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Param



 **param**
Foundation

An aerial, high-angle photograph of a group of people in dark clothing walking on a light-colored, textured surface. The people are scattered across the frame, some walking in the same direction, others in different directions, creating a sense of movement and a crowd. The lighting is soft, and the overall color palette is muted, with greys and dark tones against the lighter ground.

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Masthead

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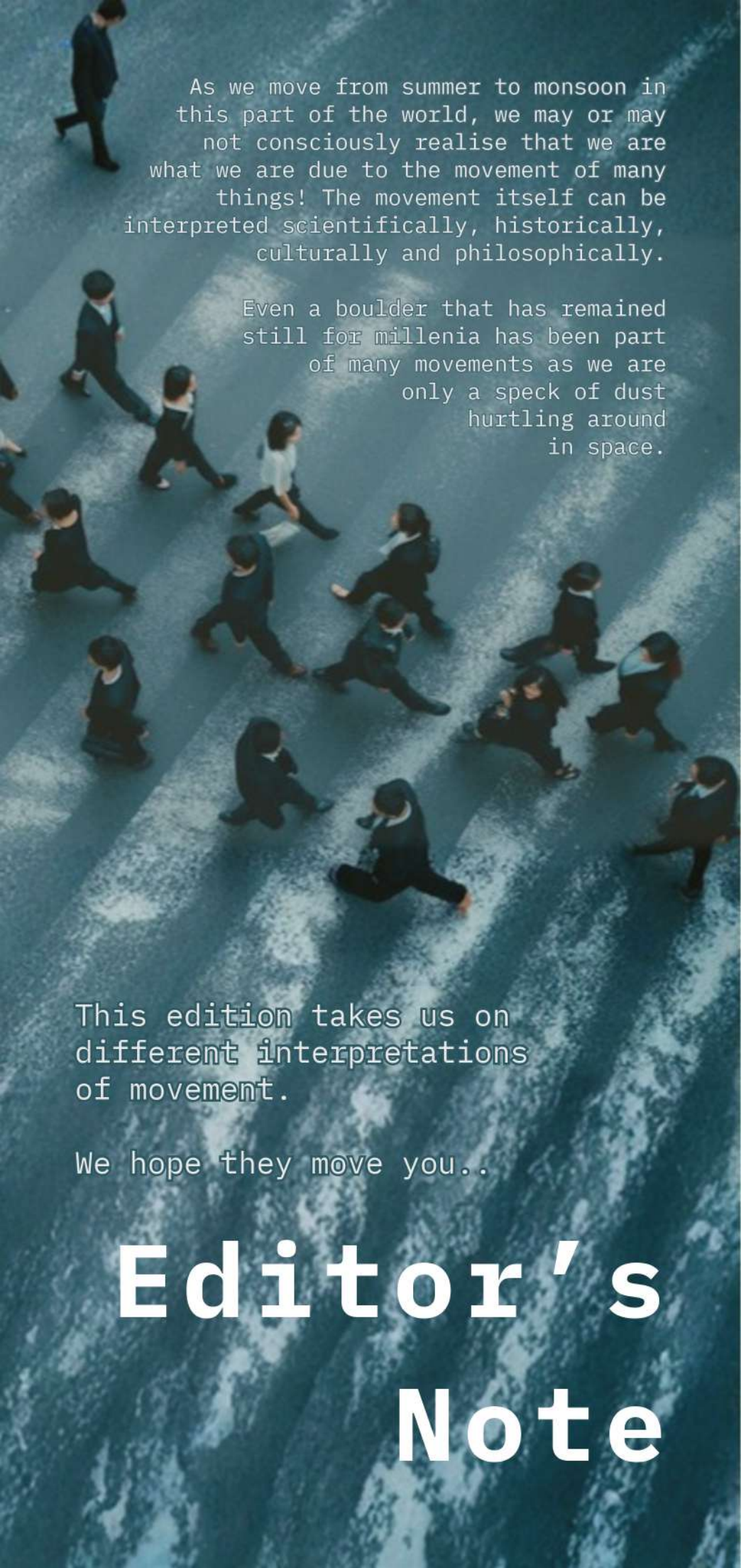
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As we move from summer to monsoon in this part of the world, we may or may not consciously realise that we are what we are due to the movement of many things! The movement itself can be interpreted scientifically, historically, culturally and philosophically.

Even a boulder that has remained still for millenia has been part of many movements as we are only a speck of dust hurtling around in space.

This edition takes us on different interpretations of movement.

We hope they move you..

Editor's Note

BETWEEN STILLNESS AND DYNAMISM

BY AISHWARYA MEENAKSHI

Movement, in Indian classical dance, is rarely just movement. It is memory carried through the body. It is devotion translated into gesture. It is rhythm finding shape in space. As dancers, we spend years training the body to become precise, disciplined, and responsive, however, somewhere along the journey, movement begins to transform into something more intimate and personal.

A slight turn of the wrist, the pause before each glance, the deliberate placement of the foot on the floor, each carries centuries of thought, meaning, and lived experience within the culture.

In forms like *Kuchipudi*, movement does not merely decorate music; it converses with it. It becomes story-telling. The body listens, responds, resists and surrenders.

There are days when movement feels mechanical which is built carefully around rhythm and melody, and there are days when it feels like water, impossible to contain within technique alone. It flows.

MOVEMENT



The ancient treatise **Natya Shastra** is perhaps the most widely known text on Indian performance traditions, but works like **Abhinaya Darpana** are equally remarkable in their precision and detail, especially in their exploration of expression, gesture, and movement. These texts do not simply speak of dance in broad strokes; they meticulously categorize the body and its possibilities.

Movements of 'Sheera Anga'

Shirobheda (head movements) consists of nine variations. **Sama** holds the head straight in calm neutrality like attentive listening during a conversation, while **Udvahita** lifts the head upward in wonder or elevation like how we would look upward in wonder at rain after a long summer. **Adhomukha** bends the head downward in humility, apology or contemplation, and **Alolita** introduces a circular motion expressing intoxication or dizziness after a long day at work.

Dhuta moves gently from side to side to indicate denial or disagreement, whereas **Kampita** creates an up-and-down nod suggesting assertion or inquiry.

Paravrtta turns the head sideways in avoidance or attention, **Utkshipta** tilts it upward sideways in pride or alertness, and **Parivahita** creates a graceful swinging movement conveying delicacy.

Greevabheda (neck movements) is classified into four types. **Sundari** is a gentle side-to-side neck movement expressing grace and charm, while **Tiraschina** moves diagonally with a serpentine quality. **Parivartita** involves a circular turning of the neck suggesting elegance and curiosity, and **Prakampita** creates a forward-and-back oscillation conveying emotion or emphasis.

Drishtibheda (eye movements) consists of eight varieties that give depth to expression. **Sama** maintains a steady and composed gaze, while **Alokita** creates circular eye movement suggesting observation or wonder. **Sachi** offers a sideward glance filled with playfulness or subtle emotion, and **Pralokita** shifts rapidly from side to side. **Nimilita** half-closes the eyes in meditation or devotion, while **Ullokita** directs the gaze upward in reflection or divine contemplation.

Anuvrtta creates repeated quick eye movement expressing excitement or agitation, and **Avalokita** lowers the gaze in modesty or introspection.

Movements of 'Hasta Anga'

The hands in Indian classical dance serve as powerful tools of communication and symbolism. They are broadly divided into ***Asamyuta Hastas***, the twenty-eight single-hand gestures, and ***Samyuta Hastas***, the twenty-three combined-hand gestures. Together, these mudras create a rich visual vocabulary capable of expressing objects, emotions, actions, deities, and entire narratives through gesture alone.

Movements of 'Pada Anga'

The movements associated with the feet and lower body establish rhythm, grounding, locomotion, and spatial design within classical dance traditions.

Mandala Bheda (forms of standing) consists of ten varieties that define foundational body positions.

The first among these, ***Sthanaka Bheda***, refers to the basic standing postures establishing balance and readiness for movement.



It is further divided into six types.

Samapada creates a symmetrical stance with both feet placed evenly together, conveying composure and neutrality. **Ekapada** balances on one leg, suggesting grace and concentration, while **Nagapada** adopts a serpentine placement of the feet resembling the movement of a snake. **Aindra** embodies regal authority and strength, **Garuda** appears in expansive stances taken during excitement or protection, and **Brahma** mirrors moments of composed stillness.

The remaining **Mandala Bhedas** each carry distinct qualities. **Ayata** resembles the instinctive bend of the knees while preparing to lift something or begin movement. **Alidha** recalls the grounded stance of someone bracing themselves with determination, while **Prekhana** resembles the gentle sway of the body while listening to music. **Prerita** appears in the body leaning forward eagerly during conversation, and **Swastika** resembles relaxed crossed-leg standing.

Motita captures the lightness of excitement, **Samasuchi** the stillness of discipline, and **Parshvasuchi** the sideways extension of attention toward someone entering a room.

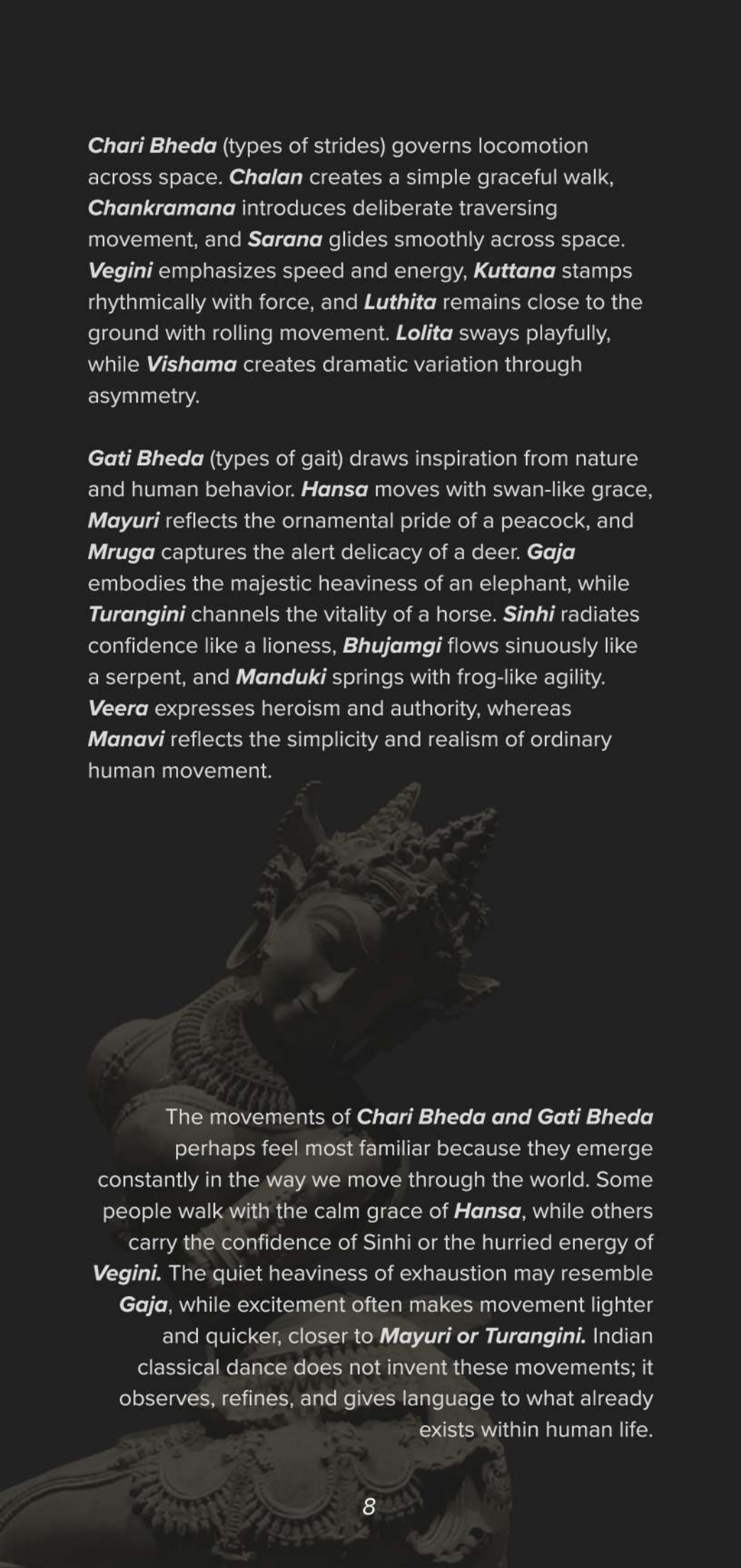
Utplavana Bheda (types of leaps) explores aerial movement and elevation. **Alaga** creates airy expansiveness through a light leap, **Kartari** resembles a scissor-like crossing movement, and **Ashva** draws inspiration from the vigor of a horse. **Motita** expresses elegance through lift and buoyancy, while **Krupaalaga** creates flowing continuity through a swift gliding leap.

Bhramari Bheda (spiral movements) introduces turning and rotational energy into dance. Like, turning quickly when someone calls our name, spinning joyfully as children, or shifting the entire body during surprise all echo these rotational movements.

Utpluta combines spiraling with elevation, **Chakra** whirls like a wheel, and **Garuda** evokes expansive flight. **Ekapada** demands precision through a one-legged turn, **Kuncita** contracts inward with contained energy, **Akasha** opens into an aerial spiral, and **Anga** integrates the entire body into rotational movement.

Chari Bheda (types of strides) governs locomotion across space. **Chalan** creates a simple graceful walk, **Chankramana** introduces deliberate traversing movement, and **Sarana** glides smoothly across space. **Vegini** emphasizes speed and energy, **Kuttana** stamps rhythmically with force, and **Luthita** remains close to the ground with rolling movement. **Lolita** sways playfully, while **Vishama** creates dramatic variation through asymmetry.

Gati Bheda (types of gait) draws inspiration from nature and human behavior. **Hansa** moves with swan-like grace, **Mayuri** reflects the ornamental pride of a peacock, and **Mruga** captures the alert delicacy of a deer. **Gaja** embodies the majestic heaviness of an elephant, while **Turangini** channels the vitality of a horse. **Sinhi** radiates confidence like a lioness, **Bhujamgi** flows sinuously like a serpent, and **Manduki** springs with frog-like agility. **Veera** expresses heroism and authority, whereas **Manavi** reflects the simplicity and realism of ordinary human movement.

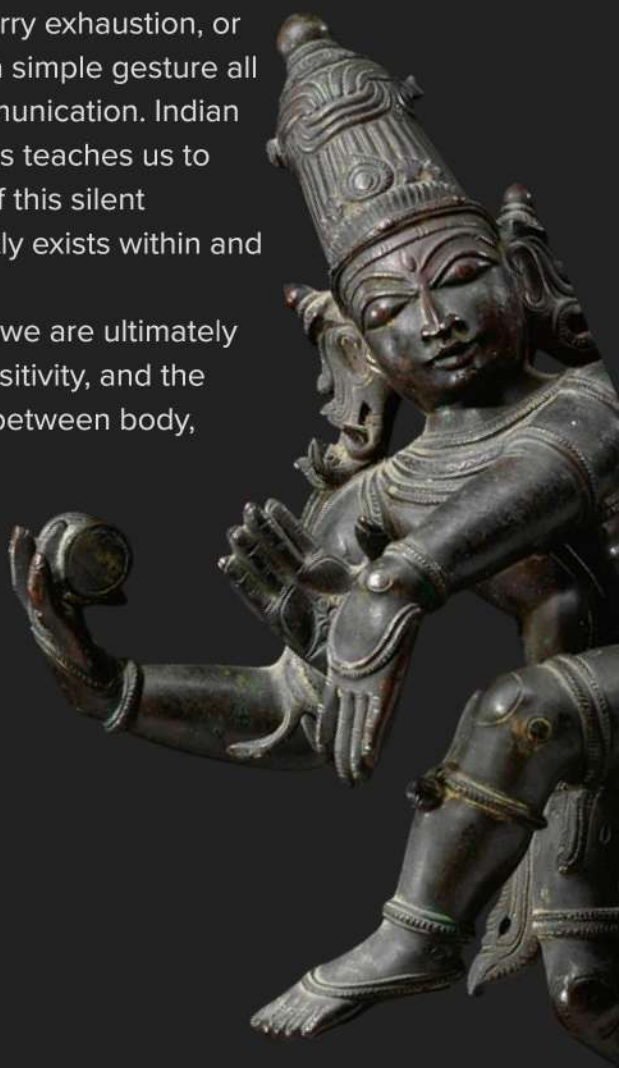


The movements of **Chari Bheda and Gati Bheda** perhaps feel most familiar because they emerge constantly in the way we move through the world. Some people walk with the calm grace of **Hansa**, while others carry the confidence of **Sinhi** or the hurried energy of **Vegini**. The quiet heaviness of exhaustion may resemble **Gaja**, while excitement often makes movement lighter and quicker, closer to **Mayuri or Turangini**. Indian classical dance does not invent these movements; it observes, refines, and gives language to what already exists within human life.

In conclusion, the remarkable precision with which movement has been studied and documented in texts like the *Natya Shastra* and *Abhinaya Darpana* reminds us that movement was never seen as accidental or insignificant in Indian lifestyle.

Every glance, stride, turn, and gesture was observed deeply enough to be named, classified, and understood. Yet, beyond the world of performance, movement remains equally essential in our everyday lives. The way we walk into a room, hold silence, express joy, carry exhaustion, or offer comfort through a simple gesture all become forms of communication. Indian classical dance perhaps teaches us to become more aware of this silent language that constantly exists within and around us.

In learning movement, we are ultimately learning presence, sensitivity, and the profound relationship between body, emotion, and mind.



Author's Bio:

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Alongside her performance career, she has worked in arts management and cultural outreach through NGOs and community-based initiatives, bringing together artistic practice, education, and engagement.

Architecture of Flux

We are currently in an era obsessed with velocity. Be it the **hyper-acceleration of digital data and shifting of geopolitical borders to the chaotic, microscopic jitter of quantum particles**, status is a mathematical illusion. Even when we sit perfectly still, we are aware that continental plates are drifting beneath us, or that our blood circulates within us, just as the atoms are composing our bodies in a state of perpetual agitation. For centuries, **human civilizations ran on the principle of 'stability'**, which is understood as the natural order of things, and motion was seen merely as an interruption.

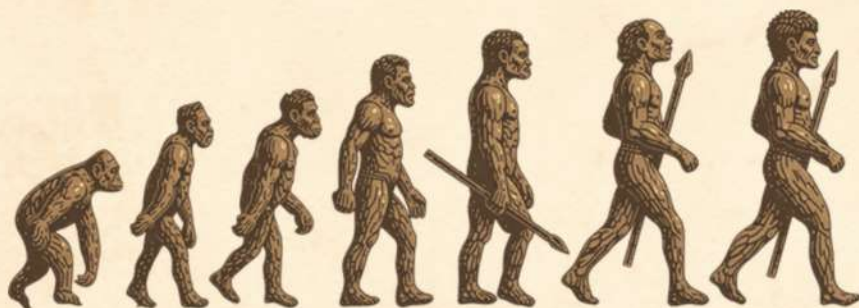
This led to building thick walls, mapping rigid borders and establishing permanent institutions in order to **anchor ourselves**. Yet, the history of science and that of society reveals **a deeper truth that 'the universe is not a collection of static objects interacting with one another'**. It is a web of dynamic movements that temporarily solidify into what we perceive as reality.

This is not a modern revelation. **Ancient cross-currents of thought anticipated the fluid realities of modern physics**. The Buddhist schools in the East pioneered the doctrine of **Universal Momentariness (kshanabhangavada)**, where existence flashes into being and passes away every microsecond. Heraclitus from the West observed that one cannot step in the same river twice, **recognizing nature as an uninterrupted wildfire of 'becoming'**.



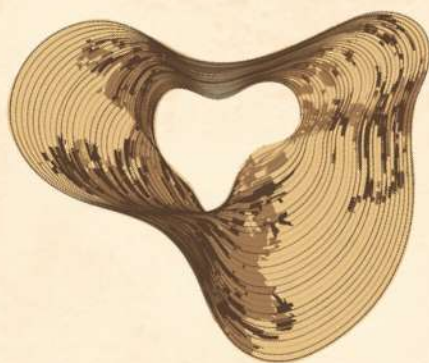
Einstein is noted to have mapped the erratic, jittery dance of microscopic particles suspended in fluid (known as Brownian motion), which he mathematically validated to what these ancient philosophers intuitively felt. **The universe is in a constant state of flux.** Therefore, to understand history, one must stop analysing static eras and turn to analysing vectors of movement.

From the lens of kinetic physics, **we could map human civilization using four fundamental patterns of motion, centripetal, radiation, tensional, and elastic.** The gravitational pull drawing an object towards a denser center could be considered as centripetal motion.



In human terms, **this is the history of urbanization.**

Just as cosmic dust collapses to form stars, resources and **human masses have historically collapsed into megacities**, a phenomenon modern urban theorists map using the **complex geometry of fractals.**



On the other hand, radiation motion acts as the cosmic counterweight, displacing energy outward from the epicenter. We see this mechanical reaction during historic collapses: **wars, resource depletion, or climate failures that force diasporas and refugee crises to radiate across geography, scattering culture and altering the periphery.**

As these opposing forces collide, they generate tensional motion. **This is the friction of history**, the systemic grind between centralized power and decentralized resistance, seen in feudal struggles or shifting legal authorities.

Finally, when these tensions become unsustainable, societies experience elastic motion. Like a **stretched rubber band snapping into a new form**, laws bend, regimes rupture, and social frameworks stretch to accommodate the new kinetic reality, **creating a more flexible environment**.



This constant historical churning follows a predictable **three-step evolutionary cycle of:**

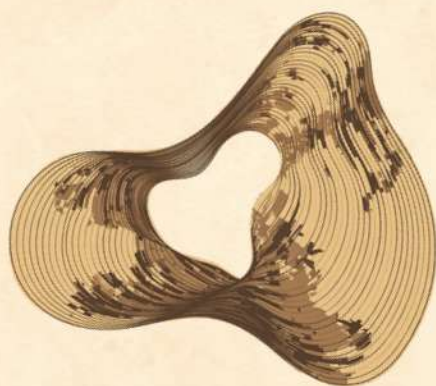
flow, fold and field.

The **'flow'** can be understood as **the baseline current of everyday life**, the steady, predictable rhythm of a society which is surviving and adapting. However, history is inevitably interrupted by the **'fold'**, which is **the point of intense friction**.

This could be in the form of an industrial revolution, a global pandemic or an economic crash. These folds bend the existing trajectory of civilization, forcing a paradigm shift. When these folds repeat, stabilize and institutionalize, they create a **'field', which is a brand new normal** which sets the stage for the next grand flow of human history.



History is therefore not a collection of dusty, immovable monuments, but a **fluid mechanics lab operating at a macro scale**. By studying physics of how civilizations move, disperse, and adapt, we can stop trying to build brittle, unbreakable dams against the currents of time, and instead **learn how to navigate the inevitable flow**.



Author Bio:

Chintada Bindu is a **Doctoral research scholar in the Department of Philosophy at the University of Delhi, India**, where she is currently writing her thesis on intersections and implications of Satire in Morality, and Epistemology. Her research explores **how humor challenges what we know and how we judge, alongside interests in Indian aesthetics and practical philosophy**.

When the Mighty Cholas Moved on the Ocean!

– Param History Desk

Movement is the fundamental currency of reality. Even in "stillness," your atoms vibrate, the earth spins at 1,000 mph, and our solar system hurtles through the galaxy. In biology, movement is the pulse of life—nutrients crossing membranes and neurons firing. Without it, there is only "static boredom."

But movement isn't just a law of physics; it's the engine of history. When the flow of ideas, money, or people is obstructed, the world shifts. When the Ottomans taxed trade at Constantinople, Europeans moved toward the sea. The Panama and Suez Canals were carved into the Earth simply because humanity refused to wait.

Long before these, an Indian empire launched a massive naval "movement" to reclaim the seas.

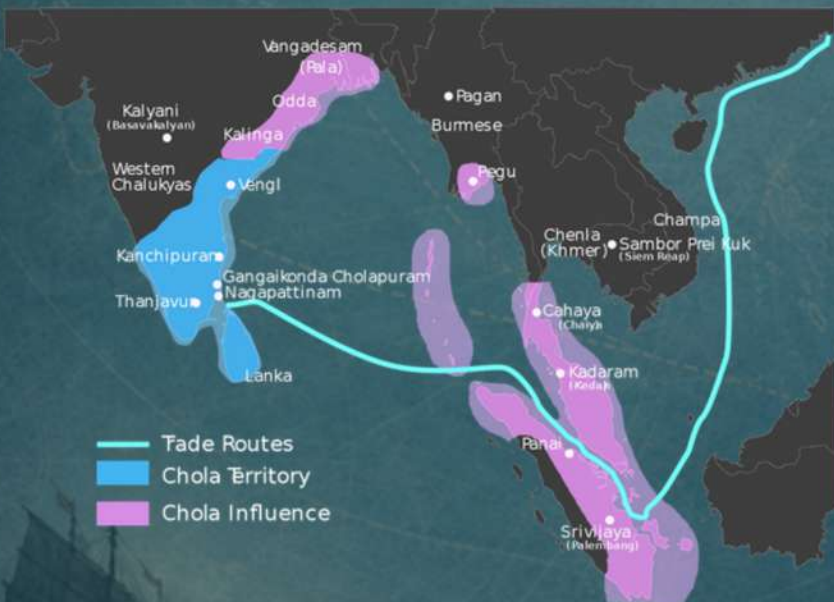
The Chola Maritime Blitz (1025 CE)

Under **Rajendra Chola**, Tamil merchants were the original "multinationals," running trade networks from Oman to China. However, the **Srivijaya Kingdom** became a hostile gatekeeper. By leveraging their strategic grip on **Kedah (Kadaram)** to impose excessive tariffs, they bottlenecked the vital sea lanes and paralyzed the movement of Indian goods.

Rajendra Chola's response was a masterclass in kinetic power. He didn't just send a message; he sent a fleet. War-elephants, catapults, and fire-arrows boarded ships to liberate the seas. To design our map, we trace the Chola fleet's path across Southeast Asia:

- **Srivijaya:** The heart of the empire (**Palembang**, Sumatra).
- **Pannai & Malaiyur:** Key trade nodes in **North and Central Sumatra**.
- **Temasek:** The strategic tip that became modern **Singapore**.
- **Linngi:** Pinpointed to **Seremban**, Malaysia.
- **Vallappandur:** Reaching as far as **Southern Vietnam**.
- **Merillimbangam:** The **Isthmus of Kra**, Thailand.
- **Kadaram:** The final siege at **Kedah**, Northern Malaysia.

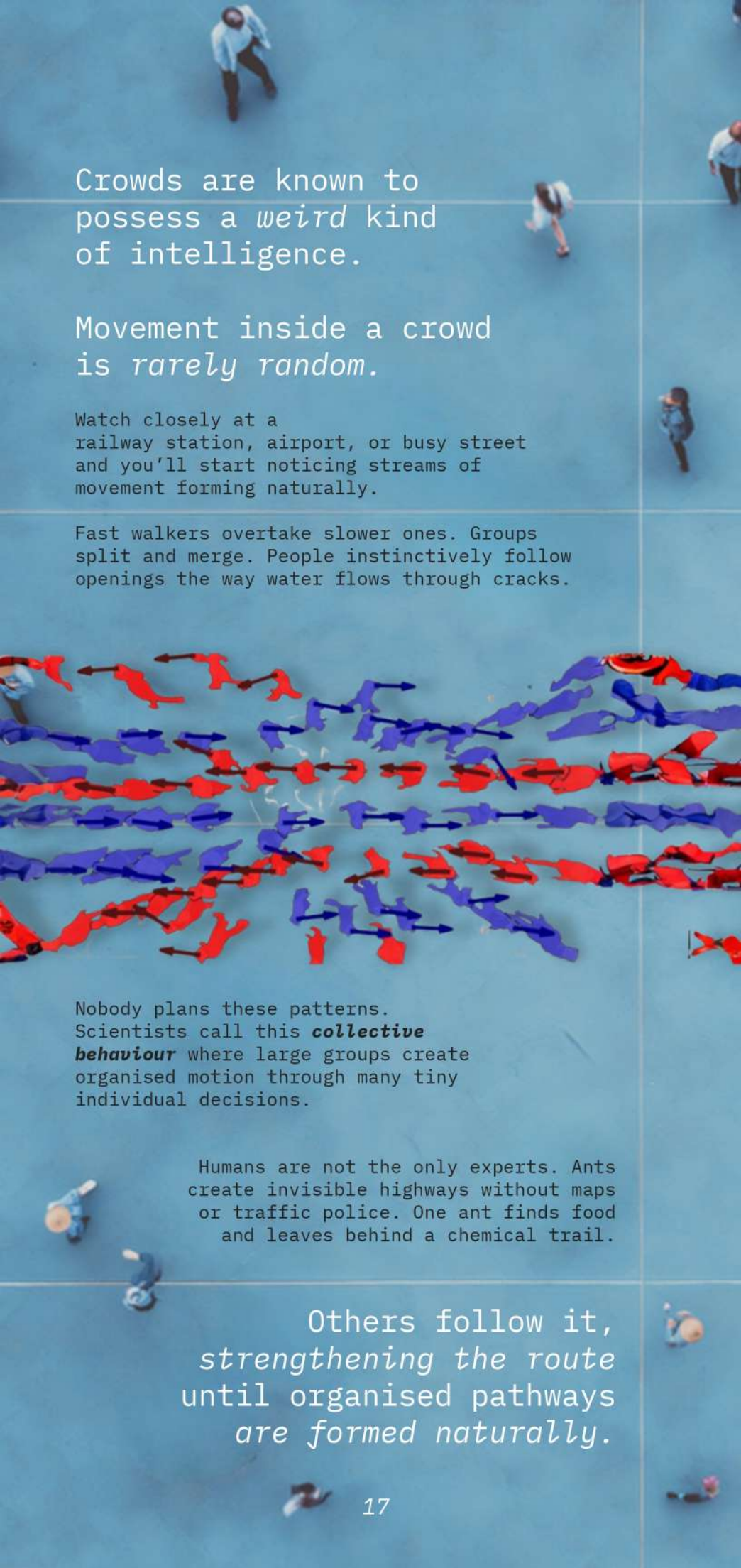
By 1025, the Cholas had dismantled the blockade, securing free movement for global trade. Today, the nearby **Malacca Strait** remains the world's trade jugular. History reminds us: when vital movement is obstructed, power belongs to those who can clear the path.



You're running late.
The doors of the metro open. A
hundred people spill out while
another hundred attempt to get
in at the exact same time.

Somehow, without rehearsals or
instructions, everybody
twists, sidesteps, squeezes
through gaps, and keeps
moving.

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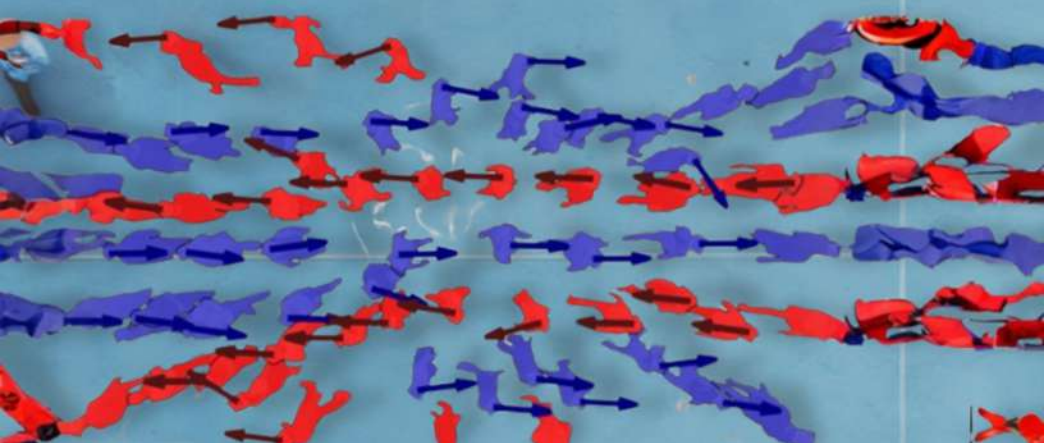


Crowds are known to possess a *weird* kind of intelligence.

Movement inside a crowd is *rarely* random.

Watch closely at a railway station, airport, or busy street and you'll start noticing streams of movement forming naturally.

Fast walkers overtake slower ones. Groups split and merge. People instinctively follow openings the way water flows through cracks.



Nobody plans these patterns. Scientists call this **collective behaviour** where large groups create organised motion through many tiny individual decisions.

Humans are not the only experts. Ants create invisible highways without maps or traffic police. One ant finds food and leaves behind a chemical trail.

Others follow it, *strengthening the route* until organised pathways are *formed naturally*.



Birds do something even
more dramatic.

Huge flocks of birds like starlings swirl across the sky in *formations called murmurations*, moving almost like smoke. There's no leader bird directing traffic. *Each bird simply reacts to nearby birds' presence: stay close, avoid crashing, move together.* It's incredible to watch them.

We mirror these patterns more than we realize.

Ever noticed how traffic jams happen for no particular reason?

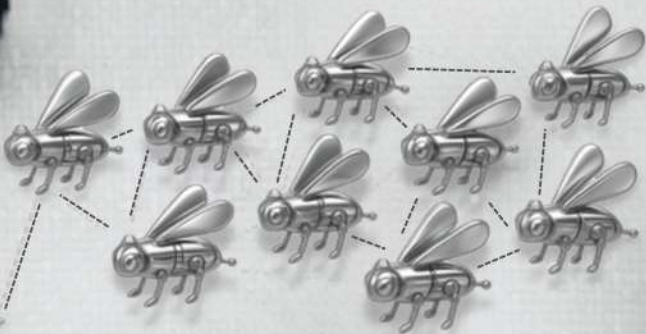
One person taps the brakes slightly. The next reacts a little later. That tiny interruption travels backward through traffic until hundreds of vehicles slow down.

Even applause behaves the same way. One person starts clapping rhythmically, people nearby sync naturally. Suddenly an entire auditorium is moving in unison.

Crowds
constantly
transform
individual
movement
into shared
behaviour.

Scientists study them
carefully because
understanding crowd
movement helps design
safer stadiums, airports,
concerts, festivals, and
evacuation systems.

**Engineers even build swarm
robots inspired by ants
and bees.**



Turns out, movement
is not always about
getting somewhere.

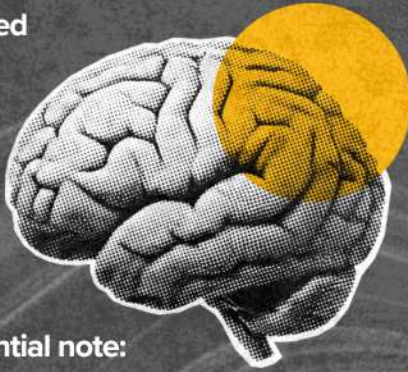
Sometimes, it's
about how countless
tiny movements
interact to create
patterns much larger
than themselves.

Movement

Movement. **What is movement?** A Roomba, your small intestine and an overthinker are all part of the same room. The Roomba is just following a **mapping algorithm**, it's a predefined set of checkpoints it needs to tick off.

The small intestine is doing something called **peristalsis**, which is basically a stadium wave of the muscle. And the overthinker is just doing what neuroscientists call "**stimulus independent thought**".

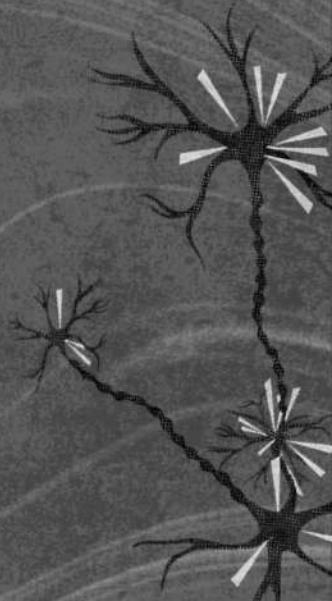
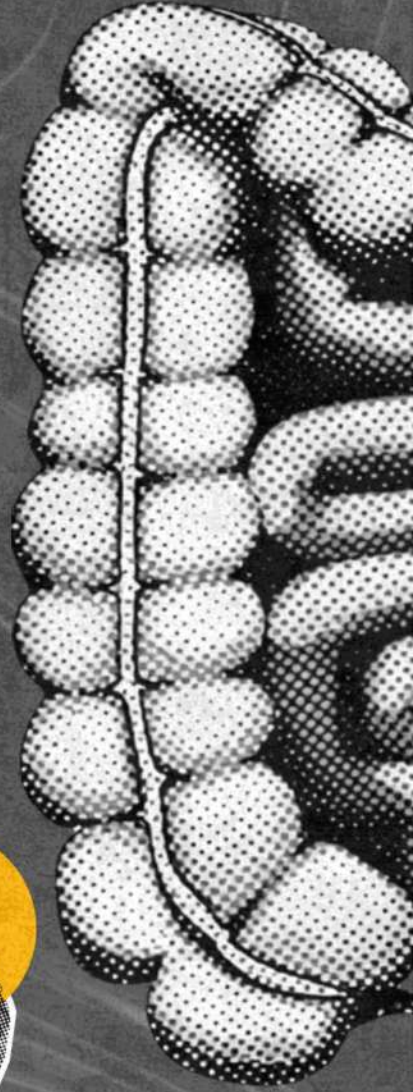
Are any of these voluntary? Or does it come to our physical or mental perception where the intent was to overthink, or to digest food? All of these "**movements**" were progressing, regardless of **whether or not you intended it to.**



On a tangential note:

Dharma, in particular **Swadharma**- the path that is native to your being brings to light the concept of **aligned movement - not of the body but of thought.**

Because, thoughts are also essentially **firing of neurons**, a chain link of neurons that directs your bodily movement. This movement of thought is what makes life cohesive- it's not what one "should" be doing, it's **what you would draw if you stopped fighting it.**



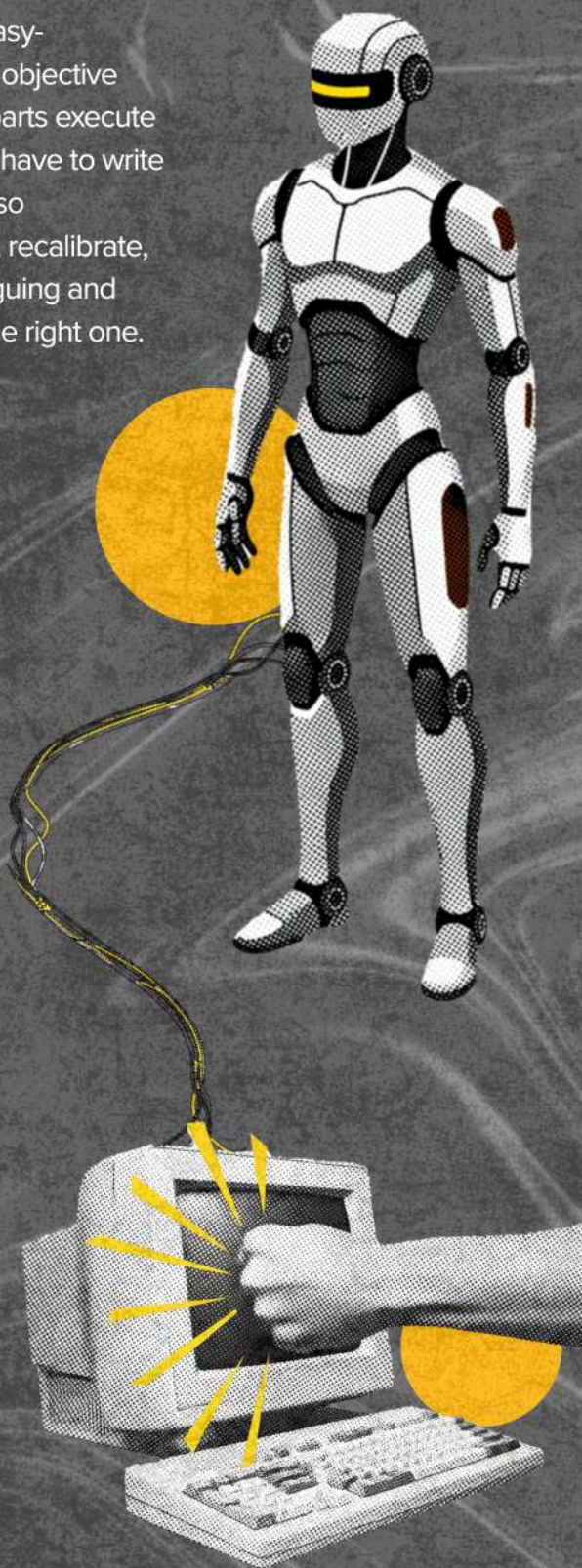
A traditional robot has it easy- somebody else writes the objective function and mechanical parts execute it. With us it's different, we have to write it on our own, run it and also contemplate, ponder over, recalibrate, realign, restart all while arguing and questioning whether it's the right one.

Tech revolutions, scientific paradigm shifts, civil rights- none of them started with a press release, **it started with one person making one voluntary internal movement**, then another and then some more. The world order drifts when enough people stop drifting and **start steering- consciously**.

Tim Berners-Lee invented the **World Wide Web at CERN** and gave it away for free- when he could've charged for it. Every link you click today, every URL has a certain direction- someone's thought because one person decided that the web should belong to everyone.

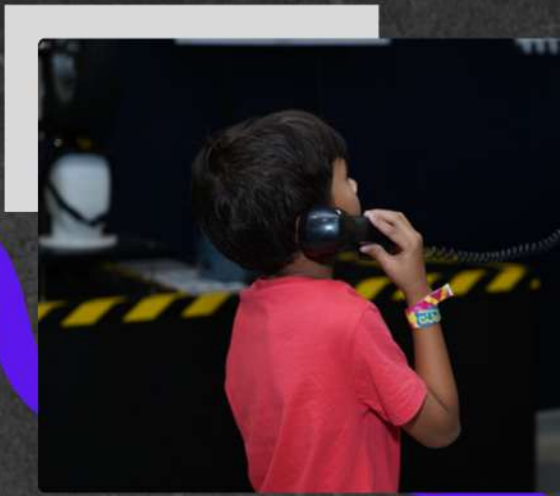
Einstein was a patent clerk in 1905. That year, he published groundbreaking work on mass-energy equivalence and Brownian motion. A decade later, in 1915, he completed the General Theory of Relativity, reshaping modern physics.

Conviction in thinking from first principles! The hardest movement to engineer isn't the one with motors, it's the one with conviction. **The outcome defines whether its movement.**



Parsec Whitefield





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ready for
an immersive
science experience
in Whitefield?



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