

The Contingent God

On History, Gravity, and the Roads Not Taken

Chris George / Liminal Mind

Frank Herbert knew them before history did.

Each was a vector of human will — not moral, but gravitational.

History has a way of presenting itself as inevitable. What happened feels, in retrospect, as though it could not have happened otherwise. This is one of history's most seductive and dangerous lies.

We speak of Alexander, of Caesar, of Muhammad, of Genghis Khan, of Lenin and Hitler, as though they were geological events — pressures building across centuries until the earth moved. And there is truth in that. The conditions that produced each of them were real: the wounded nationalism, the theological hunger, the collapsed economy, the power vacuum. Structure matters. Forces accumulate.

But structure is not destiny. It is only pressure. And pressure requires a precise point of application to become a rupture. To understand how that rupture happens — why here, why now, why this person and not another — we need two images from physics, not metaphor. They are not decorative. They are precise.

I · *The Supercooled State*

Consider supercooled liquid. Water held below freezing point — sometimes far below — perfectly liquid, sustaining a state it should not be able to maintain. The energy is enormous, held in suspension by the very chaos of its molecular motion. It looks like stillness. It is anything but.

This is what a society on the edge of historical rupture looks like from the outside. Weimar Germany. Pre-revolutionary Russia. The Arabian peninsula of the seventh century. The Mongol steppe before Temüjin. Late eighteenth-century Saint-Domingue, where the most profitable colony in the Atlantic world sat on an ocean of human suffering so compressed that the air itself was volatile. France during the Hundred Years' War — a collapsed economy, a paralysed royal court, a national psyche so wounded and theologically hollowed that it was waiting, without knowing it, for something to break the surface tension. Enormous stored energy — suffering, hunger, theological longing, economic collapse, wounded pride — held in suspension by the friction of ordinary chaos. Stable enough to persist. Unstable enough to snap.

The system is primed. It sits beyond its natural threshold. And then — a dust particle. A single perturbation, sometimes absurdly small, sometimes a precise human configuration of gifts that the moment has been waiting for without knowing it.

The liquid crystallises. Instantly. Completely. Releasing all that stored energy at once into a single irreversible structure.

This is the mechanism of emergence. And across centuries and cultures, the dust particle that triggers it shares a recognisable signature — not moral character, history is indifferent to that — but a cluster of properties so consistent that it suggests not accident but a recurring type:

**CERTAINTY. HUNGER. MAGNETISM. RUTHLESSNESS. STAMINA. OUTSIDER. VISION.
FEARLESSNESS. IMPATIENCE. TOTALITY.**

Ten words. Each load-bearing. But they are not merely a list of admirable or terrible qualities. They are a kinetic system — specific traits acting as the precise molecular geometry required to drive the phase transition through each of its stages. Remove any one and the historical impact likely fails to reach civilisational scale.

The universe is indifferent to the origin of the perturbation. The system responds identically whether the dust particle is a Macedonian prince whose insatiable empire-hunger refuses every natural boundary; an illiterate French peasant girl whose absolute internal certainty re-aligns a paralysed medieval kingdom around a crowning ceremony in Reims; or a Caribbean slave whose fearlessness and structural vision bend the geometry of global colonial power inward until three empires — British, Spanish, French — break against him in succession. It is not the identity of the particle that matters. It is its resonance with a world sitting dangerously past its threshold.

┆ *The dangerous moment is not the appearance of the exceptional individual. It is the confluence of the individual with a system already beyond its threshold.*

But to understand why that resonance works, we need to look at what each trait actually does in the physics.

OUTSIDER and HUNGER are what prevent the individual from being absorbed into the ordinary chaos of the existing system. They are chemically distinct from the fluid. The insider operates within the system's existing channels, is shaped by its pressures, attenuates rather than amplifies the stored energy. The outsider — Temüjin on the steppe, Louverture on the plantation, Joan of Arc in the Dauphin's court — arrives without the existing system's friction coating. They do not dissipate the pressure. They concentrate it.

CERTAINTY and VISION act as the precise molecular geometry that forces the unstable, high-energy system to align. This is not confidence. It is something harder and stranger — a structural conviction so absolute that it reorganises the perceptual field of everyone who enters contact with it. The supercooled liquid does not crystallise around doubt. It

crystallises around a geometry so clear and inevitable that the molecules have no other direction to move.

Frank Herbert understood this at a structural level most political philosophers never reached. Dune is not an epic. It is a warning dressed as one. The Fremen did not follow Paul Atreides because he was right. They followed him because they were supercooled — prepared by history, by suffering, by the Missionaria Protectiva's deliberate seeding of messianic expectation — to crystallise around someone with his precise configuration of gifts. The charismatic figure and the prepared population are a system. Not cause and effect. Resonance.

II · *The Vortex*

Crystallisation describes the moment of emergence. But it does not describe what happens next — the field the figure generates once they exist, the way ordinary social and political space reorganises itself around them.

For that we need a different image. Not water snapping into crystal, but gravity introduced into a high-energy field. A vortex forming. A structure that pulls everything nearby into circular, accelerating motion around a centre that is simultaneously generative and consuming.

This is where the second cluster of traits becomes the kinetic engine of the transition. **IMPATIENCE and STAMINA** in combination produce something that neither can generate alone. Impatience without stamina burns out at the first resistance — the vortex collapses before it achieves self-sustaining velocity. Stamina without impatience produces a different kind of figure entirely: the long-game bureaucrat, the patient institution-builder, the reformer. What the vortex requires is the violent combination of both — the relentless acceleration that refuses every plateau, sustained across years or decades without attenuation. Caesar fighting concurrent civil wars on three continents. Temüjin spending decades rebuilding after catastrophic defeats before the final crystallisation. Atatürk dismantling an entire civilisational inheritance — the caliphate, the Arabic script, the legal code, the dress — with an impatience so total it could only be sustained by an equally total stamina.

MAGNETISM is the binding force that makes this vortex recruit rather than merely rotate. Louverture unifying maroon bands and disciplined armies that had every reason to distrust each other, pulling them into a common orbit through the sheer gravitational coherence of his presence. The vortex is the transition state — the moment between crystallisation and the full establishment of the gravitational field. Energy that was stored now moving, directional, building on itself.

And the vortex has a quality the supercooled state did not: it recruits. Its motion draws in what surrounds it. People who were not part of the original crystallisation find themselves in orbits they did not choose, moving faster than they realise, pulled by a gravity they experience as conviction.

III · *The Black Hole and the Event Horizon*

The vortex, sustained long enough, becomes something else entirely. The gravity becomes the field. The exceptional individual no longer needs to persuade or mobilise — the space itself bends around them, so that moving toward them feels like moving naturally, freely, by choice.

This is the black hole. Enormous generative power at the centre. Light, matter, judgment, institutions — all curving inward. The followers are on geodesics — the straightest possible paths through curved spacetime — and they believe they are walking in straight lines. They are already captured and they cannot feel the capture.

It is **RUTHLESSNESS and TOTALITY** that drive the crossing of this threshold. To bend political space permanently — so that no worldline exits — the figure must be willing to completely dissolve the old infrastructure. Not reform it. Not work within it. Dissolve it. Qin Shi Huang standardising the script, the currency, the axle widths, and then burning the books — not because he was uniquely cruel, but because Totality at this scale requires the elimination of every alternative geometry. Peter the Great cutting off nobles' beards with his own hands, building a city on a swamp through forced labour: the message is the same. The old molecular structure must be destroyed for the new crystalline order to hold.

And here the physics reveals something that the moral account of these figures always obscures: the individual is as trapped by the geometry as their followers. Once Totality is engaged, the figure cannot stop. Their own Certainty insists that the vision is not yet complete. Their Stamina means they do not tire. Their Impatience with any obstacle — human or physical — means that Ruthlessness becomes not a choice but a structural necessity of the phase they have entered. The black hole feeds itself.

The mathematics of the Penrose diagram makes this precise: beyond the event horizon, no worldline exits. The geometry itself is the trap. This is what Herbert's Jihad encodes: sixty-one billion dead, and Paul knew it was coming, and the movement had its own momentum, and he could not stop it, and he had started it, and he had not started it — the pressure of ten thousand years of Bene Gesserit breeding and Fremen suffering had started it, and he was simply the point where it broke through.

┆ *The singularity at the centre of every historical rupture is surrounded by the ghost architectures of what almost happened.*

Paul's tragedy was not ignorance. He possessed the Vision to see the event horizon before he crossed it. But his Certainty and Impatience had already made him the crystallisation point. The vortex had its own momentum. He could not unbecome what the supercooled world had made of him.

Herbert spent the remaining five books of the cycle trying to solve this problem at civilisational scale. What he arrived at — Leto II's Golden Path — was not optimism. It was the most unsentimental systems-level diagnosis in twentieth-century fiction. Leto recognised that humanity's baseline condition is to become supercooled — forever generating the stored energy of suffering and longing that makes populations ready to surrender their judgment to the next charismatic vortex. The Golden Path was a monstrous, three-thousand-year tyranny administered at civilisational scale, designed not to produce a better empire but to destroy the messianic impulse itself: to scatter humanity across the cosmos so thoroughly that no single gravitational field could ever again form a civilisational-scale black hole around one person. It was a structural intervention in the physics of emergence, not a moral one. Herbert was not arguing for better leaders. He was arguing that the conditions that produce the vortex must be permanently altered.

We do not have three thousand years.

Three phases, then. Supercooled potential. The vortex of crystallisation and acceleration. The black hole of established gravity. Each state produces the next. Each is harder to escape than the last. And each was, at some earlier point, not inevitable.

IV · *The Hinge*

This is what the retrospective narrative always obscures: the hinge point. The moment where the accumulated pressure of history meets a decision small enough to be made by one exhausted person in a room, and the outcome forks.

Versailles. If Woodrow Wilson's more moderate position had prevailed against French and British demands for punitive reparations, the Weimar Republic likely survives. No stab-in-the-back myth. No hyperinflation destroying the German middle class. No supercooled state waiting for a crystallisation point. Hitler probably dies an obscure failed painter, his name unknown.

October 1917. Lenin was in exile in Zürich. The German High Command, calculating that his return would destabilise the Russian war effort, arranged his transit in a sealed train. A bureaucratic decision by military planners pursuing a tactical objective. Without it, the Bolshevik seizure of power is far less certain. The Soviet century may not happen.

October 1962. A Soviet submarine, B-59, cut off from communication and under depth charge attack, believed war had begun. Protocol required agreement from three officers to launch a nuclear torpedo. Two agreed. One — Vasili Arkhipov — refused. The world did not

end because of one man's judgment in a steel tube at the bottom of the Atlantic. He is almost entirely unknown.

| *The conditions for catastrophe were structural. The catastrophe itself was contingent.*

When we say a bad outcome was inevitable, we are not describing history. We are making an argument that forecloses responsibility. Inevitability is always partly a story told afterward by those who benefited from the outcome, or those too frightened to admit how close the other branch was.

History is not a river with one channel. It is a delta — braided, shifting, with the current running differently at every depth. What we see from downstream looks like a single flow because we can only see where the water went.

V · *What This Demands*

If history is contingent — if the hinge points are real, if the roads not taken were genuinely available — then the present is not a determined state either. The pressures are real. The conditions accumulate. The personality types recur. The populations that are prepared to surrender judgment are always somewhere in the formation process.

The question is not whether a supercooled state exists. It is whether the crystallisation point has been reached. Whether the vortex is forming. Whether the event horizon is still ahead of us or already behind.

This is not optimism. Optimism is the belief that things will be fine. This is something harder: the insistence that agency exists at the hinge point, that one person in the right position with the right judgment at the right moment can refuse the torpedo launch, can insist on a more moderate peace, can decline to seal the train.

- Alexander the Great
- Julius Caesar
- Muhammad
- Genghis Khan
- Christopher Columbus
- Vladimir Lenin
- Adolf Hitler
- Vasili Arkhipov — who held
- Stanislav Petrov — who held

The last two names on that list are the most important. They are almost unknown. They exercised their pivotal agency in the direction of restraint, of refusal, of not. History does not

build monuments to the man who did not launch the torpedo. It builds them to the men who bent the world inward.

Perhaps that is the deepest contingency of all — not whether the exceptional individual appears, but which direction their totality runs.

Frank Herbert spent six books trying to inoculate us against the pull. His answer required three thousand years of monstrous, deliberate tyranny administered at civilisational scale to burn the messianic impulse out of humanity's nervous system forever — to lower the density of human concentration so thoroughly that no vortex could achieve black hole gravity again.

We do not have three thousand years. We have the present moment, and the event horizon is always closer than it looks, and the geodesics still, for now, curve away.

Look up.

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#FrankHerbert #Dune #Power #History #Psychology #MythicRealism #HumanWill #Philosophy #ArtAndMind