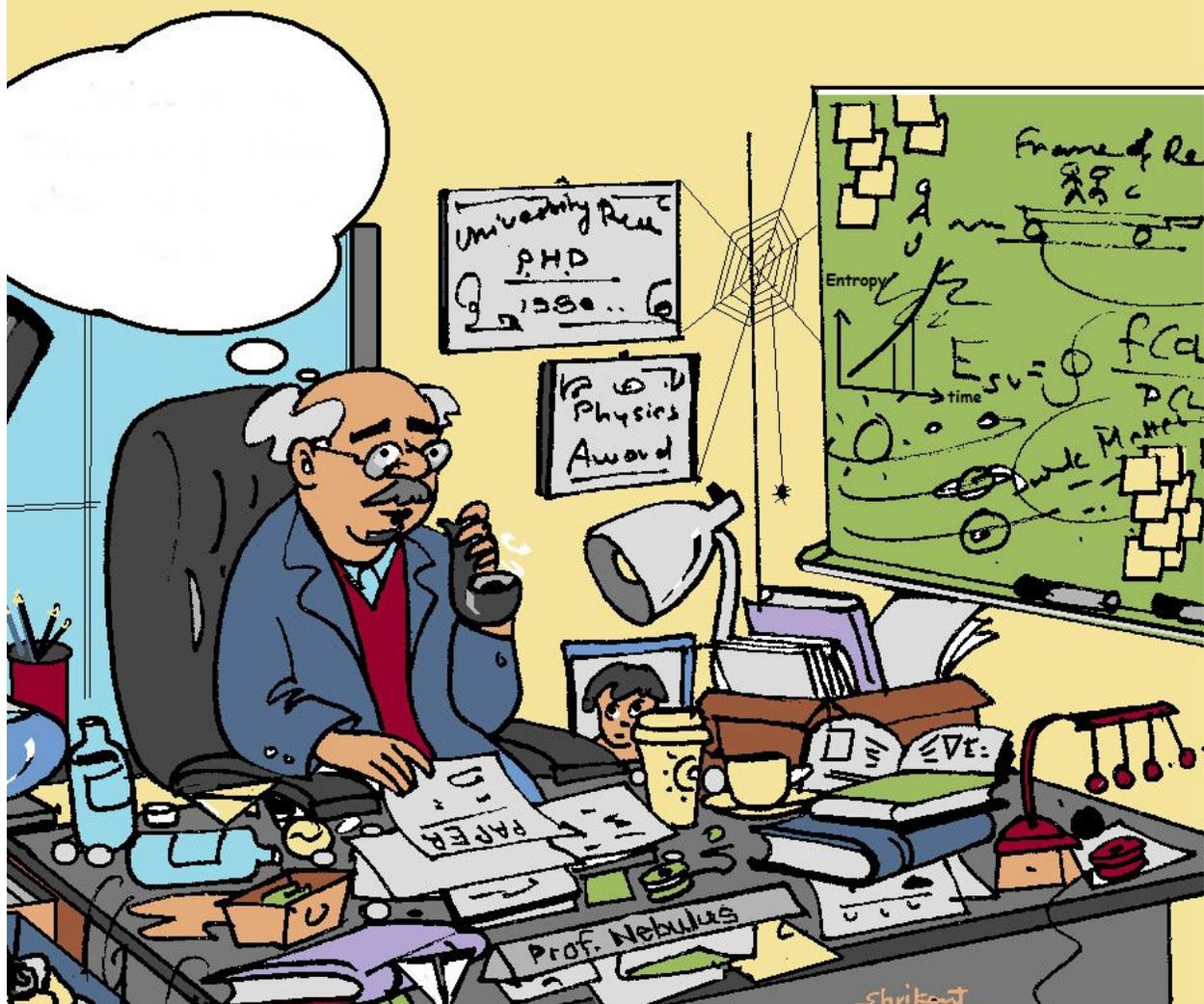


If There is 'Truth', Then This is It

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Preface

This world I find myself in- how does it work, how did it come into being (if it did!)? And who's this 'me'- that seems to think, act by controlling this body, sees, hears, touches/feels, smells, tastes? Unless the answer to the later is conclusively known, nothing else known can be trusted! Sought resolution for these in properties of quanta- the building blocks of world, in the nature of singularity of big bang (or whatever prior to it)- that seems to have started all the observed, in the behavior of neurons- that seem key to fathoming (pun!). But the answer was intimate, obvious once recognized

The ingrained view says that I form thoughts to reflect my views e.g. about an inherent world - but do I? If I don't, then what is the role of thoughts- the difference between their presence & absence?

Whatever the result (of above), it would be conclusive= 'Truth'. Why? If the observations- the most intimate & direct consequences can't be trusted, then nothing thoughts say about I/world... can be!

This's a lab report- observations about formation and role of thoughts, not a speculation, a belief or a theory. Each needs to see it for themselves. Accepting what it reveals is a matter of detachment

Chapter 1: A relatively gentle introduction. Chapters 2, 3, 4, 5, 6 clarify the empirical content of last 3 paras of that introduction: 2 - non awareness of thought formation, 3 - what is self, 4 - what is time, 5 - what is objective world, 6 -what are joys & sorrows. Chapter 7- weaves all these pieces together. Chapter 8 clarifies the completed picture by describing a situation from 5 different angles- daily life, neuroscience, biology, physics and a child's vantage. Finally, Summary conveys the gist in 4 different ways- I: Semi poems, II: A slide show, III: A Cartoon/Animation, IV: A one page comic strip

Note: there is nothing new in this 'lab report'. What it shows has been recognized throughout the ages (though not widely). Only its 'empirical-rational' elaboration, presentation, is modern - new

Click [Here](#) for Background & Bibliography

1. A Relatively Gentler Introduction (Rest of the Booklet Clarifies the Last 3 Paragraphs)

As far back as memory goes, the sense of individuality can't be denied. Obviously! Memory trace is that sense of individuality- of being a free embodied entity in a world 'out there' in time, author of thoughts, actions, unique vantage of sensations. But is it actual or illusion?

Do we choose: our gene combination, conditions in the womb and environment after birth that shape us- not just relatives, teachers etc. but even the detailed (random) events that affect neural connections? Are we even aware of 99.999999% of body processes: digestion, metabolism, immune response, cell repair, brain activity preceding complex sensory-motor coordination? No! Don't the same shaping/processes lead to the rest- intent, decision, plan?

"But couldn't quantum randomness lead to free choice?" Let's say a molecule oriented one way in a neuron's synaptic channel leads to 'tea', another to 'coffee'. No way to predict the outcome in advance. But even we become aware of that result only when the correlated thought arises- aren't aware of the flipping of molecule, nor of thought formation= no free choice

"But must be a role for 'illusory individuality' in survival- reason evolution selected it?" The language of neuroscience/biology obfuscates the essence that underlying physics makes clear: every act is part of lawful play of matter-energy unfolding from a hot/dense state to galaxies, sun, earth, life, human brain, body action this moment. No role even for illusory individual

"Agreed, no actual free individual, nor role for an illusory individual. But isn't each one a unique vantage of sensations?" Perhaps but calling it individuality is like saying a window is an individual! Besides, 'other vantages of sensations'- existence of other beings- is a belief (based on similarity with own body/behavior), not experiential. That belief subsides with related thoughts (I don't form)

"But at least My vantage's a fact?". Existence can't be denied: immediate seeing, hearing..., but inherent seer (vantage) and seen (world) are illusions. A thought's not, then is. No awareness of forming em. Thought e.g. 'I see' is the sense of an embodied seer; thought 'seen that ball before' is the sense that ball/world (own body included) exist even when not part of sensations. That sense of inherent seer-seen vanishes with thoughts, seeing remains but sans labels: my body, yours, rock,...

So no inherent world->body (except as thought evoked appearance) for sensations to arise! Those & thoughts arise from their absence- **are atomic**- as is experiential e.g. 1st waking/dream moment

"So can we say 'am not a body but am the whole moment'- as all of it is equally intimate in absence of thought division, also 'am absence of thoughts, sensations'- as it's that which transitions to their presence, its awareness?" Yes we can but with one foot still in illusion: as saying so creates an impression as if eternal silence is paused by a life of finite thoughts (or many disconnected finite lives). But the realm of time itself subsides with thoughts: notions eternal-finite and even existence vs nonexistence vanish (even if sensations are present)! What remains? A baby's I/timeless vantage

2. Non Awareness of Thought Formation = I Don't Form Them, They Arise From 'There'

We acquire words - gradually. First hear them (repeatedly), then respond to them and finally form them. Initially words are limited to the immediate sensations- mom, own name (I/me come later!), cold, yum; takes a while to understand reference beyond the immediate e.g. 'Where's the ball?'. Takes even longer to form words referring to time- right sequencing & duration of events. It's easy to point (finger) at things within immediate sensations but words (symbols) are the only pointers to things beyond 'here & now'. Somewhere along words (symbols) are formed that no one else can hear/see- "I am thinking" i.e. forming words/narratives to reflect on situations, to express I's views

But as one grows up, one may find exceptions to 'I am thinking'. Many ideas, insights, desires appear all of sudden- without deliberate effort, without thinking about them- from 'there', unknown

It's evident that 99.99999999..% of the universe unfolds by itself- without any human intervention- as lawful changes in matter/energy. This also includes 99.9999% of human body/brain esp. complex survival processes. Also, thoughts are very tightly correlated with brain activity i.e. thoughts seem to arise as part of the same unfolding- lawful brain changes in response to a question/situation or just internal. Even if some thoughts don't arise as part of that unfolding- it'd be very strange for just a few happenings in the universe to be affected by events (thoughts) 'outside the lawful unfolding of matter- energy' (that too by recent arrivals & only when they reach a certain age!)

With time, one may notice more & more exceptions to "I am thinking" e.g. during later part of my career, many complex solutions - algorithms, protocols, ways of looking at a problem etc. used to appear 'out of nowhere', fully formed and weeks/months after related 'thought was put in'. The result used to be far superior compared to the content of 'earlier effort' (or to what my deliberate thinking was capable of). After many such occurrences one starts trusting this 'design process'!

Finally one may be lead to empirical observation of thoughts. It was clear that I did not form most of the greatest insights/outputs of life but do I form any thoughts? Thought chains (even most speech) are formed too rapidly for any 'aware effort' to generate them i.e. there is no awareness of weaving related sights, sounds, meanings. Even "am (deliberately) thinking about xyz" actually means "am aware of formed thoughts about xyz". The content is known only when related thought arise. Any awareness of partial content, reasoning, intervention etc. leading to some 'eventual thoughts'- are themselves formed thoughts!

Empirically, sight, sound, meaning related to a thought is absent, then present i.e. thought awareness arises from its absence - the same absence/nonexistence that transitions to first waking or dream thought. So 'there' doesn't just spawn ideas/insights, it spawns every thought. As we will see in subsequent chapters, this recognition shatters the ingrained view of life - turns it upside down: there's no inherent free self/world 'out there' to spawn thoughts, it's the other way round!

(Note: since I don't form thought/speech - all word/symbol awareness, heard, read..is like breeze)

3.What is the Self: Were You Born on Your Birthday?

The body you call your own - wasn't. To say that it was born at conception would also not be true. The fertilization of egg was an event in a long- perhaps eternal- chain: part of the unfolding of universe from a hot/dense state to galaxy, sun, earth, life, humans,..The body decoupled from your mother's on 'birthday'. But it was just another vantage of sensations: sight, sound, touch/feel, taste, smell. Integral part of the universe. You - the sense of a free entity existing in time that calls that body 'me' - were not there on 'your' birthday!

Today there is almost incessant flow - experience - of words/symbols: heard, read, written, spoken, mostly thought. Yes, even thought & speech is 'experience' of words/symbols. The ingrained belief is: I form thoughts to reflect my views e.g. about myself. But as seen earlier, I don't form thoughts!

That wasn't the case on 'your' birthday and for many months later. There was no experience of words - obviously not as read/written, spoken or thought but not even heard. Hearing 'later', 'had to', 'hope to', 'did', 'not now', '5 p.m', '13.2 billion years ago' etc. didn't conjure past/future (time); nor did 'in the next room', 'behind that hill'. 'where were you', 'dark side of the moon' etc. conjure a world beyond immediate sensations. They were just sounds. Without experience of words/thoughts - their meanings - it was always 'here & now'

Raw immediate sensations (sans thoughts) have no notions of waking vs dream, of a world beyond sensations, of gap in sensations (deep sleep), my body vs the rest, I vs you, observer vs observed, past-future, birth-death etc. No notion of some I claiming, liking/disliking sensations. No notion of any history- of the world or own. No notion even of "I am"= I exist!

Slowly words started flowing - not just sound. First heard, then spoken/thought (you don't form!). 'You' were (gradually) born i.e. 'sense of a free entity existing in time' emerged and strengthened. Experience of words e.g. 'my body' = sense of being the body; 'moved my hand' = sense of author of body's actions; 'I think', 'chose' 'will decide' = sense of thinker, free choice maker; 'heard, 'tasted' = sense of subject of sensations; 'I love', 'got angry' = sense of one who has emotions; 'my child', 'my country' = sense of center of relations; etc. Just experience of 'was 5 years old then' evokes the entire relevant past - I in time. So the sense of I comes & goes with thoughts/words 'I don't form'. I don't exist apart from thoughts (word awareness)!

So 'you' as an actual entity were never born, hence can't die! A notion, an illusion- 'you'- is born (& dies) with experience of every thought (you don't form!). Now that's magic! How then do evident thoughts arise, what's aware of em? Brain? Space? Let's investigate the reality of time & the world

4. What is Time?

The changes within a day, its turning into night. The seasons. The flow from birth to death. Though clocks have choreographed life for ages (!), 'it' can't be seen, heard, tasted, smelled, touched/felt. It seems to tick whether one is aware of it or not, as: event- detected change; flow/passage- sequence of events; duration- comparison of different passages; direction - large scale phenomena mostly happen in one direction- aging/rusting is seen, never their reverse

But none of this (even if written in terms of exotic math equations!) helps in understanding the empirical - experiential - sense of existing in time. There is no sense of time (existence) in deep sleep. There is no way to know in a dark room - whether your sound sleep lasted for hours or for days. Also, waking 'time scale perception' isn't fixed- gets jumbled up in a dark room after a while; years seem to go faster with age; wait for the beloved feels like eternity

As seen before, I don't form thoughts. "I am thinking about xyz (say, time)"- means - "I am presently aware of formed thoughts about xyz". A thought is absent, then present- it arises from its absence. There is no time in immediate sensations- just 'here & now'. Awareness of thoughts/words referring to past/future is the sense of time i.e. ***the time that appears, the only known, arises & subsides with thought/word/symbol awareness.*** No thoughts, no time

Almost every thought contains time= sense of an entity existing in time. A single thought displays different mix of properties described above e.g. a moment ago, tonight, last year, all conjure passage but with different duration; 'when I was 5' evokes passage, its duration and direction; should've, did, hope to, will decide, who's next- are the passage; 'x decays quicker than y' is sense of passage and its scale; even just "Bob" is memory- passage. From our thought vantage, a child is a body in time - born, asleep, awake, growing, adaptive behavior reflecting memory- time. But from a child's thought free vantage, it's always "here & now".

Similarly, as clarified in the next chapter, thoughts conjure an earth in time, evolution of life in time, correlation of brain activity (in time) with thoughts, life of a body in time. It's not 'built up thought by thought'. 'Big bang was 13 billion years ago', 'it's from the Jurassic age', 'remember my 1st day in school'-***a single thought evokes the entire relevant context, it vanishes with related thought***

Relativity (thoughts!) showed that its not just human perception of time that's malleable but so is time measured by clocks. But empirical reflections reveal that all this is valid within the appearance of time thoughts conjure. There's no time ticking away 'out there'- thoughts make it seem so. Thought awareness arises from its absence = time arises from its absence. It is the same absence- nonexistence- that spawns first waking/dream thought. This is all that can and need be said about time in the realm of thoughts. 'Thought arises' too is a thought- sense of past without thought and entity present since then = sense of time! That too- like all conjured- vanishes in silence. And world?

5. What is 'The World'? The Big Bang - Story, Evidence & a Twist

The vastness of night sky. All those galaxies, pulsars, stars, planets. How did it get that way? Einstein's theory of General Relativity applied to the universe as a whole says that it should either be contracting or expanding (not eternally stationary- as had been assumed till then). The resulting model- hot big bang- isn't about the universe's origins but about its unfolding

The evidence - all galaxies seen moving away from ours at rates proportional to their distance from us - says that it is expanding now (click, wait, watch). So if we run it's movie backwards then all that can be observed should fit in a smaller volume, get hotter. How far back can we rewind the movie? Mathematics of Einstein's theory says that it would end up in a singularity in ~ 13 billion years i.e. zero volume, no time, infinite density/temp. What's the evidence that universe has been expanding i.e. gradually cooled down (as it would with expansion), how far back does the evidence go?

The universe would have cooled down enough ~ 300 K years after the presumed singularity to 'bind free electrons to nuclei' - to form atoms. This would have allowed radiation, until then trapped by the sea of electrons (not allowing it to go too far), to travel long distances. We can detect this radiation released then - bombarding us from all directions at exactly the predicted frequency (related to temp. then): called CMBR, Cosmic Microwave Background Radiation (click). Going further back, universe would have cooled down enough ~ 3 minutes after the presumed singularity to form H, He, Li nuclei from free protons/neutrons. We can observe these elements today exactly in the predicted proportions (related to temp. then)

There are only two known possible sources of evidence from an earlier era: (1) pattern of gravity waves - we haven't detected any gravity waves yet (from any era!) and (2) Imprints left by earlier processes, including gravity waves, on CMBR. Deciphering 'minute variations' in it has been very challenging. Whether we can gather any evidence about the earliest era or not is for the future to tell. Till we have such evidence, theories about earliest stages of expansion (let alone about how it got started!) would remain stories. ***But they would be stories even with the evidence!***

How? Our notion of 'the world' is based on an ingrained belief: I form thoughts to reflect my views- about a world 'out there' etc. But I don't form thoughts i.e. we experience incessant breeze of words/symbols (we don't form): heard, read, spoken, mostly thought. What is its role in life?

Without thoughts/speech- or words read/heard (I don't form!) - there are just raw immediate sensations: sight, sound, touch/feel, smell, taste. There is no sense/notion of a world beyond sensations - beyond 'here & now'. Experience of words/thoughts I don't form e.g. in the next room, where were you, behind that hill, 13 billion years ago, this pattern of CMBR could be due to gravity waves - is the sense of a world 'beyond sensations', a world (the only known) that appears to exist even when not part of sensations. In waking & in dream. Experience of most thoughts is such sense

Immediate sensations aren't 'the world': the sense that things e.g. rock, you, neurons, Andromeda galaxy, my body- exist when not part of sensations. No experience of thoughts/words, no 'world'!

6. What are Joys & Sorrows?

Imagine a life just of sensations - sight, sound, taste, smell, touch/feel (e.g. pain). But no thoughts, no sense of control over the body. When eyes turn, related movement is felt and change of scene seen. The body may move towards certain things- accompanied by increase in the flow of saliva, may move away from others-accompanied by sweat and rapid breathing, may resist something- accompanied by change in muscle tension. All is felt as it arises - even physical pain. Nothing is labeled, claimed/judged by some 'I', nor explicitly (= **mentally= as thoughts**) yearned, resisted

There may be some pattern in the sequence of sensations. Hence anticipation of some event just prior to its arising. Sensation related to that would be felt, momentarily. Add partial thinking: only nouns & 2 adjectives (yuck/yum!). The same exact life- sensations without sense of control- would go on but now accompanied by 'rose yum', 'egg yuck' etc. All still in the moment - nothing claimed by "I", **nor explicitly (thought) yearned/resisted**'. A missing 'yum' in some familiar context may lead e.g. to a specific sound, but not dwelt on beyond

Now include full thinking: tenses, verbs etc. There's no awareness of forming thoughts- they arise on their own. So it's still just a sequence of sensations except, now it includes thought narratives. Not getting/losing yum, getting yuck= suffering, its inverse= joy. Yuck and yum as they arise in a moment are not suffering and joy - **'yearning for, resistance to or memory of them' - is i.e. joy & sorrow can only arise in presence of thought narratives** e.g. recurring thoughts like- 'I hope yuck doesn't happen to my abc', 'I am so looking forward to yum', 'yuck happened, I will never see my xyz again'

But joy & sorrow won't arise even in presence of thoughts if a single key feature is absent from the narratives- 'sense of control'- I think/act: it's easy to see that- credits, blames/anger, guilt can't arise in narratives with absence of sense of control. No 'yearning/anxiety/worry thoughts (about a goal)', no joy on success (achievement), nor disappointment on failure. Even if 'yuck' happens, it is felt like sensations in the first two paras above. There is no 'I don't want yuck to happen', 'I wish things could have been otherwise', 'Why me' i.e. no resistance, no entity who 'cares' about the yuck or yum. Then would yuck/yum be yuck/yum- wouldn't they lose their significance/impact?

Thoughts arise but are not random - have a structure (are related to each other). So elimination of key features e.g. sense of control, not only constraints what narratives (= colors) can arise but also changes significance/impact of what does arise! Free 'I' - a fiction - is at the root of human drama!

Raw sensations e.g. related to fear, aren't emotions. They need to be labelled (fenced from the overall context), claimed by someone, embedded in a narrative- some I is needed to be happy, angry. That someone can't just be a narrator but needs to have a sense of control. A conclusive recognition that there is no embodied entity with actual control doesn't take away 'sense of control' from the thought narratives i.e. **joys & sorrows don't go away with mere intellectual realization!**

7. Weaving it All Together - Successive Approximation to the Actual

The ingrained view says that I am a free embodied entity in an objective world= things exist even when not part of sensations i.e. I form (at least some) thoughts and sensations arise from 'world-senses-brain. This view works in practice- hasn't hindered progress. Is it valid?

What does science as we know it say? Not neuroscience, biology/evolution. Their practical utility aside, they obfuscate the simple essence that underlying physics makes explicit: a very hot, dense state has been unfolding to become galaxies, sun, earth, life, humans, brain activity this moment. No place for individual body actions (anymore than there is in wind blowing, tree growing) in this lawful dance of matter-energy. Even the illusory sense of individuality e.g. thought 'I did', is correlated with brain activity- part of that unfolding

Though science's view is far more consistent than the ingrained, it has an issue: **thoughts are correlated with but aren't the same as brain activity**. You, machine & I can see my brain activity but only I feel my thoughts/dreams. No imagined light can trigger a photodetector! The brain activity that you & I see can only become another state or activity you & I see- **can't** become (exchange energy/info with) or predict the existence of thoughts only I can see

A thought's absent, then present i.e. I don't form em- this observation resolves the above. What is the empirical difference between presence & absence of thoughts ? Their presence is: the sense of self in time- the story of a free embodied entity, an objective world- the sense that things (even own body!) exist even when not part of sensations, joy & grief, birth & death= **I, time & world that appear, the only known, arise & subside with thoughts. This is conclusive= the limit of empirical & rational.** Why? If this most intimate observation & its direct consequences can't be trusted, then nothing else thoughts say about I/time/world can be!

So the ingrained view's invalid. **There's no inherent free embodied I or world known- just thought conjured appearance**. Thoughts & sensations arise from their absence- are **atomic (no how/why)**- as is experiential (e.g. 1st waking/dream moment)= that absence isn't 'nothing' but is Ma of everything!

But the above is valid only in the realm of time. As is the undeniable sense of existence- awareness of sensations sans thought conjured division: 'this body/voice- me, that- you' etc. But even that realm vanishes with thoughts! Then there's no separation at all, not even 'seer vs seen' or 'exist vs not' (even if sensations are present). From a thought's vantage, a baby appears an entity in time- born, awake, asleep, learning, growing but a baby sees no I, nor birth/death, awake/asleep - time

What 'remains' in absence of thoughts, in the gap between thoughts? It can only be pointed to as absence of all that thoughts conjure e.g. absence of illusion- of I, time world etc= the background of thoughts in any moment Close your eyes, shhhh, feel the moment - that is non illusion. Open your eyes, no labelling, no commentary. It still non illusion. **Very obvious, intimate, essence of being - no need of, nor can be described. Any later recall, judgement about it - illusion in action. This conclusive recognition of an illusion as illusion doesn't end it. In fact, the recognition, too, is part of the illusion!**

Chapter 8: World is as Words Display

"They call me X. I have been sitting in front of this computer for over 10 hours - working, can no longer tolerate the hunger. Let me go the kitchen. What do we have here - bananas and ice cream. Both can meet my need. Banana is tasty & healthy but ice cream looks really yummy. Hmmm, blood test results were on the border the last time. Better eat 2 bananas"

The above as viewed by neuroscience: specific nerve signals and chemical messages from the digestive system reach the brain. The resulting neural activity is correlated with the sensation of hunger. When it crosses a threshold, neural firing patterns modulated by feedback from the senses (eyes, skin) drive a sequence of muscle movements - X's body moving into the kitchen. Further neural activity- guided by memory of tastes and health priorities stored as synaptic states - oscillates a bit before settling down as 'eat banana'

A view from biology: a random mutation and subsequent self organization of matter in an early single celled organism lead to the ability to swim up sugar concentration gradients (i.e. towards food source). Having this function increased the chances of survival in some environments (relative to those who lacked it). A long series of such random mutations and self organization from fertilized egg to fully grown form- lead to our digestion/metabolism, eye, muscles/joints, brain, The move towards (& eating) food above is part of their interplay

A view from physics: matter-energy-space have been lawfully unfolding in time - without any human intervention - for ~13+ billion years. From a very hot & dense state to galaxies, stars, earth, life, X. The episode above is part of the same long sequence of lawful changes

What would a child see? We must first remove a belief that distorts the view: 'I think'. It implies that an individual forms thoughts to reflect its views. But as we have seen, that belief is untrue

Without thought awareness - a child's vantage - the immediate sensations aren't labelled (fenced) into 'this body is me, that is X and banana'; there is no 'I see X and banana' i.e. no separation as seer vs seen, just seeing without being called so. No narrative e.g. 'first X was not near banana, then walked towards it and started eating', hence no time; nor 'objective X/banana' - the sense that they exist (in time!) even when not part of sensations; there isn't even difference between seeing/waking/existence vs not seeing/sleep/nonexistence! We can know what a child's view won't see (all the word/thought conjured) but ***only deep silence can reveal 'what it does see'***

So all is a play of thought (***word/symbol awareness***) 'I don't form': daily thoughts (1st para above) conjure a free being with a body in an objective world in time; neuroscience/biology thoughts take free will away but keep a world in time and a causal role for the body/brain/senses. Physics thought take that role away, just evoke a world in time. A child's 'thought free' vantage wipes off even that! This very moment is a mystery- it appears as 'thoughts/words I don't form' choose to display

Summary I: Nothing Says it Like (semi) Poems

For the Joy of Singing

Songs spring up from deep within
but I can't predict when or which
Lyrics say I am a body in a world
a story that subsides with words
Then all illusory divisions vanish
even existence vs nonexistence!

Awe

Tho thoughts rise from within, can't predict next
yet are not random, conjure coherent narrative -
drama of a free embodied entity in world in time
All that - even time - vanishes with every thought

Within story, ***no how or why for above, just awe***
in silence, no questioner & nothing to ask about
Recognizing the illusion as illusion doesn't end it
may awe overwhelm thoughts in every moment

Just Your Imagination

Choice, seer-body-world, time, exist-not, r thought clothing
From thought vantage, 'the naked' = silence = your essence,
necessarily appears as a state in time but
from 'the naked vantage', there is no time

Your thoughts are the most intimate but
you can't predict the what, when of next,
mostly conjure being free embodied entity in world in time
If drama overwhelms, remember, it's just imagination, shhh

Summary II: Click [Here](#) for SlideShow

Summary III Click [Here](#) for Cartoon/Animation (generated using tools from Xtranormal.com):

Summary IV: The Essence in a Comic Strip (generated using tools from stripgenerator.com)

