Knowledge Is Power

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Abstract: Undecidebility, uncomputability, and unpredictibility of universe by giving different type of examples.

From years people, scientists, philosophers, and great thinkers are in search of reality and completeness which is supposed to be undecidable, unpredictable and uncomputable.

They are crazy and thirsty after it. From centuries the great scientists, thinkers and intellectual personalities are trying to achieve it through mechanical way. They have developed mind blowing theories and equations. It has been proven also but ultimate reality is still hidden. Many scientists are trying for theory of everything which will satisfy everything in the universe but in my opinion the ultimate reality is beyond human intelligence. It is beyond time and space. Heisenberg's uncertainty principle also states that the position and velocity of an object cannot be measured exactly at the same time even in the theory (which indicates uncertainty). There is uncertainty about knowing reality and completeness.

According to Godel's incompleteness theorem anything you can draw a circle around cannot explain itself without referring to something outside the circle. Something you have to assume but cannot prove.

Single theory of everything (the completeness) is actually impossible. Only the physical and mathematical approach of theory of higher consciousness can be theory of everything. (Completeness) which will be computable, predictable and decidable but it is hard to prove that. That's why God (who is complete) is supposed to be not a thing which can be proved in laboratory or through mathematics or physical laws it is a thing to be experienced and can be experienced only through faith.

Acc to Turing's theorem physical system can express elementary arithmetic of a Turing machine (computer) and is not proved within the system and is likewise subject to incompleteness. Therefore the universe capable of expressing elementary arithmetic and like both mathematics itself and so Turing machine is incomplete.

All non-trivial computer systems are incomplete. (If we want it to be complete, the artificial intelligence should be self aware). The universe is non-trivial computer system therefore universe is incomplete. You can draw a circle around a bicycle relies on a factory that is outside the circle .The bicycle cannot explain itself. There is dual nature between humans and universe which is incomplete. So if we want to prove completeness, we should get adsorbed in the universe which is not possible through current physics and mathematics. So current mathematical and physical laws are incomplete to prove the completeness.

On the other hand Godel's incompleteness theorem applies not just to math but to everything that is subject to the law of logic. If the universe is mathematical and logical, incompleteness also applies to the universe.

Incompleteness is true in math and it is equally true in science or philosophy.

You can always draw the bigger circle but there will still be something outside the circle. (it depends on observer)

Any statement alone requires an external observer. No statement alone can completely prove itself (so we can say that everything is relative) but all reasoning ultimately traces back to faith. It's something that you cannot prove. All closed systems depend on something outside the system. Outside the science circle is philosophical circle. Scientific methods cannot prove it, it can only infer.

Godel's incompleteness theorem proves that science can never fill its own gaps. We have no chance but to look outside of science for answers.

Without science and ethics we cannot penetrate deeply into philosophy, without philosophy we cannot penetrate deeply science and ethics

So we have to use philosophy which is beyond science. There is no other way to go towards completeness.

It is said that the true genius shudders at incompleteness, imperfection and usually prefer silence to saying something that should be said.

When you find someone who completes your incompleteness then he can be said as complete man.

To achieve completeness we should have faith in completeness. The aim of humans are to achieve completeness through faith. Incompleteness is a new dimension in which you can expand as much as you can.

To achieve completeness the logic of recursive functions should be used because it will go on and on and is self-referenceable and will be useful till the final goal is completed.

Second order logic can always be fruitful to explain universe which uses the idea of discourse. (Discourse means a long and serious discussion of a subject in speech and writing).

According to equation ego=1/knowledge. If knowledge is infinity then ego is 0 which is sign of great saints. If we consider knowledge as infinity which is complete and can experience completeness and if knowledge is somewhere between 0 and infinity it can be said as incompleteness

Through this equation we can say that humans are incomplete. Due to incompleteness universe is unpredictable, uncomputable and undecidable since all physical laws are same for human and universe also!

Completeness is achieved through knowledge and faith!

Math of incompleteness:

If we consider n as a system then for every n+1 system, n is incomplete and for every n-1 system it is complete.

According to Hinduism if we consider 0 as conscious state of mind, 1 as higher consciousness (super consciousness) and -1 as subconscious. So conscious is incomplete as far as super consciousness is concerned and subconscious is incomplete as far as conscious is concerned. (In Hinduism the number 3 is important,) so incompleteness is relative while completeness is absolute. So universe is unpredictable, undecidable and uncomputable as far as our system is concerned. If we go beyond our system it is decidable, computable and predictable. So only solution for this is to have faith in complete reality.

Human intelligence has limited scope and because of that completeness is unpredictable, uncomputable and undecidable. If we want it to be computable, decidable and predictable then we should have faith in completeness. (Which is beyond intelligence)

I think selfreferencing is necessary to achieve completeness.

Comments on mind, intelligence and physical world:

There is a difference between mind and intelligence. Physical world can be traced by intelligence. Mind is beyond intelligence and beyond mind there is ultimate reality.

Unpredictability, uncomputability and undecidability are outcome of intelligence but since mind is beyond intelligence, completeness can be traced only through mind and not through intelligence.!

Mathematics is indeed an imperfect domain but can be seen as perfect in physical world. Since mathematical and physical laws have limit, they can prove the physical world and not the ultimate reality. That is why mathematical and physical laws are incomplete and hence universe is unpredictable, undecidable and uncomputable. Physical laws are outcome of eyes and other sensor organs, due to which we find universe as imperfect and thus it is undecidable, unpredictable and uncomputable. But beyond eyes and sensor organs there is ultimate reality that is completeness.

The world is rational:

Physical world, all physical laws and mathematics is outcome of rationality. I think completeness is combination of fideism and rationalism. Faith is essential and cannot be separated from rationalism. Completeness can be understood through faith and rationalism. I think rationalism is awareness of self- existence and beyond it is the ultimate reality that is completeness. So one can say that rationality is incompleteness.

According to hindu philosophy incompleteness is nothing but incompleteness in knowledge and existence. God is unpredictable, uncomputable and undecidable because there is incompleteness in our knowledge and existence. Faith is the only way we can remove our incompleteness and not the intelligence. If we agree that we are incomplete then that is the biggest step towards completeness.

Incompleteness is temporary while completeness is permanent. God is unpredictable, uncomputable and undecidable because we are incomplete. Godel's and Heisenberg's principle discuss limit of human knowledge. (One logical and other experimental). Godel showed that some things are fundamentally knowable just as in quantum theory. Some things are fundamentally unmeasurable. There is no partial completeness. Uncertainty is incompleteness while certainty is completeness. Uncertainty leads to confusion but not certainty.

Comments on relation between intelligence, mind and physical world:

The individual is the passenger in the car of material body. The intelligence is the driver and mind is driving instrument and senses are horses. The self is thus the enjoyer or sufferer in the association of the mind and sense. The information in the surroundings is revealed by senses. The brain is a physical organ in the physical body that links the physical body to the mind. The mind is its own place and in itself can make heaven of hell and hell of heaven. Brain is a part of physical body. Mind is part of subtle body and both bodies are material. The mind is responsible for thinking, feeling and intention. These faculties are generally informed by the stimulus. We receive from senses like a computer's hard drive, mind is repository of facts and memories but it does not understand the significance of information it processes but it places sensation in the 2 broad categories, pleasure and pain and responds accordingly. Mind is the cause of everything that is sorrow and happiness. Thus if we want true happiness, the mind must be kept always happy. Since we are considering physical universe through brain only and not through the mind.

Comments on computer of mind:

The software of mind is constantly updated through daily experience. The mind is an amazing instrument and objectively it is an absolutely brilliant creation.

Comments on What is intelligence?:

The power of discrimination is beyond mind's scope. This is function of intelligence. It is the faculty that guides the mind.

There are 4 types of intelligence:

Abilities to learn the things of external world.

Ability to learn through experience.

Misdirected intelligence.

The capacity to love is in all beings, this is purest form of intelligence which describes what is wrong and what is right.

Through self referencing only, we can judge ourselves. Chaos theory states that which thing is tiny is also too big. I think butterfly effect can be applied to technology of computer. Chaos theory is the mathematical explanation why butterfly effect takes place. (The application of butterfly effect is that scientific knowledge could be advance enough to predict the behavior of entire universe). But scientific knowledge could never become advanced enough to predict the weather because there are limitations to butterfly effect. Prediction of the sufficiently distant feature is impossible by any method unless the present conditions are known exactly. The butterfly effect can be stated as there is plenty of room at the bottom and at the top also (vice-versa).

Some of the statements mentioned below may be irrelevant but I would like to mention those:

- ✓ Your state (condition) of mind is responsible for your thoughts and behavior.
- ✓ God is complete while humans are incomplete.
- ✓ Death is nothing but decomposition of matter with conservation of energy having selfawareness.
- ✓ Human mind is more than a machine.
- ✓ God never created universe but he manifested himself in the universe as well as in humans.
- ✓ Through selfreferencing only, we can judge ourselves.
- ✓ If nature of things are so small then due to butterfly effect its impact will be very large
- ✓ If nature of things will approach to zero, there impact will approach to infinity.

Comments on Turing machine halting problem:

Input: A Turing machine and an input string W.

Problem: Does the Turing machine finish computing of the string W in a finite number of steps?

The answer must be either yes or no.

Proof: At first, we will assume that such a Turing machine exists to solve this problem and then we will show it is contradicting itself. We will call this Turing machine as a halting machine that produces a yes or no in a finite amount of time. If the halting machine finishes in a finite amount of time then the output comes as yes otherwise as no.

Turing's statement:

There is no effective general procedure to solve, calculate and compute.

Halting problem:

This proof aims to find a contradiction.

Can we design a machine which if given a program can find out if that program will always halt on a particular input?

That is why halting problem is undecidable.

Any Turing machine is computable but not aware of self.

I think the way in which this gives us unsolvable problems.

For any Turing machine how a weak form of Godel's incompleteness theorem can be derived from the proof and that reality problem is undecidable.

Chaos theory yields unexpected philosophical results. Chaos theory suggests that the behavior of complex system can fulfil and future stats remain in principle unpredictable.

It can also be said that for any physical law that governs the universe cannot explain god and reality and so still is incomplete.

Universe is very complex, so as completeness. It is very complex to encircle and compute the consciousness.

Other comments:

Our mind is totally programmable. Subconscious is fully programmable, conscious is programmed through teachings of mother, father and society. (In hinduism it is called threading ceremony). But in upper state of consciousness (That is higher consciousness) the programmable mind vanishes and it gives birth to freewill and it becomes spontaneous:

We have limitations in physical laws and mathematics so universe and god are undecidable, unpredictable, uncomputable and so to make it computable, predictable, decidable, we need to begun our circle.

Some statements are undecidable meaning that it is impossible to prove them either true or false.

Turing showed there are some algorithms that are undecidable by such Turing machine. It is impossible to tell whether the machine could compute the calculations in the finite amount of time.

Godel's incompleteness theorem implies that no theory of everything is possible. Physics on the other hand ultimately attempts to model reality. Today's standard model of mathematics and physics are related to the dual nature of man and universe. So, it is incomplete and so is also relative. In my opinion, if we apply physical laws and mathematics to absolute nature of reality and universe, then that will be biggest success of scientists but it is too tedious. It is hard to prove mathematically everything that is infinite. Collection of reference frames, the measure of wave function of the universe. can be steps towards it

The concept of self reference is always associated by theory of consciousness. The active approach and passive approach are no longer equivalent. Quantum theory and consciousness studies suggest that our experience is limited by subjectivity and continuity which we assert is a basis of universal grammar. Self-referential observer always reduces the gap between observer and object.

Since all physical laws that governs the human minds are applicable to universe also. If we will be able to have physical and mathematical approach of theory of consciousness and the unification of all absolute and relative things. We will be able to have theory of everything and also completeness theorem.

REFERENCES

[1] Godel's theorem of incompleteness, chao's theory, turing machine with different type of mathematics and comments on physical body, mind and intelligence