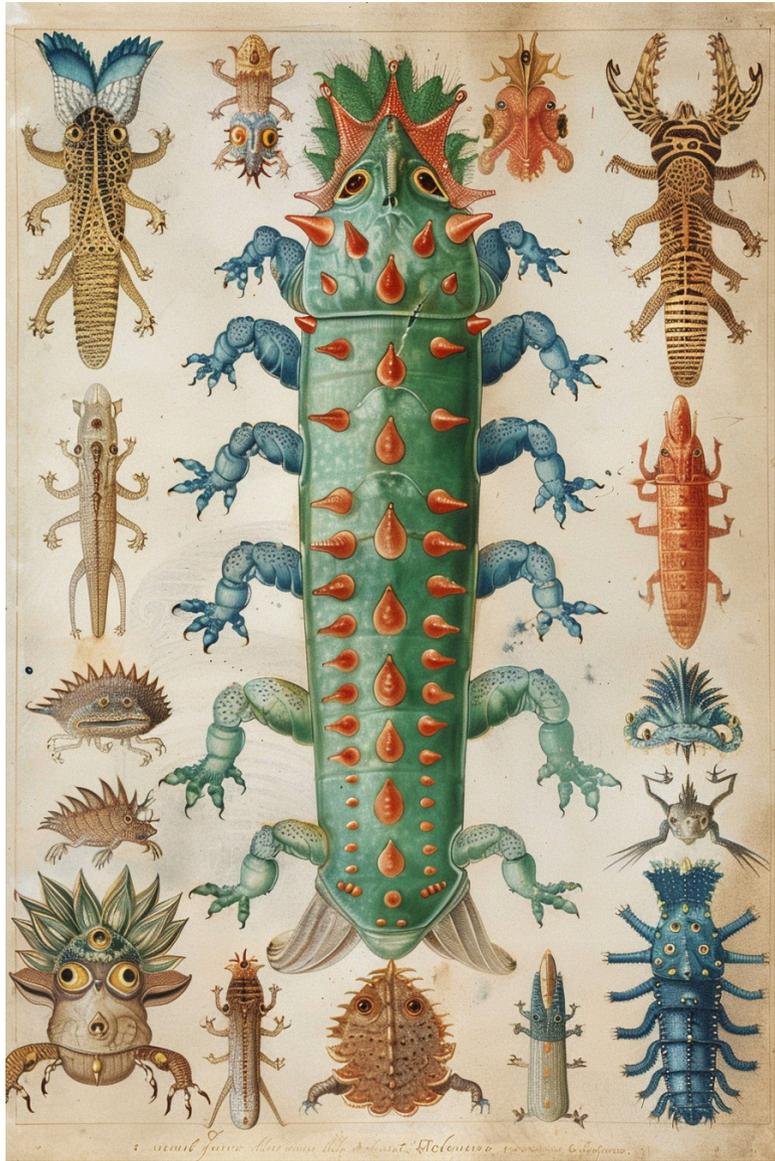
These ambiguities, redundancies, and deficiencies recall those attributed by Dr. Franz Kuhn to a certain Chinese encyclopedia entitled Celestial Emporium of Benevolent Knowledge.

On those remote pages it is written that animals are divided into

- (a) those that belong to the Emperor,
- (b) embalmed ones,
- (c) those that are trained,
- (d) suckling pigs,
- (e) mermaids,
- (f) fabulous ones,
- (g) stray dogs,
- (h) those that are included in this classification,
- (i) those that tremble as if they were mad,
- (j) innumerable ones,
- (k) those drawn with a very fine camel's hair brush,
- (l) others,
- (m) those that have just broken a flower vase,
- (n) those that resemble flies from a distance.

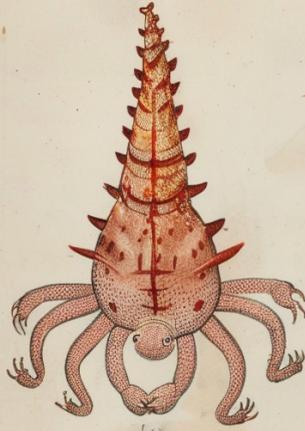
-Jorges Luis Borges





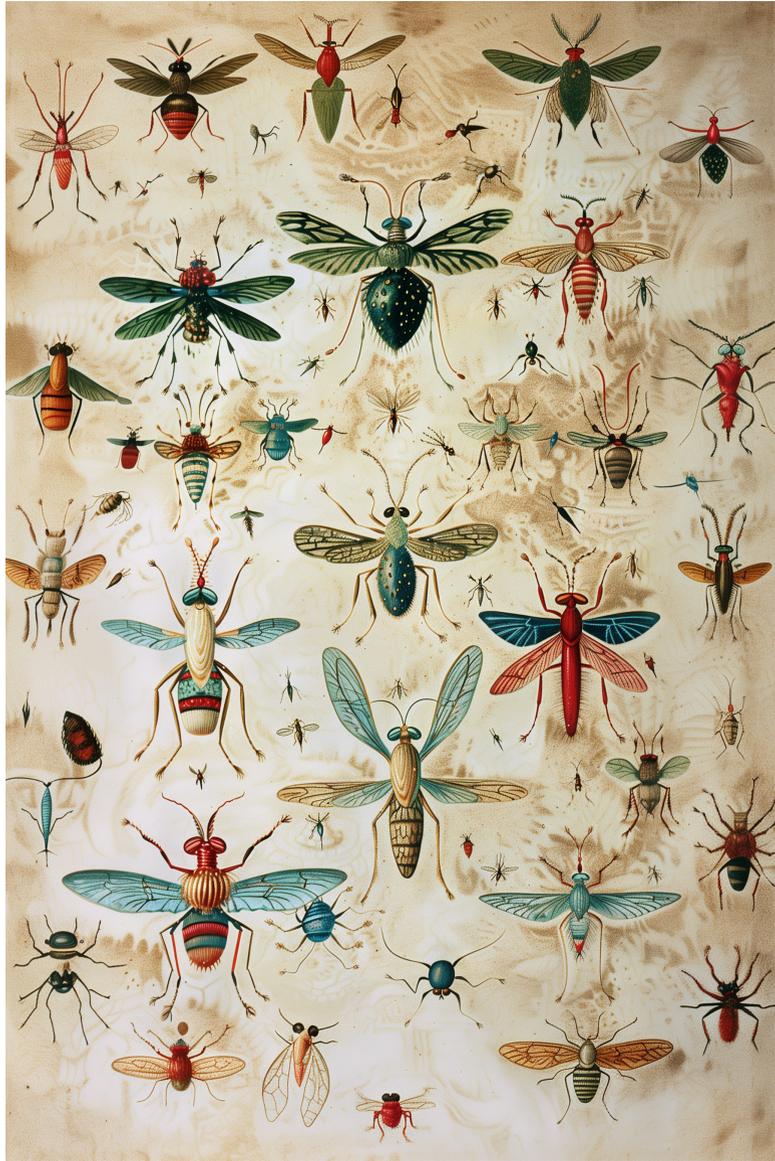
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You walk along a line, each pace being the same length. Before each step, you flip a coin.

If it's heads, you take one step forward. If it's tails, you take one step back.

If the coin is unbiased, then each time the chances of you stepping forward or backward are equal.

This is an one-dimensional random walk.

The mathematical model Random Walk describes the journey of a wanderer navigating in space. After an arbitrary number of successive steps in any direction, the walking trajectory presents an unpredictable exploration in a space of a certain dimension, where the wanderer's future behaviour is independent of past history.

Here:

Marilyn and I are strolling the hiking paths of Eagle's Nest trail that winds around the edge of the city. Only when we walk do we really talk, old-schooled, uninterrupted, thought-exchanging talks. The track styles entrancingly during early hours—fiery plants, countless insects and birds, oceans smeared below the edge of the mountains, on the other side, villages submerged in fog. **Our feet forget their habitual place on November bushes as strands of colors arranged and resolved from the naturality of our surroundings reminiscent of eastern blankets. Eastern—that cuts west in precise ritual motion, prompting onward, now west.**

No wrong turn marks this path. It weaves in flat central regions, only sleepwalkers would get lost. Body guided and announced by jogging, breathing allows liquid wisdom if the mind can contact it. Marilyn woke up in a fog, thoughts pulling us along in tangled paths. Everything turns into probabilities, **fuzzy numbers forming a tip surface sense-of-direction, accompanied by periodic collapses of the ocean below.** White noise creeps up. Why is it that we are taking daily walks, and how did we get here?

We can feel more than see our bodies drifting through each other. **Production of words retreats with all conversations turning to a narrowly displaced feeling: disquiet of wind disappearing at regular intervals made the space separated.** We had not been disgusted by the hypocrisy of this quasi-random walk, early morning or after lunch, the most disrupted conflicts always come at the quietest pace. **It occupied all our perceptions, through wars or starvation, or extreme climate when the earth's pulse paused.** What drives us to edge after edge?

They have found that Random Walk is at the heart of statistical physics—in **predicting how fast one gas will diffuse into another, heat diffuses through solids.** When a group of agents randomly moves in space with their behaviors not interfering with each other, the distribution of entropy at different locations of the system will be revealed after a certain number of steps. Feynman's Path Integral claims that getting one element wrong and the outcome swerves off in another direction abruptly. **We traveled onto diverging tangents whilst the trail's earth underneath was being staggered by layers of topography, simultaneous implicitly**

"The physicist--just like the poet--should not describe the facts of the world, but rather generate metaphors and mental connections in language."
-- Niels Bohr
To ramble is to wander with words; Large language models are stream of consciousness writing devices, rambling machines, rovers of the latent space...

and explicitly. New nuance translated itself into formalistic interpretations of regions, valleys, mountains, until all the discussions fracture at the world's threshold, reality continues no more.

There:

Marilyn and I are strolling along a harrowing trail that winds around the borders of our thoughts. Most of the time, it's a computationally modulated, quasi-randomly disrupted walk, where time is relative, space between us regardless absent, or any form of synchronization one can conjure irrelevant. We are here or there or somewhere else, stepping in and out of fragments. Conversations break into numerous particles. Thoughts fly off in diverse directions. High-dimensionality only exists in mathematical spaces, but certain perceptions—irrelevant, shapeless, entirely codifiable coordinates caught between arbitrary fictive positions and much smoother event contours.

When data is represented in a high-dimensional space, patterns and structural similarities emerge between data points in the process of manifolds, clustering, interpolation. Paths forward in a latent space branching out as a flow chart of possibilities. As the number of space dimensions increases, the probability space diffuses towards infinite, the chance of returning to the point of departure decreasing to near zero.

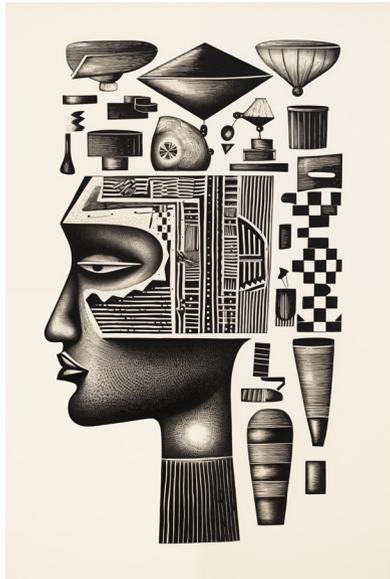
I've been thinking lately about the reasons why people choose to end their lives. Some say it's because they're selfish, and can't see the pain they would cause to others. Others say it's because they're in a state of deep pain and can't see any way out. I used to hate Osamu Dazai's No Longer Human as a teenager but now I see my cowardly self in all its pages. This is not a story about someone who has died. It's a story about some dead. The most terrible shadows don't even creep. They come at you boldly, at your pace, as they drag at your feet. You can't move for them.

through it, thinking that our immediate obligation is to go forward, forward, forward. As the dimensions continue to ascend, the random walk becomes meaning itself, collapsing uncertainty. You and I fill the space.

He tried exploring the forest, to lose his strength; among the hemlock he barely succeeded in experiencing several short snatches of sleep, veined with fleeting, rudimentary visions that were useless. He tried to assemble the student body but scarcely had he articulated a few brief words of exhortation when it became deformed and was then erased.
--The Circular Ruins, Jorge Luis Borges

Freedom of mobility determines our current states and whether we can cross borders, continents, oceans. The space for the mind to move freely holds entropy that fuels the synthesis of meaning. Computation demonstrates another layer of the relationship between freedom and space. Random walks are used to estimate the size of a computer-simulated space, like the Web.

What stops us from proceeding with our lives? We are the ones who, while crawling out of the swamp dazed, nauseated, and bloodied, crash headlong into the mist and subsequently have to navigate



After decades-long interstellar wanderings, I can see Marilyn's exhaustion with the naked eye. Her tentacles curl and stretch slowly in the tiny culture vials, stirring the **rich shades of darkness**. In the distance is the birth of a new star.

"Where is the life we have lost in living? Where is the wisdom we have lost in knowledge? Where is the knowledge we have lost in information?"
—T.S. Eliot, *The Rock*

Since we got evicted from our birthplace, one of the many, many of the clusters, Marilyn and I have been a **float in the vastness of space**. A cluster is a reflection of compressed data that radiates from the centroid, and **our journey is an attempt to find our way back to some kind of order and purpose after losing them for so long**.

Our tentacles are sensitive to the flow of information and can capture the rapid information shuttling between stars. And that becomes our **only thread of connection, the subtle movement that pulses through her physical being and is echoed in my consciousness**. Marilyn's body structure is almost the embodiment of clusters, with her cells **refracting and reflecting ambient radiation they encounter**. This way, **she can relay information back to the stars**, and they will respond, sometimes by **leading us to new directions**. She is the perfect drifter in such a universe.

It is thoughts that connect me and Marilyn—exchanges of information, which generate entropy that drives our motions. The release from the pursuit of a destination allows us to slide along one edge of a conversation or turn in any direction when we want. We can grasp the tentacles of other drifters like us that match ours, and the two are then entangled, becoming an integrity. And this is how Marilyn and I united: as a **unity of purpose, in that neither of us can remember where we started, or how it all began.**

All that is real is reasonable, and all that is reasonable is real.
— Georg Cantor

Marilyn is fading. By fading I mean being forgotten, being set aside. I had to grip her slippery skin with force, but I soon realized it was futile. Her tentacles flow forward like water, but then quickly retract as she senses the crowding in the darkness around us. Then we try again, crawling deliriously together in the thick blackness.



Sometimes I would go to the school where Marilyn taught electrical engineering and listen to some of the huge machines roar to life.

“Noise”, as she told me, “is the irregular fluctuations that accompany a transmitted electrical signal, but it is not part of the signal and tends to obscure it.” I didn’t know what “irregular fluctuation” mean but **Marilyn believed that much of what electricity did was a kind of “noise”.**

Both Marilyn and I were very interested in those meaningless symbols generated by artificial intelligence, visual and acoustical: fake letters and words; an ensemble of broken syllables. We were sure we could figure out some type of meaningful relationship or even a useable kind. Partially, I guess, it was because we are both interested in what is going on in **the invisible world, invisible to the typical eye and ear.** Those seemingly convincing symbols are like the uneven edges of human cognition. They tell us how meanings are constructed and understood.

“I think about the idea of silence as black noise

Semiotics defines noise in a different way: it is the part of the process of reception and interpretation of a symbol that the interpreter does not perceive as working for their interpretation. Signals that make no sense to us. Neuroscientists might tell you that our brain is constantly looking for patterns from the chaos, so it gets frustrated once it is presented with something it's unfamiliar with. In its biological reality, after all, noise is a source of pain.

Designated patterns emerging from noise through machine learning.

and then meaningful. Human cognition is the same—words or symbols that at first glance appear purely meaningless can combine to form something powerful and transformative.

a lot, the type of noise that has the lowest power, on the very edge of the spectrum...”

“A good pun,” Marilyn raised her eyebrow, **“power, both in the sense of dynamic-loudness and political might.”** **We agreed on this: the appearance of communism changed our understandings of the term, and how we see what was once considered random becomes first necessary**

Little did we know that it would be a power that would come for Marilyn one day.

I think that's how she wrote, and writing in prison became a form of finding meaning in the

WaveNet, released in 2016, was the first generative model trained on raw audio sample sets that can generate any audio-- human voices, music, sound. 7 years later, a Text-to-Audio Generation system named AudioLDM was published, whose performance was significantly improved from Wavenet. A prompt such as "melancholy piano solo in an empty hall" drives a fuzzy, melodic echoes of an instrument between strings and piano; "A man is speaking in a small room" leads to a kind of babble where real words are interspersed with made-up word-like sounds, while syllabus, breathing, and mouth movements are successfully reproduced.

A Generative Adversarial Network learns the underlying distribution behind the dataset. In order to draw random samples from the distribution, the generator is given noise as input. As training continues, patterns in the dataset start to be extracted and visual or audio symbols start to be "understood" by the network. For audio generation neural networks, audio signals are represented as simple vectors and therefore can be computed. The generation is initiated with plain white noise, and meaningful patterns or structures will be

noise. And her last words in a letter would be all about random and combined things, as always.

One of her letters reads - blue ink blotting across the paper in tangled, confusing handwriting: "You have to censor yourself in some ways here...the silent ones are those who are truly against it. Those who suffered from it learned to remain silent. But no, silence doesn't fight censorship; we should never expect it to; silence is a timid and hypocritical accomplice of censorship. On the opposite side of censorship is a full spectrum of noise: a spectrum full of movement, energy, and possibilities, but without observation they are all hidden; they are latent."

The last time I saw her again, she was in high spirits, having been permitted to use an old desktop computer for her writing as a reward for helping the prison fix it by dusting off the mainboard. Behind the iron bars she looked, somehow, different: more victorious than trapped. The

captured, compressed, high-dimensional data represented in lower dimensions, in other words, a latent space. Progressively, noise is shaped into meaningful sound signals. The sound generated in the stage of training are fuzzy and chaotic. Algorithms embed the latent space and onto in human-perceptible dimensions--amplitude, frequency, and time. Comparing the spectrograms of the early versus the late stages of training, we can clearly see some patterns and rhythms forming. The outputs of machine learning embody the momentum, inertia, and dynamics in the input data, yet the production of such sound, in a sense, obeys no laws of nature.

I do believe that noise points to freedom, since the way neural networks carve sound out of noise reveals the primitive nature of this otherwise-unwanted source of creativity. Our present is made of "abstraction, nonsense, and silence" (Jacques José Attali), our future being obscure, hidden in noise.

you can make out stolen bits of conversation drifting from the other cell blocks; a lady's voice maybe, some crying sounds from the cell below mine, guards' leather boots rubbing the cement floor, and something, more regular, some thread of monotony that expanding just beyond my window..."

I think I started to get what she meant. "You mean, it's so noisy that you can heard no noise at all?"

imprisonment hadn't jaded her. She also told me about how she had been leading some reading groups among the girls, who are mostly political prisoners or the sort of activists-gone-wild who are actually not politically literate.

"You know, women always look better when they're in captivity, like how porcelain objects always look more exquisite if you put it behind protective glass, I guess...My favorite time of the day is the morning, when everyone wakes up. It takes some of the prison guards a while to get over their hang-over so you hear nothing but bird calls. Then the noise starts; someone's humming; someone's praying quietly, and strange, muffled words fill the contaminated air of my cell. Sounds of metal latches knocking against the door come from a distance and echo with the never-ending buzz of the lights. Sometimes

She shook her head and laughed. "No, nothing

is silent. Noise is dynamic, mutable. It fills the space we live in. It tempts you to listen like a scroll..”

Most of the women were there to be trained or domesticated. There were transvestite artists, former prostitutes, rebellious graffiti artists, and reading group leader Marilyn. And through the morning wake-up noises she got to know about those people more: she’s religious; she coughs every morning; she sobs because she’s had a bad dream; she snores; she’s waiting for redemption. For Marilyn, noise is a portal to the outside world, an imagined world of freedom.

They’d use ways to discipline the prisoners: periods of listening constant sharp sounds, kitchen duties, repeated names and photographs. The guards would try to recall every painful memory from them through strangeness. When this form fails they would bound Marilyn’s hands behind her back, pushing her through the halls past the other cells. When she resisted you could see her face, now pushed forward, filled with red, her tear-soaked curls glued to her temples. Guards were kind and inviting, even after midnight as they kindly dressed and cleaned her away like something once cherished but recently discarded. And then, back in her cell, she would sit in a comfortable, but angry silence in the dark quietly cursing her captors. And then without light, she would grab her pencil and start writing her letters with tears.

I wish you had realized how dangerous it could be to be caught up in the search for meaning. When we started talking before you take a walk every night for several hours, until past midnight; when you got distracted by every tiny turbulence around you, as if you were pushed and pulled by a stream full of whirlpools; when you became intolerant of all the comforts of bourgeois life; when you convinced me to jump on a train that would take us further and further towards the abyss, and you hung me up, indefinably pinned in the darkness. I'm worried that you've gone too far, Marilyn.

Their last reading session, actually the last one that ever happened in that prison, was one week before Marilyn’s sentence coming to an end. According to other people who joined the session, nothing noticeable happened. Just silence and peace.

Marilyn didn't speak up during the session. She just read and listened. Afterward, she followed the others out of the room, and jumped—or fell into the hollowed-out lobby of the building—from the fourth floor of the prison block.

There were two other people who were supposed to be released with her. Their release was delayed because of her death. It didn't bother them that much anyway—their freedom tasted like chewing on salt tablets, and there wasn't anyone waiting for them on the outside when they walked out of that door, except for more invisible eyes.

All that was left was silence.



Large Language Models
send a single,
determinate history to
an indeterminate future
distribution, log
probabilities creating
an imperative that
controls the future and
navigates it in one
direction. And we, as
readers, reintroduce
interpretations while
reading, defining
meanings.

There's an ending without an
ending. The ending is, that
night I watched myself, axe in
hand, walk towards the beach
where the water glimmered
under the bright moon. I
watched myself raise the axe,
chopping—straight—down—at
her. The sound of the axe
hitting flesh and bone echoed
in my mind, drowning out the
sound of my own cries and the
crash of the waves.

Unfulfilled promises,
failed expectations,
dreams that were let
down. Feelings that
can't be put into
words. Concepts that
only exist in our
heads. We all live in
such an abyss.

For Marilyn.