



Overcomplexified Norms Tend the Dependability of Physics More onto Mathematics Than Experiments

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Abstract:

Physics is no doubt pervasive and unbounded, that too, beyond the explanation of the explainable reality. Therefore, something being so vast, it's impossible to chalk out theories for every consequences going on in nature in a perceptible 'infinite macro' and 'infinitesimal micro' domains. Thus, needs have arrived to classify, attribute the norm of nature through mathematical frameworks, thus being safe from the path of the stringent nature where conducting experiments is not only a 'blind man's dream of vision' but something that is not at all worth, even thinking about. Thus, standing in that point, it's better to rely on sole mathematical formulations to objectify reality through a sense of perceptions that are within the reach of the human minds imagination with extendable complexities.

Methods:

Qualitative viewpoints parsing over a brief epistemological reasoning through analysis of impactful decisions in course of thorough human civilizations have been taken to indemnify the causes with the associated effects, considering the facts, thinking and mindful exploratory approach of eminent thinkers of several centuries, providing a solution based models of analytical deductions in respect to the motive of this paper.

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Results:

Bearing and passing results through contemporary ideology based reasoning is somewhat significant to our approaches when it comes to analytics and measurement of deducible entity prevailing via logical conclusions appearing in the forefront of scientific achievements either: notable or somewhat not, giving the insights of the fallacy enticing through the inventions and discoveries of humanities over amplifying thought bearing reasoning, beyond analogies.

Methodological Interpretations:

Looking back to several thousands of years ago, physics somehow developed by the 'questioning of human minds' regarding the phenomenology of the nature. And it's those happenings of our 'mother nature' that, inquisitive, almost untrained but inertly brilliant minds started to question the reality. Thus, seeking answers to the causes behind every effect of natures, there takes birth the philosophy: the science of thinking, questioning and seeking answers to those that are somehow explainable along with those, that are quite difficult to explain, in addition to mostly those, that are beyond the strata of any questions. Mathematics was not there to interpret those actions into a theoretical scenario, thus quite amused and confused by the strange beauty of the nature, the birth and proceedings of philosophy started as a tool of thinking, then questioning and reasoning based on the biases of those questions till a satisfactory result have been obtainable.

Thorough conclusions are agendas of notional thinking's backed with diverse mathematics, that if stated correctly should be somehow in the late human civilizations, backed by experiments. But, mathematics is first to test the viability of the theory to ascertain the means whether experiments can suffice a justified result of that theory, if not, let the mathematics do their part and humans would be happily survived with the analogy of their hypothesized theories to be proven at some far way scales of time by a more advanced civilizations.

All of these are absolute and ultimatum in projecting an idea with a backed up concrete issue extendable via reality, but to make that backing up, the most potent deeds should be;

“

To combine philosophy with mathematics thereby giving birth to a more precisely formulated natural philosophies explainable by physics.

“

Thus somehow incidentally, a far more accidentally took place the birth of modern physical sciences meaning: to know and study the laws of nature. Not only limited to that, to question the reality in both objective and perceptive ways. Based on facts the reality could be segregated into two notions:

- Through objective norms: to objectify things and making them prominent, visible in the eyes of the civilizations through attainable experiments and its successful completions.
- Through perceptive norms: to provide a sense of perception or a projection taking place solely in human minds and papers, remaining completely intangible, thus sensing something more diverse to be performed by experiments, questioning both the stringency of mother nature and the capacity of human technologies.

Arguing is not believing, but believing is somewhat in a sense of notional arguing making prominent (although in some cases 'predatory') decisions which although tends to be vacuous and superficial still, minds are making their best to attenuate them in a mind-matter scenarios, questioning their natures and whether they are objectified by present realities?

The norm of human imagination is not bounded and absolute just as the simple mathematical notations, but rather human thinking with a higher order consciousness is farfetched, relative and unbounded encompassing not only what they feels or sees but what they thinks thus extending their imaginative capacities through this vast universe encompassing all the known, and to more: all the unknowns making them a victim of their own thinking and this depression when arises in the minds of thinkers and futurists, but they themselves are not synchronized with this unknown behavior of the strange realities, giving a extendible prospects of something more smooth and satisfying as to the questioning of the nature; the anthropic principle.

Thinking about all the species in this planet Earth, those who have brains to commute and engage socially, the humans are perhaps the sole exception that, they are conscious enough to understand their position and existence in this universe in a tiny patch of space but a broader spectrum of time, thus as humans know their existence in this cosmos, thus they preserve the only authority to question about this universe, also in other ways, the universe is making sense to them. Comparing this with a 'fish', they are neither aware of their own reality nor about the existence of this universe with them being a specs of dust, it's natural that the universe simply doesn't exist to them let alone they to question about the scenarios of preciseness.

Extending the logical notion and dividing the universe in 5 parts as through;

- Attainable micro.
- Attainable macro.
- Beyond attainable micro.
- Beyond attainable macro.
- Beyond the thinking capacity of humans regard to the 'extremely beyond attainable micro and macro'.

Treatments to the above points would yield something of a more philosophical congruence in them as: nature always open up her secrets to humans and make humans to explore the realities when it's considered as a mere macro or a mere micro. But, the behavior of nature dramatically alters when humans tried to go deep in the hearts and minds of nature to explore what secret she beholds as to the most fundamental identities regards to the creation, existence and pacing of this universe through a beautiful symmetry and conservations. As it's said that humans are evolving and thus is evolving their capacity of questionnaire with an extended but abstract thinking to indemnify the causes behind almost everything, it's to be noted that if somehow humans be that much smart to comprehend the melodies behind every symphonies of the fundamental aspects of nature, then there would be literally no distinction between humans and god's but would nature allow us to be that much smart, no, as is seen the stringency of the nature when humans have tried to question the 'beyond attainable micro' and 'beyond attainable macro' aspects of realities. Thus nature is restricting the human minds access to make a concluding answer to her happenings, evolving the human deeds getting more and more abstractly complex calculations diverted from experimental realities.

However, there is something beyond the capacity of human minds to 'even think of', which would remain always as an attachments restricting human minds keying the answers to the questions, even when the technological advancement of them reaches to an ultimatum.

Thus arouses the thought;

“

Are we really standing on the shoulders of giants?

“

"The furthest limits of reason has the perspectives to answer the unsolved mysteries but it's "more than difficult" to probe the deepest part of nature as then we will run out of logic to explain the phenomena! But humans tried to explore the nature. Where the mathematical tools of physics failed to arrive any conclusions, the philosophy holds the hand. Philosophy always tried to explain the farthest fathom of mysteries to develop knowledge of interest. But does philosophy succeed? Humans have no answer. Just when human tries to explain the absurdness of the hidden beauty of nature from a viewpoint of infinity then the complex physics have taken the aspects in such a difficult manner that the mathematics itself cried out for a new mathematics to be invented! Our knowledge is not sufficient and neither will be. Knowledge always strives to gain more and humans always want to race behind the fast-forwarding knowledge of reason to provide a complicated solution to it in an easy way. Just as the limits of big is endless, so as the limits of small. It will never ever be possible to probe into the greatest of the greater or the smallest of the smaller to provide a physical understanding to human mind. The limits of reason are limitless and limitless is the consequence of infinity. When will it be possible for humans to probe deeper into infinity and to attempt a solution of infinite model in a finite way? If infinity can be seen as finite, then probably the edge of knowledge can be reached by humans. Beyond this end, either there will be no more knowledge to acquire or there will still remain something as unachievable as though the edge is just a horizon with a further area left to explore afterwards. The limits of thought and the limits of reasoning are quite different from the perspective of the limits of nature. Natural law can never be explored fully as something unattainable always remains to be attended afterwards at the outer limits of reasoning. The greatest mystery of nature lies in its origin and the greatest limits of the origin lies in the infinity. It is beyond the capacity of modern philosophy to question the finiteness of infinity beyond the ordinary boundary of knowledge. The unattainable knowledge even though can be attained remains unattainable. Nature is aware of its prediction and so as infinity as a part of it. The knowledge of knowing seems meaningless when the concept of fundamentality of knowledge tends to take over the infinity. Nothing in nature is finite. Not even the conclusion. Everything is infinite in its own way as if something more needs to be deciphered to attain the edge of the knowledge. Beyond infinity is oblivion and oblivion is an uncertain boundless barrier of knowledge. Finite things will always tend to become infinite and the outermost reason of knowledge remains a question to all of us!"



In a letter to Robert Hooke in 1675, Isaac Newton made his most famous statement: "If I have seen further it is by standing on the shoulders of Giants". This statement is now often used to symbolize scientific progress. The phrase Standing on the shoulders of giants is a metaphor which means "Using the understanding gained by major thinkers who have gone before in order to make intellectual progress". It is a metaphor of dwarfs standing on the shoulders of giants (Latin: *nanos gigantium humeris insidentes*) and expresses the meaning of "discovering truth by building on previous discoveries". This concept has been dated to the 12th century and, according to John of Salisbury, is attributed to Bernard of Chartres. But its most familiar and popular expression occurs in a 1675 letter by Isaac Newton: (Courtesy: Georges Vertue d'après John Vanderbank - tirage original, portrait grave) Collected from: Wikipedia.

“ Newton's theory of motion and gravitation stands as one of the greatest achievements of the humankind as well as the natural philosophy, a single principle unifying the known laws of motion and symmetries of the Universe. Alexander Pope once wrote: " Nature and Newton's laws lay hid in the night: God said, Let Newton be! And all was light. “

– Kaku, The God Equation

Experiments should always be there to question the correctness of human thinking and assumptions, but this should be noted that, experiments could only be achieved when humans have a perfect methodology to phrase their knowledge via implementations. This doesn't or not in any way means that deriving the principles of theories through attainable experiments could only alters the notion of a hypothetical reality to an attainable truth as seen through eyes. There are instances and always be, no matter, how much progress humans have made in coming centuries, there would always be a wall separating some theories from experimental reality and thinking reality.

To phrase the shoulders of the giant analogy, we are there and would be there with something more remaining unattainable always in a concluding scenario.

Not all things that human minds could developed be justified by observation, there could be many things and there are which should need a different set of tools perhaps a bit more difficult, abstract and obscured, demanding the reasons of the causes behind effects, those which beyond the perseverance of our existence.

The sole freedom and perhaps the beauty of human minds is to make enticing analogies, thereby making great efforts to deal with them, tackle them and then ask for more behind them. Thus, through evolutions of human intelligence, a separate set of tools evolved from great scientific minds to back theories with symbols and number, making a decision in papers, in modern days through software as paper itself proved to be not so promising to justify the hunger of such versatile human imaginations.

Mathematics have developed, new and more beautiful domains have evolved, questions are crafted with symbol and number making the knowledge of those thinking reached an acceptable conclusion in papers and rigorous calculations, rather than by sole purpose of experiments.

Those which are not viable to get realistic by experiments are making permanent footprints in the atlas of human knowledge preserving through generations by proofs of hypothesis and conjectures.

“

But are all conjectures attained to be proven till now?

“

Infering:

“No and probably wouldn't be as it's like looking the world through god's eyes if everything is there proved in front of humankinds.”

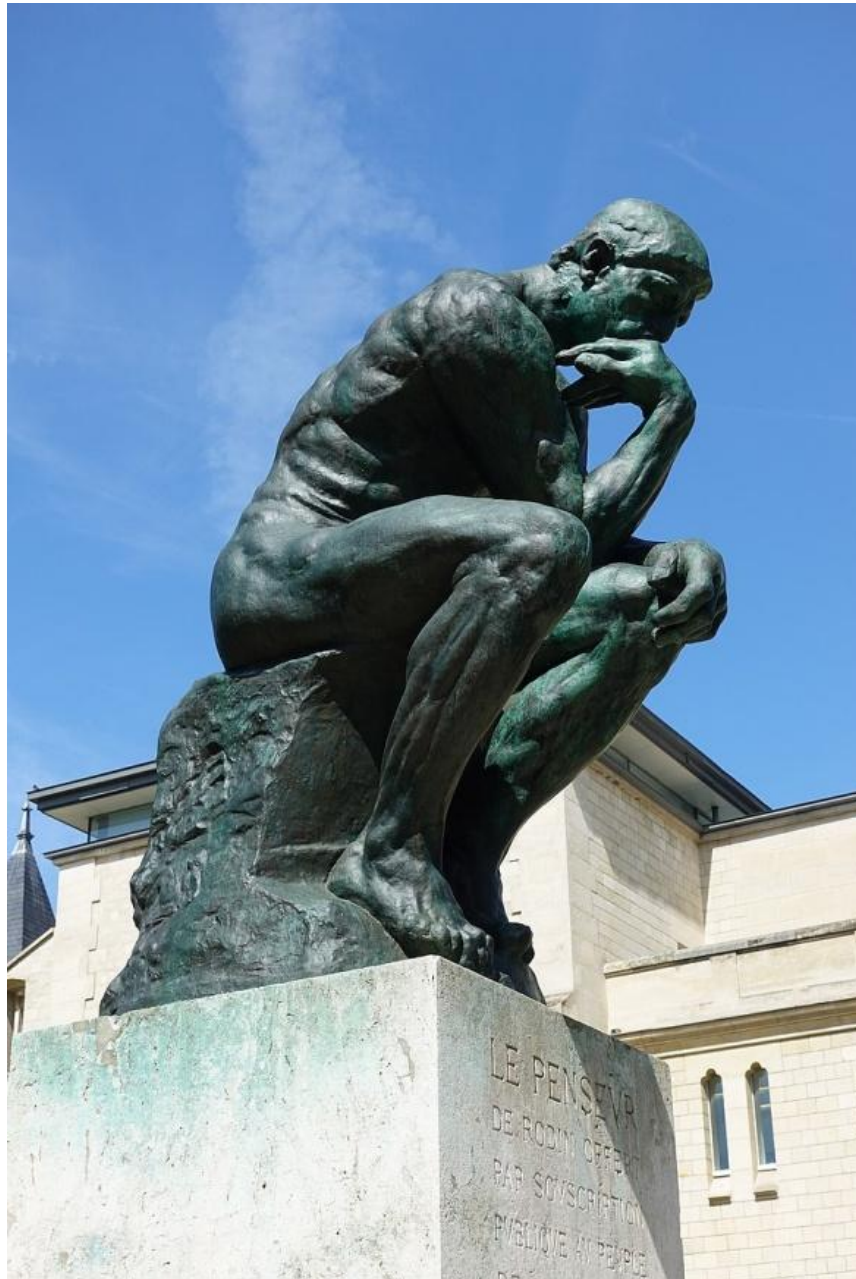
Times are changing, challenges are evolving getting complicated, thinking and perception of knowledge is getting wider and wider, thus getting discovered by human minds by many hypothesis and conjectures with a promising hope of tiring efforts of great minds to be justified in some later times through more enhancing calculations. The more the days are pacing, the more the thinking of minds getting diversified with complexities beyond the reach of those fellow humans who have conjectured the. This even stated many times before, but are getting partially discovered through modernized calculations and computations.

Satisfying the quench of knowledge regards to the human minds, is difficult rather somewhat obscure with probabilities beyond the reach of any computational proofs let alone to say about experimental hunch. So, not all things imagined by humans could be justified by machines in labs but there should always be there, some more, rather a lot more thoughts that could be left justified by symbols and numbers and this is the reality which we humans have accustomed within our deeds, minds and norms, as might be in some deep down fathom of our mind we are certain that,

“

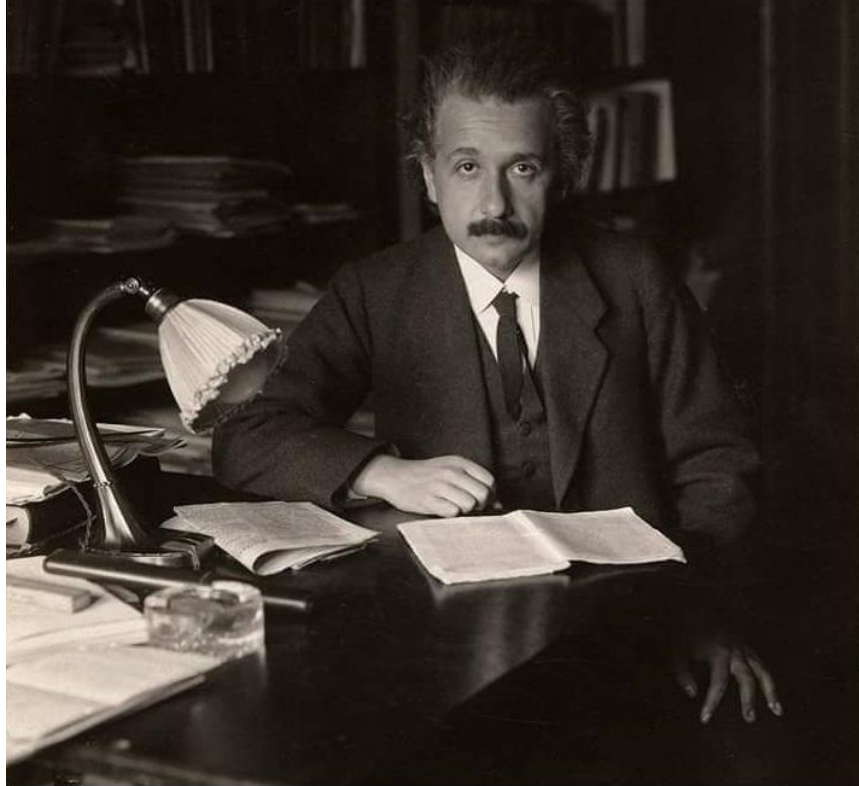
Not all being imagined could be experimented.

“



The Thinker (French: Le Penseur) is a bronze sculpture by Auguste Rodin, usually placed on a stone pedestal. The work depicts a nude male figure of heroic size sitting on a rock. He is seen leaning over, his right elbow placed on his left thigh, holding the weight of his chin on the back of his right hand. The pose is one of deep thought and contemplation, and the statue is often used as an image to represent philosophy. (This building is classé au titre des monuments historiques de la France. It is indexed in the base Mérimée, a database of architectural heritage maintained by the French Ministry of Culture, under the reference PA00088697, CrisNYCa: own work, Licensed by CC BY-SA 4.0). Collected from: Wikipedia.

Einstein made some remarkable quotes on the insights of philosophy and its consequences in physics and to him as a whole (taken from az-quotes.com), some are mentioned below for the transparency of the effect of philosophy over great scientific minds and their thinking.



“ I fully agree with you about the significance and educational value of as well as history and philosophy of science. So many people today - and even professional - seem to me like someone who has seen thousands of trees but has never seen a forest. A knowledge of the historic and philosophical background gives that kind of independence from prejudices of his generation from which most scientists are suffering. This independence created by philosophical insight is - in my opinion - the mark of distinction between a mere artisan or specialist and a real seeker after truth. “

“ Philosophy is empty if it isn't based on science. Science discovers, philosophy interprets. “

“ I would not think that philosophy and reason themselves will be man's guide in the foreseeable future; however, they will remain the most beautiful sanctuary they have always been for the select few. “

“ When I study philosophical works I feel I am swallowing something which I don't have in my mouth. “

Concluding remarks:

Philosophy has always been endowed with logic; also logical reasoning with respect to critical deduction has always been a part and parcel of it. However, instances are there when mathematical approaches are needed to get inside the philosophical lattice, thereby critical analysis equipped with deducible conclusion crowned with mathematical proofs poses a concrete scenario where the curiosity of human minds hypothesis could be put to a state of satisfaction by those charming symbols and their enumerative indices with numbers. But, the propounded conclusion sometime needs the philosophy to amalgamate with mathematics where further deducibility needs to suffice to pose the truth that is, so formidable, that humans have bounded themselves by scenarios of metaphysics to attain evidential conclusions. Thus the cycling of philosophy with physics, again through a much elevated principles of amalgamated physics-philosophies run towards meta-physics leads to answer something, so much abstract yet relative, conclusive yet hidden, evidential yet obscure – that the ultimatum of human brain is to know the *Why?* And when physics have failed to solve, then meta-physics kicks in, generating a unified ideological principle of physics, philosophy and mathematics to solve the puzzles of the jittery mind.

Thus Galileo Galilei quoted in a very righteous way:

“ “

Philosophy is written in this grand book, the universe, which stands continually open to our gaze. But the book cannot be understood unless one first learns to comprehend the language and read the characters in which it is written. It is written in the language of mathematics, and its characters are triangles, circles, and other geometric figures without which it is humanly impossible to understand a single word of it; without these one is wandering in a dark labyrinth.

” ”

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