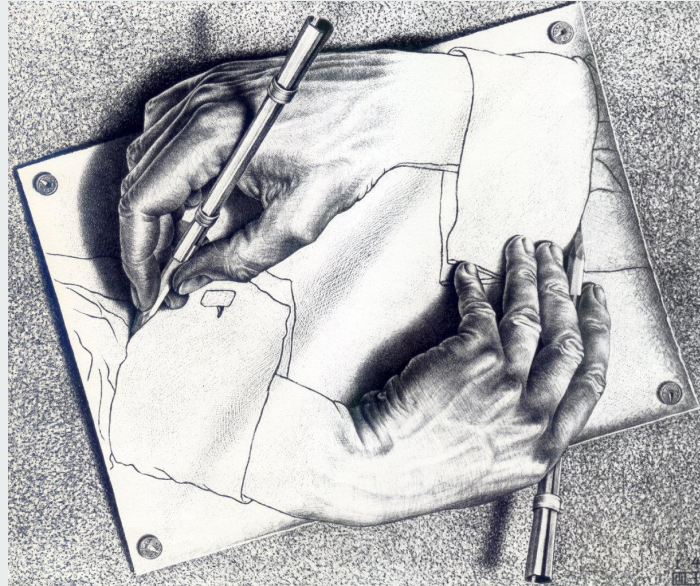


Amit Goswami

Physics within Nondual Consciousness

Rupanshu Ganvir





Introduction

Philosophy faces several dualisms:

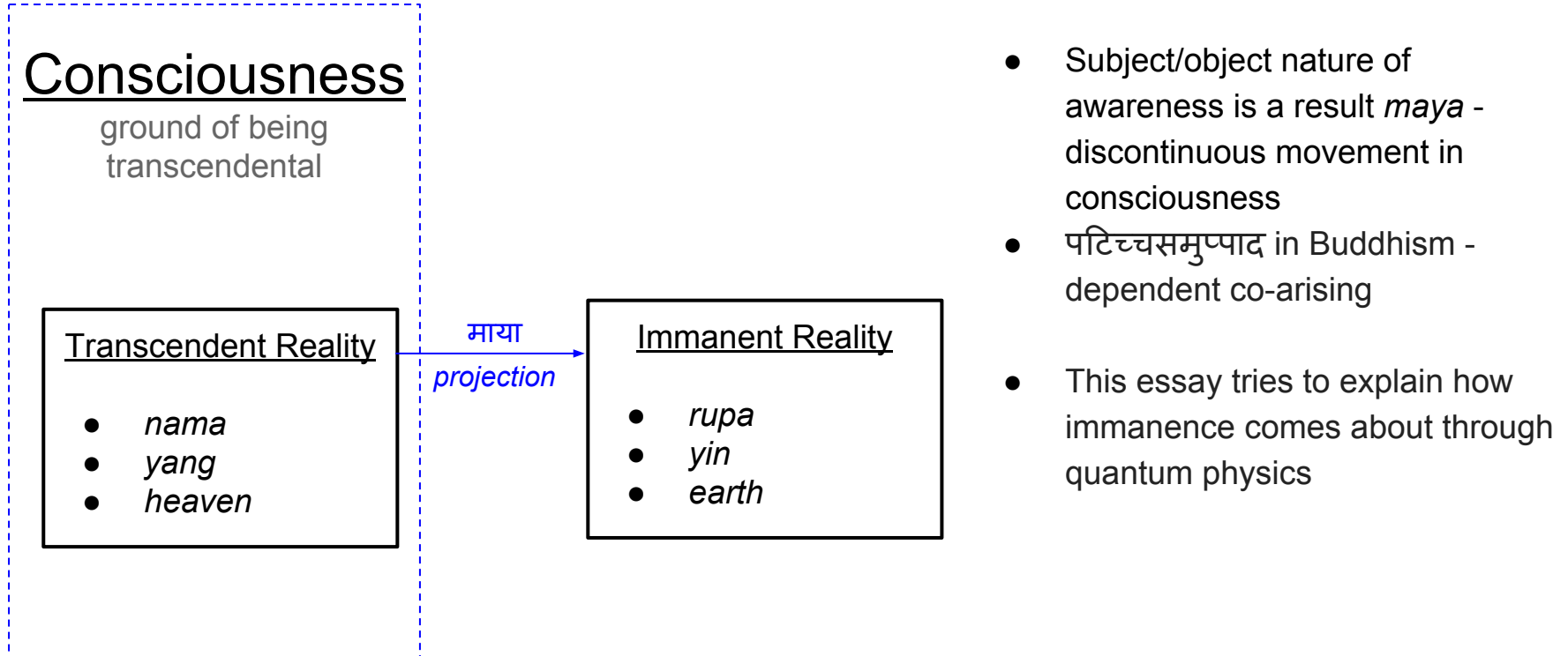
- transcendent/immanent
- subject/object split experience
- life/non-life
- mind/brain
- exteriority/interiority
- subject/person

Dualism - How do mind/brain interact?

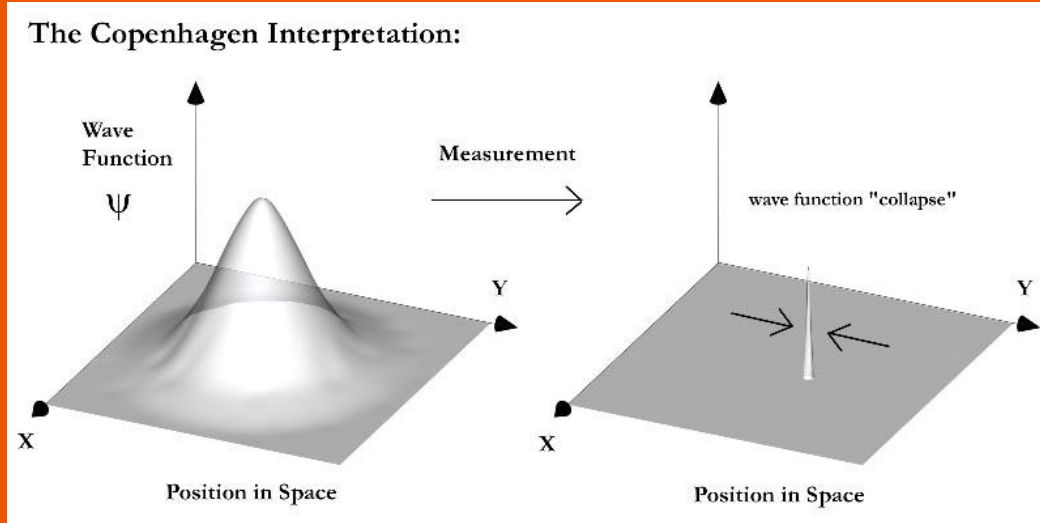
Monism - Subject/object experience?

Attempts to establish that monism underlies all the dualities mentioned above.

Monistic Idealism (Eastern Philosophy)



Premise



No mathematics describes how this collapse occurs.

This is where QM gets philosophical.

Some hold an agnostic approach to this mechanism of collapse.

A school of thinkers (including von Neumann) hold that choosing agent has to be a nonmaterial consciousness - something which transcends space, time and QM itself.

But, how does this consciousness interact with matter?

How does consciousness interact with matter?



Posit that

- *consciousness* - ground of being
- *matter* - waves of possibility within consciousness

A universal consciousness is responsible for the choice and this choice is completely free

The following now make sense:

1. “possibility/existence” of object only makes sense when embedded in a consciousness
2. resolves the Wigner’s Friend thought experiment

Resolving Dualities



1. Conscious/Unconscious Distinction and Subject/Object Split
2. Life/Nonlife Duality
3. The Mind/Brain Problem
4. Exteriority and Interiority of Awareness
5. Subject/Person Duality



Conscious/Unconscious Distinction and Subject/Object Split

- Collapse of possibility wave occurs only when an observer is looking with awareness
- In absence of observance or sensory perception, there is consciousness but no awareness - unconscious processing
- *“Behold the causal circularity of the role of the observer in quantum measurement. The observer, the subject, chooses the manifest state of the collapsed object(s); but without the manifested collapsed objects, including the observer, the experience of the subject does not arise either. This circular logic of the dependent co-arising of the subject and object(s) is called **tangled hierarchy**.”*
- Creative Evolution, Amit Goswami
- This tangled hierarchy of collapse explains self-reference and subject/object split. (Gödel, Escher, Bach - Hofstadter, 1980)

Evidence that consciousness is need for collapse



1. Helmut Schimdt(1993) performed a series of experiments.
2. Random radioactive decay events were used to generate random sequences, printouts of which were taken.
3. After 3 months, an observer decides what deviation he wants to see in the data. Now, *psychics* try to influence the randomness. They have been successful in doing so to an amazing degree.
4. Also, when the printout is already seen by an observer, no psychic influence on the randomness was possible.

In terms of EPR paradox, Dr. Goswami claims that consciousness \equiv hidden local variables



Life/nonlife duality

- Is not anthropomorphic by saying that human observer is needed for collapse.
- Instead, the author supports Humberto Maturana's view that what separates life from non life is the ability to see itself as separate from its environment or the ability for subject/object cognition.



Mind/Brain Problem

- Why should mind be separate from body?
 - Brain viewed as a symbol processing machine cannot process meaning[Penrose 1989].
 - *More symbols needed to process meaning of symbols.*
 - An example of Godel's Incompleteness Theorems.
-
- But if again, mind and brain were separate substances, how can consciousness mediate between the two.
 - Cites Jacobo Grinberg-Zylberbaum's experiment.
-
- Hardware - Brain; Programmer - Mind



Exteriority and Interiority of Awareness

Why the physical(exterior) world is experienced as objective and mental(interior) as subjective?

1. Movement of modes of mind and the uncertainty principle as seen by David Bohm.

[position, velocity] \equiv [feature, association] $\neq 0$

2. Thus it seems that our thoughts are governed by the uncertainty principle.
 - a. The physical world is a macroscopic world.
We see even the micro through intermediary macro.
Waves are sluggish- objective experience
 - b. Thoughts - meaning waves in an infinite medium.
Susceptible to uncertainty - subjectivity
(except: telepathy or nonlocal correlation)



Subject/Person Duality

Local Self

vs.

Universal Self (आत्मन्)

- People have reported spontaneous experiences of a non-local and universal self (called आत्मन् in वेदान्त)
- Quantum self-experience.

Experience seems to be two-fold:

- Primary awareness - the experience stimulus
- Secondary awareness - playing back old memories correlated to the same stimulus.

It is because of this secondary awareness that we acquire mental character and functional identity.

- Quantum self - identity due to association with subject pole of subject/object experience
- Ego - identity due out association with the conditioned functional mind.

Thank You!