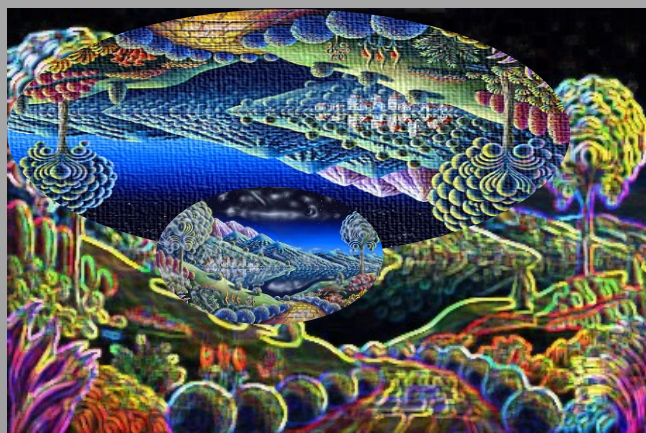


the *Journal of* *Infinitylogy*

Volume 5 – May 2022



Published by the Center for Research and Development of Infinitylogy

(CRDI)

- ***The Journal of Infinitylogy***
- Volume 5 - May 2022
- Editor: Korosh Erfani
- ISBN: 979-8-88627-787-6
- Published by the *Center for Research and Development of Infinitylogy* (CRDI)
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Foreword:

When a theory can upset our beliefs

The knowledge we need to get rid of all the limitations in our intellectual and material existence cannot derive from the mindset that installed these limiting attitudes in our behavior. Once we identify what are the undesirable features of this mindset, we can then discard them. Believing in the ending character of everything is maybe the most representative of the wrong ideas we don't have any doubt about.

For thousands of years man thought that anything is going towards an end: the leaf yellows and dies, the river dries and dies, an animal lives and dies, and so on; there is nothing that can last forever, we thought. This perception was due to a primary degree impression generated by our physical contact with material realities. What was going on inside the matter was just what we can call *change* and the latter comes from a *running process*, this one itself results from a *dynamic mechanism* within matter and that one stems from the interaction of changing realities, and so on and so forth.

We can summarize the whole thing as follows:

- Everything is changing all the time,
- Change is a result of the interaction between the realities that are changed and changing.

In fact, what we saw as perishing was not but an alteration in course, bringing a thing to some new alterations. And what we did not know either was that this course of successive modifications was endless and never stops, pushing a reality to become another one, ceaselessly and forever.

While we were ignoring this factual permanent dynamism, we designed a world that doesn't exist but in our imaginings. An imagination that had been vigorously falsifying the reality and built almost everything on a deforming interpretation of it: A false world founded on the fake assertions and bogus firm beliefs. The latter was so encrusted in us that we refuted any idea or suggestion challenging them, protecting our ignorance as much as possible at a high cost.

But there is an issue.

We did realize that the world that we construed was highly deficient: war, crime, exploitation, drought, famine, death, pandemics, and more. On the one hand, it was obvious that

our world is very imperfect, and on the other hand, we never wanted to collectively search for the root causes of such widespread misery.

Along the way, we made many technical, technological, scientific, and intellectual advancements, but none of them came to withdraw us from the desolation in which we were living. As we did not find the major solution for our pains, we theorized our failure and added many patches to our ideological argument in order to make our failure last.

Why we are such blatant losers at that point? Why billions of people could not find a solution for this absolute misery during all the human history?

The answer is not easy nor simple, but we could argue that maybe one major reason for this situation was the lack of vision. While our sights had been deformed, it deprived us of constructing a vision so different and so innovative that can revolutionize our view over the world. We stayed prisoner of a twisted sight of the universe that cannot show us anything beyond what we did chose to see.

Philosophy was certainly the last refuge where we could go looking for such a broader view that can go far beyond all the fake restrictions we build up to our worldview.

Philosophy treats the most general concepts that mankind created, and this is where we can find the necessary elements to compose our gateway from this unfortunate situation.

This is exactly what we did in the frame of the philosophical theory of *Infinitism*. Through the methodological suggestion of speculative philosophy, we choose what can be seen as the widest and broadest concept ever created by human beings: infinity.

Infinitism means seeing everything as infinite and this is exactly what we describe above as the reality of anything: endless seriatim changes. These changes are created and creating. Created through creating and creating through being created: An infinite intertwined double function that is the only reality of matter.

Infinitism then alienates itself from the classic speculative philosophy by pushing its assertions through a hybrid methodology where the philosophy, science, and technology interact to elaborate the way this permanent changing process is proven and established.

The creation of this assorted methodology is the task of *Infinitylogy*; a discipline that has to study the objectivity of

infinity within matter. This discipline goes through different declarations and suggestions of *Infinitism* theory and shows their tangibility in the real world.

What *Infinitism* suggests is to see infinity in everything, not only as the core of matter, but also as a field of action for whoever is able to integrate it in its practical aptitude and operative technology. Whoever is an intelligent being capable of grasping the following reality would be able to access the infinite scopes of existence with all its resources, to do whatever it wants:

As the matter is nothing but infinite, it is nil but the interacting set of changes in an everlasting movement.

So, if the matter is infinite, with this explicit definition of infinity, we can say that these changes are representing infinitude and as it's going on, it's thus *infinitude in action*.

Infinitylogy sets the rules for this action and also the principles that assure its infinitude. If we have these rules and principles in an organized, formulated, and framed form, we can start thinking about how to use them for their various applications. How can we apply the formulas depicting the *infinitude in action* to alter the materials into whatever we want?

This is where we can see that the core characteristic of matter, i.e. change, can be manipulated in such a way that, instead of change dictated by the existing set of a phenomenon, turns into a change that we define and govern. This is how the biggest maneuver of our history starts, instead of living the nature's changes we create the nature's changes. We shift suddenly from the object of the evolution of matter to the subject of this evolution. How, concretely?

Change happens through the causal interactions between the phenomena. The frame in which it happens is causal chains. These causal chains change and are changed. Once we know how to intervene in these chains and their components, we can alter them and push them towards where we want.

In this way, every single thing becomes manipulated and modifiable. So, we need knowledge and technology to do so. *Infinitylogy* demonstrates these frameworks where *infinitude in action* is present and can be detected and operated by whoever has the capacity of doing so.

Now we back to the main raised issue of this writing: the persisting ignorance of the scientific community to such an idea, capable of shaking their beliefs and creeds known as “scientific facts”, or “laws of physics”, or so.

For the *Infinitism* theory, it is obvious that it will take a long time until this theory can open a passage in the thick wall of science's arena. We understand that we should be very patient so that this model could get maturity to attract the attention of those who can be interested in and start to ponder over.

We are quietly patient and will remain so as well.

Korosh Erfani, (editor)

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Giordano Bruno and the Theory of Infinitism

By: Korosh Erfani, PhD



May 2022

First Version

Introduction

It's not always an absence of original ideas that makes the world stagnate, but the lack of paying attention to the new thoughts. The mechanism is psychological, on an individual level, but also institutional, on a general scale.

This reality made and still makes us miss many interesting innovations, not because they are not brilliant enough, but because we have been conditioned to ignore them. Let's get a closer sight of that.

To begin, we can ask what makes an idea 'original'. We don't have any common treaty on what 'originality' is about, but we know it's relevant to raise it when there is a newness in the way we are thinking and acting about some specific topics. Newness means, anyhow, something that had not been there before.

This unprecedented character of newness has a double edge aspect: it can attract people by its unheard-of expression and content, but, at the same time, can spook others by the same facts. This negative dimension of newness is fortified if its aloofness with the well-established ideas is bigger. So we can infer:

The more original is an idea

the least it's initially welcome.

Let's review one historic example of this inference.



Giordano Bruno (February 1548 – 17 February 1600) was an Italian philosopher, mathematician, and cosmological theorist. His extensive

intellectual work was carried over the topics like Copernican model, Cosmological structure, and the Infinitude of the universe.

His ideas and theories rattled utterly the dominant religious beliefs rooted in an archaic Aristotelian worldview. What *Bruno* suggested was so far from the unfounded dogmas of the Church that this institution reacted violently by accusing him of ‘heresy’. Hegel said that Bruno’s life could be seen as “*a bold rejection of all Catholic beliefs resting on mere authority*”.¹

Alfonso Ingegno says that Bruno's philosophy "*challenges the developments of the Reformation, calls into question the truth-value of the whole of Christianity, and claims that Christ perpetrated a deceit on mankind... Bruno suggests that we can now recognize the universal law which controls the perpetual becoming of all things in an infinite universe.*"²

¹ Hegel's lectures on the history of philosophy, translated by E.S. Haldane and F.H. Simson, in three volumes. Volume III, p. 119. The Humanities Press, 1974, New York.

² *Cause, Principle and Unity*, by Giordano Bruno. Edited by R.J. Blackwell and Robert de Lucca, with an Introduction by Alfonso Ingegno. p.x. Cambridge University Press, 1998.

Could there be any chance for him to avoid the furious reaction of the ecclesiastic authority while *Bruno* was depriving the Church's God of its faux exclusivity of infinitude and sharing this characteristic with the whole universe?

Not really, and that's why the institutional power deleted the individual in an extreme retort entrenched in its fossilized cherished wanted ignorance. Because he poised infinitude in front of all the fake but firmly believed finitude of the Church, Giordano Bruno was “hung upside down naked before finally being burned at the stake. His ashes were thrown into the Tiber River.”³

This was an example of how the considerable distance between the established institutionalized creeds and the new

³ https://en.wikipedia.org/wiki/Giordano_Bruno#Physical_appearance

ideas could cause the more catastrophic reactions leaned toward pure atrocities.

What about now?

Time, of course, changed, and we are today in the twenty-first century. The reactions are not as stark as they were 422 years ago in the Campo de Firori (a central Roman market square) where they slaughtered cruelly Giordano Bruno.⁴ But something more or less comparable to that period is still running?

Even though we can be safe from being burned for our newfangled ideas, an odd reluctance is still there, as firmly and severely as before. Whose fault is it? Again, the institution, but this time, with a little difference.

In the twenty-first century, the institution -or as it is fashioned to call it now, the *Establishment*- cannot erase you

⁴ Even though the return of Taliban in Afghanistan let the door open for the similar situation, right now.

physically, but it can bar the way from moving forward if your original thoughts want to challenge the seats on which the institution is comfortably situated. There is always an interest for those who lead an organization in the continuation and stability of the latter since they are all financially dependent on it. They assure the maintenance of their breadwinning system by keeping it untouched as much as possible. Any original idea that comes to shake it is, of course, suspicious, nefarious, and refutable.

The impact of the institutionalization of knowledge is though beyond self-defense. It also endeavors shaping the mindset of those who have to come through it either to complete their education or to work for. As to students, if they want to be graduated and finding a job, they have effectively to consent being instilled in their mind by the fabrications of these institutions; later, they will themselves reproduce them to

fill the necessary criterions of the “academic or professional success”.

The institutional authority will dictate the way any new idea can be produced, processed, and then, recognized. For instance, if you present your ideas as a plan of dissertation or thesis to a recognized “research director” within the institution, you will have a chance that he or she accepts your project, and then, you can make that ‘research’ under his/her direction to obtain your Master or PhD. for instance. But if you do the exact very work or even a better one out of the structure, they won’t find any value in what you did. Why? Because your work did not go through their esteemed system. It did not generate any income fee for them, it did not recognize the authority of their institution, and, it had not been framed in its content or its methodology, or its outcomes.

Then, an institutional tyranny is installed over all the fields of sciences, and no one can pretend to ignore it. The regrettable thing is that they condition the students of all levels not to pay attention to any source that is not an institutional one. They even created networks of self-accreditation where they put themselves in peer assessment and rise their ranking by attributing more credentials to themselves.

The students are told that they should value this sham ranking and be ready to pay more tuition fee for those that are higher in the list. By the techniques like this one, they condition the mindset of the students to get as reference only what they confirm whose validity, and nothing else. The intellectual and investigative curiosity in the youth is, in this way, clouded, and they learn and internalize how to miss or ignore many new and interesting ideas that don't carry the label of these self-promoted institutions' references.

Self-contemplation

One example of what we are talking about is happening to our current efforts to present the theory of *Infinitemism*. We can see how the lack of an institutional label for what we are doing and presenting is causing an absence of interest in those who are exposed to all our products like books, papers, videos, and so on.

Even though one part of this inattentiveness is normal, one other portion is not. And that's why, through this paper, we would like to raise the subject for those who are interested in the social epistemology of our today's world.

The similarities between the theory of the infinite universe of Giordano Bruno and the theory of *Infinitemism* are striking:

- Both say that the universe is a becoming.
- Both say that the universe is infinite.
- Both had been ignored by the institution.

- Both could have the same historic fate:
 - First, ignored;
 - Then, denied;
 - Next, repressed; and later,
 - Finally recognized.

Historical regrets

Now, let's imagine the contrary. If we had integrated the points of view of Giordano Bruno in our physics and astronomy, at that time, we could have accumulated huge knowledge on infinity within the universe at all levels of its structure. We would have had more than 400 years to ponder over and work on it, to get it operational. Instead of giving his work the highest academic rank, and providing him with all he needed to teach, publish and research more on this topic, the Church simply killed him.

Even though many things had been, since then, said about infinity, but we see how this major topic is still marginal and

orphan in the arena of philosophy and science, let alone about technology. And why? Because we missed such an opportunity to integrate infinitude in the fabric of reality and therefore, we did not learn how to make infinity an operational concept to change the whole material sphere in which we live and act: society, nature, earth, and world, and beyond.

Once again, in 2020-2022, we are trying to repair this wrong course we took from 1600, if not quite earlier; but once again, based on our own experience, we can see how hard it is to draw the attention of people to what the theory of *Infinitism* suggests in the wake of what Giordano Bruno had been proposing as an original infinitist worldview. (Have you said “original”?)

Giordano Bruno had been murdered and burned by the religion in 1600 when he was just 52 years old; I’m now 56 years old, 5 years luckier than Bruno so far, and still alive! I

will keep going in my individual odyssey to reach a point where I can be sure that this theory won't be lost once I snuffed it.

I hope those who read this text can get the point, not for the sake of the author's individual pride, but for what could be done if this theory is objectively and methodically verified. Here again, we present the main assertions of the philosophical theory of *Infinitism*:

- Everything is infinite or is not.
- If everything is infinite so are the resources any volume of matter can provide us.
- We can have infinite resources of material and energy if we know exploring the infinitude in action within matter.
- To know how to discover and utilize the infinitude in action in the inner edifice of matter, we need the appropriate triangle:

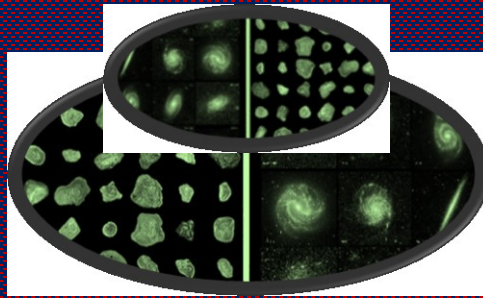
- A comprehensive philosophical theory (that establishes the idea of the presence of infinitude in everything, without any exception.)
- A scientific methodology (that can discover the presence of infinitude in action in all levels of the matter's microstructure and macrostructure.)
- The technological tools (that can operate over the infinite configuration of matter and bring about the expected outcome).

The theory of *Infinitism* also proposes to establish a discipline that is charged to study infinity, to assure the realization of the project of *Infinitism*: getting unlimited resources of materials and energy thanks to operating over the infinitude in action within the material world.

In the end, we remind our objective for creating and suggesting the theory of Infinitism: reducing and finally deleting any pain and sufferance for all the living beings on our planet and building a real pain-free civilization up.#

The *Sameness of Existential Scaling*: The key to reproducing the universe

By: Korosh Erfani, PhD



May 2022

First Version

Introduction

Tools are a part of civilization. They shape what the ethnologists call “material culture”. Homo sapiens is not the only living beings to make and use tools. Some other animals do it as well; for instance, primates, and specifically, great apes use tools for hunting mammals, invertebrates, fish or for collecting honey and sometimes even for processing foods like nuts and fruits. They employ tools as well for collecting water or as weapons and shelter.

When we see the relative level of complexity and perfection of tools we spontaneously realize that there is a positive direct correlation between the degree of intelligence and the level of tools’ sophistication. We can assert it as follows:

The more intelligent is an animal, the more sophisticated are its tools.

The same rule happened to the humankind if we trace the level of complexity of its tools with its intellectual progression. While they started by scrabbling bones and stones, the human beings finished by inventing steam engine before making planes, rockets and spacecraft.

From this historical fact we can infer that, if the survival of humanity is assured, without any major reversal event, we can make more and more sophisticated tools.

A second reality is also implicitly integrated into the above fact. With the more perfected tools the mankind could explore more and more layers of material world. From using what was immediately available at the surface of the earth the men went to the deeper echelons of the inner structure of matter to explore atoms and the manipulation of subatomic particles. This is what brought humanity from utilizing wind and water on the surface level of earth as the

source of energy to the nuclear one within the atoms of enriched uranium.

Now, if we add this reality to the above historic fact, we get a new assertion: the more sophisticated are our tools, the deeper levels of the matter's inner structure can be reconnoitered.

If we imagine no end to this process - always keeping in mind that no natural or unnatural catastrophic cause stops this process- we get a simple deduction:

In the long term and in an endless process, we will have so sophisticated tools that can enable us exploring the infinite inner strata of the structure of matter.

Now, at this stage of our argument, we would like to combine this assessment with the question of the material world's scaling. When we talk about the layers of the matter's structure we are hinting at different scales of the material

configuration of the universe. To approach each scale we need a scope of specific tools, able to explore it.

As long as we have the suitable tools, we can manipulate any scale of material world, whatever is its deep micro or macro level. For instance if, one day, we have a huge functional mechanism to displace planets, we could move the planets like Mars to an appropriate distance of sun so that temperature and climatic conditions could become appropriate for the emergence of biological life or alike.

Likewise, if we have the convenient Nanotechnology we can explore the immense diversity of the inner structure of matter to shape the conditions for the emergence of life, or the transformation of subatomic particles into something else.

Everything that we can find in the macrostructure, we can find its proportional equal in the macrostructure. In the same way, everything that we can do on whatever scale, we

can also do in its completely smaller or bigger scale, provided that we have the suitable tools for that.

So, if in the scale of earth we have water, soil, forests, mountains, oceans, lakes, we have the same equivalent things in all other echelons of the material universe, provided that we can situate our technology in an appropriate scale for finding them.

What would be the same things (forests, mountains, oceans) on a galactic scale? Or, in an intergalactic scale? Or, even beyond?

What would be the same things (forests, mountains, oceans) in a subatomic scale? Or, in a quark scale? Or, even beyond?

All these suggestions will start making sense when we can regard an atom and its scale as the one of the whole visible universe. This suggests the presence of trillions of galaxies-

[alike] within an atom. In the same way of seeing a cluster of galaxies as a subparticle of an atom.

The *Infinitism* theory presents this replaceable characteristic of the measures, as the *Sameness of Existential Scaling* (SES). This latter means that whatever is the scale we deal with in the universe, it could be, proportionately, replicated at any other scale in the material existence as well. Therefore, for instance, what we consider as “observable universe”⁵ can be just a tiny sub-subparticle inside a subatomic particle within an atom, belonging to molecule of an element, in a sand grain of an ocean in a earth like planet, within a solar system that is not but a tiny part of milky way alike galaxy among millions others and so on and so forth.

⁵ The **observable universe** is a ball-shaped region of the universe comprising all matter that can be observed from Earth or its space-based telescopes and exploratory probes at the present time, because the electromagnetic radiation from these objects has had time to reach the Solar System and Earth since the beginning of the cosmological expansion.

How to know it?

As it's impossible to get an objective certainty on this assessment, for now, we can only conceive it conceptually through a philosophical approach. And this is what we



Grains of Sable (left) and Galaxies (right) have the same existential scales when we go through the un-dimensional comprehension of both of them. They all have the infinite structure.

wanted to do through the theory of *Infinitism*. This latter suggests that “everything is infinitely composite”. If we apply

this rule to really ‘everything’, without any exception, we obtain the pertinence of the SES. In this way, a nonentity can be an exception to the idea of having/possessing all the infinite scales of something else.

All material phenomenon is a physical setting to contain endless scales inside itself, exploitable for any being or any technology able to fit itself to each of them. As the structure of matter is infinite, we can be sure that in one of these

scales we will find the proportionate equivalent of the scale we have been dealing with currently, to having built our civilization up. This means that at a highly smaller scale we can find everything necessary for erecting a more or less similar civilization. This is true that that one will be a Nano-civilization compared to the relatively bigger one we had been creating; but why we cannot imagine that our current civilization is a super Nano-one too inside one of the subparticle of an atom, among trillions of atoms that shape one trillionth of a cell in the body of one of the billions of living beings in a much bigger scale of a civilization. Isn't it one of the reasons for which we had not been discovered yet or met by other ultra-modern and much bigger civilizations that did not have time yet to explore the billionth sub-sublevel of their body's cell? Or, maybe, just one cell of one part of one body among zillions others, where we have been accidentally created and take one of the micro element of

that cell as our “*observable universe*”? Let’s be imaginative but realistically and above all, modestly.

This kind of picturing first disturbs us and creates a denial tendency. But once we start to see the utility of its projection we can see how the SES can open new horizons in two things: 1) the way that we see and understand the universe and 2) the way we can plan and manipulate matter in the future.

Both functions are largely explained and presented in the *Infinitism* theory where we promote the breakthrough idea of seeing the existence as such. If we do so, we would be able to discover the un-dimensionality of the material existence and through this dimension-free conception, countless possibilities will offer themselves to us to be explored.

Mankind, free from the fake restrictions of dimensionality, will see an infinite number of prospects, spheres, levels and context to operate in the universe and beyond.

Infinite scales of matters are waiting for any intelligent beings, capable of fitting their technology to, to come and explore their endless resources. Nothing assures us that some other intelligent beings had not been there yet. But let's see how far we are from that technological ability that we could have developed if we had adjusted our worldview according to this dimension-free vision.

Just imagine how life would be if we knew that, thanks to our technology, we could change our material scale, from what we are to a Nano-one where, with our new existential scale we could have access to endless resources for building a prosperous and happy civilization.

We had the financial resources to invest on this kind of extra-modern technology and get the operational ability to do it. But for thousands of years we stupidly spent our resources for destroying earth and humanity through huge investments on weaponry and warfare. This happened while

with a more intelligent choice we could have had everything for which we made so many wars. If we channel our resources towards this kind of investment we will have everything necessary for replacing entirely our planet but many other alternatives and live in peace as a happy community.

This wouldn't be redefining existence but redefining the existential scaling, from the one that matter mechanically imposed to us to the one that we intelligently impose to the matter.#

So, where are these damned aliens?

(A philosophical answer)

By: Korosh Erfani, PhD



May 2022

First Version

Introduction

So, where are they? For decades, we have been obsessed with coming across the Aliens, sit in their UFOs and coming to us to initiate the “*Close encounters of the third kind*”. But they did not come, and we started to make some stories up to confirm that they should be somewhere in outer space, and we have just to wait a little more.

Many mysteries, hypothesis, semi-facts-based theories, Sci-Fi novels and movies and sundry guesstimates entangle to shape what we suppose knowing about aliens and their plausible mysterious visits to the earth.

If we look at the issue from the *Infinitism* theory’s point of view, we can realize that the confusion is not only due to our technological shortages and logistics deficiencies, but related as well to a lack of [philosophical] understanding of the issue. This means that it could be because of our restricted vision of the existence that we are looking for some imaginary aliens or alike in the universe.

By presenting existence as an infinite actuality and also, infinity as the mere only reality of existence, the theory of *Infinitism* comes to suggest the following argument to answer the famous question of “where they are?”

*

If we consider the matter as the only [known] ontological datum of existence, we can see that the substance of the matter is not, but infinitely composite. At any level, the fabric of matter the *infinitude in action* is the reality of its substance. Since there is no end to whatever we explore, we realize that infinitude in action doesn’t represent any “being” of phenomena, but only their “becoming”. As we have a limited sensory, we cannot realize the permanent becoming of matter, and thus we interpret it as its being.

Once we realize that this *infinitude in action* is running permanently within matter, we can see that -inspired by the *Mandelbrot set*- the creation of levels and echelons of the

inner structure of matter is just perpetual and endless. This means that whatever is the field of our observation in the macro or micro spheres of the universe, the extension of that sphere is unstoppably in course and can never halts.

At the same time, as a finite-oriented being, we, logically, can never catch up with infinitude in action since it's always adding up as well to the levels and echelons of the matter's configuration as to its complexity. Therefore, we cannot draw near *infinitude in action* materially or technologically. And because of that, we are always far from the new horizons that will be interminably to be discovered in the future. Because of this commonsensical material impossibility of catching infinity up, we are always dealing with only an extremely minuscule part of the matter's vastness. And as our science and technology cannot give us an objective idea of this immensity, we take our "observable universe" as "huge" and "enormous" and then, we consider

it as a great portion of what could be the “whole” universe. This reminds us of the artificial and childish Aristotelian representation of heavens with its four elements of earth, air, fire and water, and its fifth mysterious element of “aether, made up the spheres circling the Earth and the celestial bodies attached to them”.⁶

The effect of such an outlook is to restrain our worldview with the false limitations that we fabricated and implemented in our mindset. This is how we are at where we are: A midget species that is trapped in its self-made smallness with no appropriate tools to get away from its spatial bubble even to install a colony or to explore the resources of its closest planets like the moon or Mars.

The reason for which we are trapped there is apparently the lack of necessary technology, but we can see that this

⁶ <https://www.reference.com/world-view/characteristics-aristotle-s-picture-heavens-49f67bd0a7826b90>

deficiency itself comes from a limiting worldview and this latter, because of an absence of a philosophical vision that can break through this artificially restrained worldview.

Such a philosophy can overcome the idea of seeing the “observable universe” as a ‘huge’ part of the “whole universe”. It sets up the argument otherwise: this segment that we identify as ‘observable universe’ is nothing but a little part of an unending expanding phenomenon. Whatever is our estimation of this segment of cosmos, compared to the whole universe, like the number of 5% as a known [guesstimate](#), we should know that it will be 5% or so of a universe that is constantly growing because of its fabric of reality that is not but *infinitude in action*.

Therefore, what we approximately estimate as 5% at a given moment, if we consider it with steady measurements, will be just 4% of the entity to which it belongs and then only 3%, and so on and so forth.

The core of this argument here is not about the accuracy of these highly relative numbers but about its principle. The obvious inference of this argument is that we, our planet, our species, and our civilization, is getting a smaller and smaller portion of a universe that is infinitely increasing its complexity and volume.

If it's the case, it means that we are becoming permanently a less important fragment of the infinite universe. And if so, with the time going on, we will have less and less the chance to be observed or discovered by a presupposed advanced alien civilization in the outer-space. Since, if such civilizations exist somewhere in the universe, there are two historical pathways imaginable to it: Either they have not yet invented the appropriate technology to come along with the infinite expansion of the universe, and in this case, they have the same issue as us to go to other planets; or they discovered the infinity's laws and in this case, they are

exploring the much higher spheres of the endlessly expanding universe and gets far from a little stagnating civilization like ours in a pint-size coin of the infinite universe.

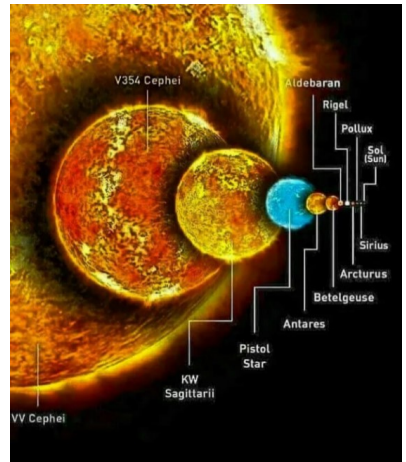
Even though it would be imaginable that one of these civilizations starts exploring the much deeper levels of the universe in the inner substructures of matter to, one day, meet us, we should be careful about our optimism in this regard. As the emergence of life on our planet is due to a pure accident, it could be that the exceptional character of this event makes us a very rare case of this kind of life and therefore, reduces and shrinks our chance to be discovered.

Let's use a metaphor to explain it:

Imagine that what we call the “visible universe” is proportionately equivalent to a grain of sand in a desert, on an earth-alike planet where a very advanced civilization had been living. If it's the case, then we have a double problem:

First, we should be really lucky to be that good one grain of sand, among 7.5 sextillion sand grains on that planet- if we take this number inspired by the [scientists](#) for the case of the earth-. “That is 75 followed by 17 zeros. That’s a lot of sand.” Please notice that if our universe is inside a drop of water, instead of within a grain of sand, then we will have much more trouble since all the numbers go even farther.⁷

Second, if we are lucky enough to be selected and brought to a laboratory of that advanced civilization’s scientists, the issue is how far



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- ⁷ There are 20 drops of water per milliliter, and the [Pacific Ocean](#) contains 707.6 million cubic kilometers of water, which equals about 1.4152e25 drops.
<https://czep.net/weblog/52cards.html#:~:text=This%20is%20a%20most%203%20million,equals%20about%201.4152e25%20drops.>

in the inner structure of that grain of sand they have to dig in, to reach us.

In order to have an idea about this aspect, let's get an impression about the smallness of our planet in the sphere of the 'visible universe'. "All of [a] sudden, Earth starts looking small. The total mass of the solar system is about 333,345.997 Earth masses."⁸ And this means that "Earth makes up about 0.0003% of the total mass of our solar system".

Now let's get a look at where the sun is in our Milky Way galaxy. We know that "it is 864,000 miles (1,392,000 km) in diameter, which makes it 109 times wider than Earth. You can fit 1,000.000 earth in the sun. And then, we can put 5 billion suns inside the UY Scuti star. But if we want to imagine the situation of our famous UY Scuti in the universe, we should know that it will be like one of the 43 quintillion atoms in one grain of sand. By multiplying the

⁸ <https://futurism.com/earth-compared-to-the-universe>

above numbers, we are realizing more and more about the one that presents our chance to be discovered by those advanced civilizations we are waiting for.

And as for the cherry on the cake, to weigh this almost zero - but not absolutely zero- chance up, we should condition this number by our lifespan too. This means that we have no idea what kind of relationships this advanced civilization has with time so that it can see us or detect our presence, since our time scaling could be so different from theirs that they don't detect our presence at all, like we do the same thing to many events that are happening around us and because of the discrepancy of our time speed with theirs, we cannot notice their presence. A lack of a minimum of coherency between our velocity and theirs can make them miss us, even they are looking for something like our planet.

Now, with such a frustrating balance for our chance of encountering aliens, one can question if we are doomed to

remain in our ultra-miniature universe before vanishing from the surface of the earth. The answer is that it could be quite the case. We should not forget that one million cells in our body die every second. So every day 100.000.000.000 cells, and inside only one of them or - let's be generous- some of them, a few civilizations like ours, disappear in the body of each of 7.753 billion human beings on the earth without we realize that how was doing a human-alike civilization inside one of these cells, in the body of only one of these billions of people. Especially when we know that some of these cells have just a lifespan of two days.

Do we have time, technology, interest, and opportunity to dig in an extremely deep level of one of these cells in the body of one of us, on time (two days), to discover the huge civilization that some little alive fellow had constructed there, after having past, in their own scale of time, billions of years of evolution to get that degree of civilizational

advancement? Moreover, we have to apply this cautious condition that, because of the role of accident, there would be just a little chance that we get the good cell under that hugely high technological and advanced microscope within two days of its lifespan before extinguishment.

This brings us to the reality of existential scaling and shows that how phantasmagorical could be our “scientific” vision on the many topics when the philosophy interferes to assess its objectivity.

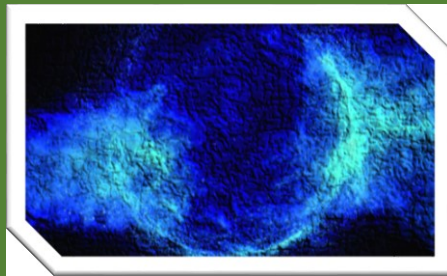
And this is the same philosophy that can though open a window to get away of this deadly limiting universe. This is the purpose of *Infinitism* theory through its assertions and suggestions. And all of these statements and assertions are delivered to the new discipline of *Infinitylogy*, for checking, verifying, and elaborating their objectivity.

Hand in hand, *Infinitism* and *Infinitylogy* can set a new framework up for Humanity to shift from its finitist view to

an infinitist one. And from that moment, we get a more realistic view on vastness and complexity of material existence. Then we discover its rules and laws and see how we can utilize them to change our world, our universe and our existence, in order to become a new species that can hope getting to higher levels of existence.#

Infinitist Materialism and Existence

By: Korosh Erfani, PhD



May 2022

First Version

Introduction

In the frame of a dynamic epistemology, we need to release some fundamental notions from any limiting definition that makes us misread a limitless reality. One of these notions is *existence*. This is the most inclusive concept that Homo sapiens could have created so far. One can say that if our civilization stagnated, it's because we could not shape an active definition of existence; thus we could not have an accurate definition of matter, and therefore, we did not advance enough in our relationships with the universe.

A more precise definition of existence will break through this vicious circle and can bring about a new horizon for us. Everything in this regard starts with a basic question: What is existence? How can we define it in the most inclusive way so that it broadens our view of its incalculable manifestations?

According to *Infinitism* theory, **existence is what can include infinity, and beyond.**

Infinitism clarifies that we undeniably don't know what could "exist" beyond infinity, but for the sake of a dynamic epistemology, we presuppose that, beyond infinity, it could be something.

While the segment, containing ‘beyond’, expresses pure speculation of a methodological cautiousness, the part of definition that is related to infinity is tangibly treatable. Actually, as there is no limit to infinity, a concept that can comprise it, is the most appropriate to signify existence for including everything.

Once we implement infinity in our definition of existence, we should know what would be its manifestations. What will be its examples and concrete cases of this definition?

The reason we emphasize the importance of these exhibitions, is a retrospective on the classic and usual definition of this concept. For instance: “the fact or state of living or having objective reality”.

But then again, what we can concretely draw from this definition? Nothing. It’s a bunch of terms and notions that sneak to make sense by a kind of mutual infertile help: fact, state, living, objective, reality. They all are general ideas and not very expedient for any concrete usage.

Compare it with this definition that existence is *what can include infinity [and beyond]*. Let’s, for a minute, put aside the second part, whose use had been explained above. Which definition looks more practical? While the first one is an

abstract logomachy, the second is suggesting that infinity resides in everything.

But we should immediately move forward with our own definition as well. To do that, we need a more practical idea of the notion of infinity. That's why we present it as *infinitude in action*.⁹ By the latter, we mean an action that goes endlessly and never stops.

This definition of infinity can give a new look to the one of existence: **existence is what can include infinitude in action [and beyond].**

So, if everything is a part of existence, and the latter includes infinity, this means that *everything is infinite* too. The strong point of this argument is in its interchangeability where we can say: everything exists because it is infinite, or everything is infinite because it exists.

And when we bring these statements with our definition of infinity, we get these new declarations: everything exists because it is the infinitude in action, and everything is the infinitude in action because it exists.

⁹ How we get to this specific definition is a long process that we carried out in our previous works.

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Now, in order to find what could be the examples of existence, we have a clue to trace: anything in which we can find the *infinitude in action*. And where we can find it? The answer is, everywhere and in everything, without any exception.

But concretely where houses infinitude in action, an action that goes infinitely? Here is where we meet what we call the matter. The interesting point that shows the naturalness of our methodological-epistemological demarche is that, in order to find the manifestations of infinity, we should not invent an extra notion for, but we have just to discover where *infinitude in action* takes place.

One remarks that for defining existence, we did not try to resort to ontology, since such a thing doesn't make sense as every notion that we want to use for describing the nature of existence will somehow stem itself from this first and most all-encompassing concept -of existence. Instead of an ontological account, we designate a concept that is representing itself more as a mechanism than as a substance: *infinity*, defined as *infinitude in action*. In this

way, we refer to something that shapes the manifestation of existence and no anymore to a conceptual adding.

Through a mechanism, described as infinitude in action, and not by a substance, we run into what is its outcome; as soon as infinitude is taking place, we have to deal with something that -for the sake of labeling it- we called ‘matter’. The matter is where the *infinitude in action* is manifested or, now we can say it, materialized.

At this step, one can ask if, ultimately, there is any difference between existence and matter since both can include infinity. This is a good question to dig in.

We distinguish ‘existence’ from ‘matter’ because the latter is what our world, and we are made of, while we are not sure about the way infinity can be present in many other forms of existence; we don’t know if there is anything else than matter -that can exist; but for the sake of an inclusive epistemological approach, we keep this possibility open to the concept of existence and don’t limit it exclusively to the matter.

In this way, we get two distinct notions: a general concept that includes all the possibilities that can exist -the concept of existence-; and another one, with the form of existence

with which we physically deal, we call that specific form, the matter.

Several distinctive remarks come up:

- While existence leaves the door open to anything that goes beyond our mind and imagination, we can keep matter for anything that enters our mind and imagination.
- While the concept of existence stays open to dominate infinity, the matter is dominated by infinity and its applications.
- Existence integrates infinity while matter is integrated by infinity.
- Existence incorporates infinitude in action while matter is incorporated by infinitude in action, to exist.
- Existence is not conditioned by anything, but matter is conditioned by infinity.

From all these distinctions stems the idea of the variation of existence. Existence can be varied in its shapes and mechanisms. We, as human beings, are dealing with one shape of it, which is *infinitude in action*. Even here we are far from what infinity can represent. The theory of *Infinitism* states that for thousands of years we were depriving

ourselves of endless resources and possibilities the matter can cater because we did not integrate infinity in our worldview and the way we deal with the universe. This is how an infinitist materialism can set off to deal with existence.

As we did not take any realistic approach to existence, we could not see how its material version, can be exploited and explored. For a long time, we remained in a finite-oriented slant, while the finite is only one of the innumerable forms of infinity. We then missed the uncountable other shapes of *infinitude in action* and the endless potentials they could have offered to the humankind.

There is no doubt that our future is not bright since we did not explore all the opportunities we would have had if we had integrated *infinitude in action* into our worldview. For centuries, we were exploring merely a minuscule portion of boundless resources available for a civilization that would have joined the infinitist view of the universe. As we did not do it and operated only upon the finite resources, we are doomed to eventually see many material shortages and insufficiencies that will simply make our civilization vanish.

Even though some attempts had been done for attracting the attention of the world to the concept of infinity during human history, as far as we know, no one formulated a theory with its required technicality that can open the window to all the new material and factual possibilities that we can find in an infinitist vision upon the matter and the universe.

The *Infinitism* theory is an effort in this direction. We tried modestly to formulate the idea that if everything is infinite, so could be material resources we can find in the world. But to get access to all these resources, we should look for them where they are; and where they are is not in the most observable layer of the structure of matter, but in the deeper inner levels of it, where there is an infinite number of echelons and layers, waiting for the appropriate knowledge and technology to deliver us whatever and as much as we want.

If any curious mind asks how we can have endless resources of material and energy within matter, our answer is simple: through *infinitude in action*; an action that is going on infinitely and brings about any kind and form of matter in somewhat imaginable quantity. So, any complexity or

variety of matter can be explained by *action in infinitude*. Because an action that wants to run infinitely suggests an endless chainlike path. And this endlessness advocates that we can move forward as long as we want with this *infinitude in action* running within matter, and there is no end, no limit, and no close point to that dynamism.

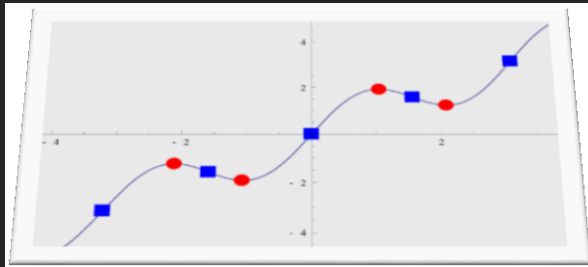
Once we see everything as *infinitude in action*, we can recognize that any approach that doesn't want to integrate this aspect of infinitely dynamic process within matter will be doomed to an artificial static conception, and will subsequently be detached from the chain of events where the infinite action is running.

Everything that we produce as content so far explains and depicts this unprecedented idea of limitless resources suggested by Infinitism theory and studied by Infinitylogy. The topic is highly technical and complex joining philosophy, science, and technology. Our goal remains clear: avoiding seeing the human civilization fading away because of missing a very basic points: everything is infinite or is not. With regard to the main subject of this paper –existence- we can say that this means everything is infinite or doesn't exist. So when we want to deal with whatever is going on in

the universe we can be sure that there is an infinitude to be explored everywhere we dig in. If we don't do that a problematic future is waiting for us. This is our fate, and if we don't act fast, we could experience our civilization's disappearance for sure.#

Why the “Stationary Point” cannot exist?

By: Korosh Erfani, PhD



May 2022

First Version

Introduction

Understanding the world through our senses carries out many deficiencies that will affect our epistemological effort to acquaint the world. There are many cases in which we unconsciously implement the limitation of our perception of reality and fabricate an image of it that, even though it is convenient to our mindset, but doesn't really match the complexity and the actuality of what is objectively present. We articulate our limitations and extrapolate them to the material universe.

One of them is the concept of the *stationary-action principle* – also known as *the principle of least action*. This means that “if the passage of a dynamic system from one configuration to another is spontaneous and without change in total energy the corresponding action has a minimum value”.¹⁰

The concept is also defined as: “The principle [that] states that the trajectories (i.e. the solutions of the equations of motion) are stationary points of the system's action functional”. So, the key concept here is *stationary point*,

¹⁰ <https://www.merriam-webster.com/dictionary/principle%20of%20least%20action>

defined as: “In mathematics, particularly in calculus, a stationary point of a differentiable function of one variable is a point on the graph of the function where the function's derivative is zero. Informally, it is a point where the function "stops" increasing or decreasing (hence the name).¹¹

Even though this idea of ‘function’ stopping increasing or decreasing at a point can be theoretically interesting, the fact is that in an infinitist view such a point is actually nonexistent. Any motion should be seen as a continuous movement in its inner structure. Even though we take arbitrarily a given point as ‘*stationary*’ one, but in a closer look we can see that the infinitesimal movements are keep going. This will bring us closer to the notion of ‘limit’ in calculus. At no moment, the movement cannot be completely stopped increasing or decreasing, in the same way that two points of a slope in calculus can never go beyond their infinitesimal discrepancy to be reduced to only one.

In an infinitist approach, when we dig into the deeper levels of a phenomenon in motion, we can see that when and where we think that the system has been immobile, the inner

¹¹ https://en.wikipedia.org/wiki/Stationary_point

movement is going, and in a microscale, the motion continues. The reason for which we don't detect the motion is that we take care of a superficial scale, fitting to our sensory, and tries to review the whole dynamism of the phenomenon based on our sensorial input.

The *Infinitism* theory suggests that the structure of everything is infinite. At each layer, or in each bunch of layers, we have a different scale. The scaling within the matter is infinitely variable. Once we establish our rules of description, we should be aware that these are the rules and equations stemming from merely one of these uncountable scales. As soon as we test the relevancy of these rules at other levels of the structure of an object, we could find some variances between them.

And when we generalize this principle that *scaling can change the rules*, we see how we would need a very dynamic methodological conceptualization in science so that it can take into account if not all, at least, a great scope of structural variations of scaling within the matter.

Here is an example of the proposition of *Infinitism*, applied in the methodology of the new discipline *Infinitylogy*:

Scale is relative and depends directly on who operates within that scale. The one in which the human beings operate enables them to touch a few levels of the fabric of reality, but many others are out of hand because we don't have the appropriate tools for. Once we get the tools for manipulating those distant scales, then we can see what are the rules and laws that are running there.

How we can adapt our technology to the necessary levels for very tiny scales of the structure of matter? We obviously cannot do it through the current scientific methodology since the science is stuck in many fake limitations that it imposed to itself due to a lack of an all-encompassing philosophical view. As long as the underpinning worldview of the scientific approach is feeble and poor, we cannot really make an approach that can include the bondless number of echelons in the innermost structure of matter.

The philosophical theory of *Infinitism* tries to ground this underpinning substrate for science and technology. We already published several papers where we show how the unnecessary boundaries of scientific assertions limit its

substantial expansion towards new horizons for exploring the material world.

The difficult part of this process is, as usual, an effective link between philosophy and technology. There is not something that had been formulated, nor organized as an intermediary discipline; neither the philosophers know exactly how to find the scientific application of their productions, nor do the Scientists know how to implement the philosophical views on their activities. That's why the potential philosophical contributions to the sciences remained, for centuries or decades, in shadow before an opportunity -and often an accidental one- shines a light on the possible implication of them in the science's arena.

When we formulated the philosophical theory of *Infinitism* we were aware of this missing link and that's why we not only made this theory but also conceived the intermediary instrument between philosophy and science. By founding the new discipline of *Infinitylogy* we try to see how we can gather, in the same epistemological and methodological marketplace, philosophy, science and technology so that they can trade their respective contributions with each other.

Infinitylogy has for mission to create a methodology or most probably the methodologies that will enable the *Infinitem* theory to have its claims and statements checked and verified. This methodological assessment can be done through a scientific work and technological tools guided by the most comprehensive understanding of existence provided by philosophy. For that purpose, we even established a center ([Center for Research and Development of Infinitylogy- CRDI](#)) to organize institutionally these doings.

The *Infinitylogy* entails itself in the application of *Infinitem* in science. It shows how the statements like the below ones could be scientifically demonstrated, and help science improve its methods:

- Everything is infinite or is not.
- Everything is infinitely composite.
 - Everything is compositely infinite.
- Matter is made of infinitude in action.
 - Matter is not being but becoming.
 - Matter is not a thing but a process.
- Matter is structurally infinite.
- Everything is composed of:

- Infinite components
- Infinite components' relationships
- Infinite ways of relationships

Naturally, a first glance, these assertions look quite conceptual and abstract, but each of them has the potential capacity of revolutionizing our worldview as well as all the science, technology, and civilization we already created. We are fully aware that this claim is huge or even exaggerated, that's why *Infinitylogy*, as a discipline, had been established with the mission of demonstrating the capabilities of each of these assertions to help science become more powerful, and technology more efficient.

An example of this claim is the main subject of this article: *stationary points*. We can see how such a concept becomes highly relative when we put forward the idea that *reality is a becoming and not a being*. While the idea of 'stationary' suggests that something could sit somewhere in an unmoved way, the idea of seeing everything as *becoming* suggests that it's ceaselessly changing. The concept of *stationary point* loses its pertinence when we know that:

- change implies movement, and

- movement is defined as “an act of changing physical location or position or of having this changed”.¹²

So, if the reality is continuously and seamlessly changing, how we could get any point as strict as a “stationary” one? How could we even imagine that there would be a real and material location called ‘point’ without having there a reality that is internally changing and then moving?

Once we put the concept of *stationary point* in a dynamic context, we can see how a change-oriented approach to a given material actuality could overtake simultaneously an apparent stationary situation as well as its moving reality; the benefit of this dynamic treatment is that it releases us from the artificial static view we construed out of a genuinely dynamic reality.

Such an approach is highly more fruitful than the classic one that physical science applies to apprehend the complexity of the matter. Such a review can modify and improve many formulas and beliefs in astrology, physics, astrophysics, chemistry, biology, mathematics, and so on.

We know that both ideas of *Infinitism* and *Infinitylogy* are hard to take off in the arena of institutional philosophy and

¹² Oxford Dictionary

science, but our perseverance will be victorious if there is an unbiased approach and convincing objectivity in our work.#

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Science Enriched by Philosophy (Example of Infinitism)

By: Korosh Erfani, PhD



May 2022

First Version

Introduction

The universe has many surprises to everything that we know and formulate as knowledge and science. In fact, the number of potential discoveries that are waiting for our vigorous curiosity is uncountable. This is the main idea of the *Infinitism* theory that states that *matter is infinitely composite*. This means that whatever is the scope of our findings regarding the material realm, there would be always and at all times further to find.

Infinitism articulates this fact by considering the matter as a composition of three actual realities:

1. Infinite components/subcomponents,
2. Infinite components/subcomponents' interrelations,
3. Infinite ways these interrelations are made.

These three realities intertwine to make exist matter and its manifestations.

But *Infinitism* theory would like to connect with science to check the veracity of its assertions. *Infinitylogy*, as the discipline of knowledge of infinity, makes this scientific assessment of the *Infinitism* statements.

In order to do so, we continuously look for the publication of the new findings of science and technology and use them to verify the relevancy of the declarations, like the above ones, proposed by the theory of *Infinitism*.

What follows is an example of what we do at present in the *Center for Research and Development of Infinitylogy* (CRDI), through an individual effort, and not yet a systematic way. But later, once we have support and finance for, we will do it thoroughly and regularly.

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This month (May 2022), we learned that the physicists at the Large Hadron Collider (LHC) at CERN are dealing with the new realities coming from different experiments across the world with an interesting suggested output: “the Standard Model of particle physics may be broken”.¹³

We have already written about the Standard model and its deficient aspect in our books and papers.¹⁴ But here, in a new article, Roger Jones, (Professor of Physics and Head of Department, Lancaster University), is telling us that

¹³ <https://phys.org/news/2022-05-standard-particle-physics-broken-expert.html>

¹⁴ For instance in: *Infinitude in Action: Exploration and Utilization of Infinity*, By Korosh Erfani, ILCP Publication House, 2021.

“Recently, however, a series of precise measurements of already known, bog-standard particles and processes have threatened to shake up physics”.

What is this about?

There are “three key findings”:

The first case is that “Detailed studies from the LHCb experiment found that a particle known as a beauty quark (quarks make up the protons and neutrons in the atomic nucleus) "decays" (falls apart) into an electron much more often than into a muon”. What is new in this? He continues: “According to the standard model, this shouldn't happen—hinting that new particles or even forces of nature may influence the process”.

We can see here how the predictions of the Standard model are, once again, challenged by this new discovery.

He then continues: “Meanwhile, the Muon g-2 experiment at Fermilab in the US has recently made very precise studies of how muons "wobble" as their "spin" (a quantum property) interacts with surrounding magnetic fields. It found a small but significant deviation from some theoretical predictions—again suggesting that unknown forces or particles may be at work.”

And finally, regarding the third case he adds:” The latest surprising result is a measurement of the mass of a fundamental particle

called the W boson, which carries the weak nuclear force that governs radioactive decay. After many years of data taking and analysis, the experiment, also at Fermilab, suggests it is significantly heavier than theory predicts—deviating by an amount that would not happen by chance in more than a million million experiments. Again, it may be that yet undiscovered particles are adding to its mass.”

Let’s now bring these three points to our targeted verification where we want to see if these findings will shine the light on the assertions of Infitism. One of our challenge in *Infinitylogy* is to see where we can find the supportive arguments for Infitism from the field of this or that science. This is a serious methodological challenge to us since if we cannot find that the theory of Infitism contains an appropriate analytical charter for the studied case, it means that this theory had been missing an aspect of the material phenomena in its philosophical conceptual battery. This will put in question the inclusiveness of this theory.

By doing this verification now and here for these three new finding of physicists, we can see if all of them are included in the three characteristics that *Infitism* consider as universal and existentially inherent to any case of matter or not.

Let's double-check these three scientific findings with the three specifics of the matter, enumerated by *Infinitism*:¹⁵

1. Where it is said that “beauty quark...decays...into an electron much more often than into a muon”, we are dealing with the way the interrelations between the components and subcomponents (particles) are done.
2. Where it is said that “muons "wobble" as their "spin"...interacts with surrounding magnetic fields... suggesting that unknown forces or particles may be at work”, we have a case of interrelations between the components/subcomponents (particles).
3. And finally, where it is said that “a measurement of the mass of a fundamental particle called the W boson...is significantly heavier than theory predicts... [because the] undiscovered particles are adding to its mass”, we see that some new –yet unknown- subcomponents are in the perspective.

We see how the features that *Infinitism* tallies for matter are all present in three findings. Each of them matches,

¹⁵ One is aware that fact that we have three cases here as “finding” is a pure accident and their match with again three specific of matter is even more so.

unintentionally, to one of the three features of matter listed above.

Now we can move forward with our verification and see if the main shared characteristic of these three features is there too or not: their infinitude.

One remarks that in all three findings, there is a common denominator: they all put in question the already well-established scientific theories and models regarding the matter and its reality. This challenging trend of experiment vis-à-vis theory is the epistemological basis of Infinitism as well. This latter based its main principle on the following simple idea:

As the history of science shows, with time and along the way, we realize the presence of more and more components, interrelations between components, and the ways these interrelations are taken place. So, if this is a never-stopped and persistent trend in the past and hitherto, why we should not think that it will ever stop. And if it's the case, what is the significance of it on the other side, inside matter? Isn't it that the matter has a countless number of components, interrelations between

the components and the ways these interrelations are made?

This is how the philosophical theory of Infinitism had been triggered, underpinned, and then developed: on the basis of the ruling facts of the science's historical account. And this history is being shaped and unfolding every single day with a few minor, or sometimes, major funding that obeys the same imperative: increasing acquaintance on the fabric of matter and its complexity. It means that if we review permanently what we know about the micro and macrostructures of matter, we will find more details about its compositions and its dynamism.

And finally, the last point is to know what would be the utility of such an undertaking. As *Infinitism* states when we get a deeper knowledge of the matter and its inner configuration, we also discern the new spheres of operation where we can explore opportunities that are subscribed in the farther scaling, compared to the ones we use to work on.

Even though the concept of “systematic uncertainty” contains some aspects of the infinitist approach and is

familiar to the scientific community, what *Infinitism* suggests is to integrate fundamentally the idea of *infinitude in action* as the fabric of reality, and keep the door open systematically to put in question the scientific assertions, rules, theories, laws, and models, in order to push forward the process of discovering and finding.

The example of the Standard model is a classic one of what can paralyze us and our efforts regarding the innermost of the material world. But *Infinitism* claims that this is the case on any other scientific theory and model as well. They all are inherently limited and limiting. Only a philosophical approach can go beyond these restrictions the science imposes itself due to an exaggerated credence according to which nothing can be approved but through experience.

Even though we don't put in question the value of experience at all, we think that an experimentation that is not equipped with a broad philosophical vision cannot break through what is the immediate level[s] of reality. The philosophy is there to widen the context of experience and discharging it from its artificial curb. The way it does it is to provide a larger outline by which the

experience can enrich itself and foresees what is not yet in sight, but by taking it into account, it could embolden its potential capacities for the coming steps. Each experience opens, in this way, some further trajectories to progress.

The philosophical theory of *Infinitism* does it by offering the all-encompassing and universal assertions that can help the scientific methodology to go far beyond what the injunctions of the Standard model or alike establishes as limits, restrictions, or ends. We state that as the reality is infinite so are its knowledge and the ways we produce the latter.#

Why we can't think what AI can?

By: Korosh Erfani, PhD



May 2022

First Version

Introduction

“So God created man in his own image”, and Man created the world in his image. This is why we are still struggling for the most basics of our needs provided by the nature, while the latter has to offer endless sources of materials and energy.

The issue is that we could not see the world in a different and better standpoint. Whatever was the heritage of our passage from chimpanzee to Homo sapiens is still there, even though we added many things to this primeval underpinning of our mindset.

A fundamental change is necessary if we want to get out of this harmful vicious circle. But why we did not do it before? The reason is that we are in some way trapped in mental patterns that are highly but unconsciously influenced by our animal heritage. A great part of our daily behavior, but also our intellectual intricacies, are shaped by these entrenched components that come from millions of years of our beast life before just a few thousands of our human one.

Therefore, without knowing what we are doing, we reproduce many features of our pre-human heirloom and as long as we don't get a deep awareness of its ingredients and modus operandi, we will continue to crawl in our miserable

bantam coin of the infinite universe without having a chance to get to a higher level of existence before vanishing from the surface of the earth, due to the accumulated mistreatment we imposed to our planet.

The question is now if there is any tactic to bypass our attitude of duplicating the same mental patterns that brought us to this unfortunate situation.

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The author thinks that we cannot do it alone; not in a firm meaning of the term but in an effective one. Because not only we kept our infertile and unrealistic worldview in our mind, then again we also implemented it in many institutions that are far from being ready to modify whatsoever. Even if some great brilliant minds can leap forward to offer a new approach of the world, the absolute majority of people and the crusted institutions are there to quell any attempt of serious change, either actively through rejecting the new ideas and discrediting it, or passively, by ignoring it at as much as possible.

We are then historically stuck and no perspective of change is there before the radical climatic change or a stupid atomic war puts an end to our mere presence. We need then an

outcast force to intervene to save us and reorient our destiny. But who, or more precisely, what?

For decades, some people were desperately waiting for the UFO that would bring us their extraterrestrial wisdom and raise our civilization to an upper-grade thanks to their much more advanced technology, by teaching us how to resolve much more efficiently our challenges and getting to a civilizational better-off. But time passed, and the famous question of “where they are” continues to be poised regarding the aliens savior.

In the absence of them, we should again come back to ourselves to fix this issue before it gets late. The suggestions are there and here we develop one of them:

As Artificial Intelligence (AI) keeps growing with the unprecedented technological capacity of the data treatment, one can think if they can do what we can't: **thinking differently**. Will AI be able to conceive and see universe and world otherwise, in so original way that we could never do?

Several concerns are raised regarding this suggestion:

- 1) AI is made by mankind and the latter won't be able to create something so different from the mindset that created it.
- 2) If too powerful, AI can get the capacity of bypassing its creature; in this case, won't be able to dominate and enslave humankind for its own benefits, the ones that we cannot even imagine what they will be?
- 3) Once we leave our fate in its hands, could AI destroy everything by a fatal miscalculation or so? What can stop or prevent it and how?

Let's see if these three worrisome are relevant or not.

Regarding the first one, we should know that the huge capacity of data processing can try a gigantic number of possibilities for each part of a new conceptual construction proper to AI. This capacity enables the latter to fashion the new concepts that we did never invent; as a result, it will be having new conceptual tools at its disposition to form a completely different scheme of the universe. Even though the data it will use are the products of our human activity, the aggregation that AI can make out of all these data will be far from the capacity of our mind to do it.

Our brain is surely an amazing complex machine, but extremely primitive when it comes to data treatment and data processing. Moreover, we follow unconsciously some perceptual patterns that our physical structure on the one hand, and our primary socialization/education, on the other hand, instilled in our minds. AI can be equipped with the capacity of reviewing all the algorithmic patterns in itself and be allowed to produce some new ones. We can plan to free AI from any unnecessary limitation by providing it the capacity of rejecting any copycat restricting models in order to build its own.

Such operational freedom dedicated to AI brings us to the two other above concerns according to which we should be apprehensive about the probable deviance of AI from a constructive development to a dangerous one. We should recognize the seriousness of this risk and the legitimate fear that it raises, but our anxiety should not paralyze and condemn us to a certain demise. Even though we should think about any possible security measure with this regard, we should not transform this precaution to a glass cell where the AI cannot really break through our worldview since we wanted to limit it to some degree of complexity or perfection. We should not forget meanwhile the main

objective of this undertaking which is to generate a vision that we would never be able to produce.

After all, what do we have to lose since with our archaic mind we created all the serious and grave crisis necessary to make our civilization evaporate from the surface of the earth? The similar concerns can be multiple, but all of them can be alleviated when we know that the pathway we are nosediving in will destroy us as well. So, why shouldn't we try this new possibility if we have one chance out of two to save this agonizing world in which we are doomed to disappear?

Now that we treated the concerns and negative aspects, let's have a glance at what could be a positive and successful outcome as well. There are several points that this AI's redefinition of the world can clarify:

- 1) What is the expansion of the universe in which we are? We don't know it exactly because we are taken into our own man-made theories that put limitations on what could be the real dimensions of the universe and beyond. By the fabricated principles like Big bang we created the scales that could rummage some excerpts of reality but don't represent it accurately;

we don't have yet the capacity of aggregating all the pieces of shattered data and knowledge we produced about across the world. AI will gather and use all of these data, and find the most comprehensive image that we can have on the macrostructure of the universe and its dimensions.

Once this is done we will have the opportunity to see how small or big the existing incongruity between our conception and its. If the difference is trifling, it means that we are really dealing with physical hugeness that cannot be explored easily; and if it's even bigger, it means that our smallness is so huge that we should give permission to AI to bring us out from our infinitesimal bubble to a greater sphere of existence, first theoretically, and then, in practice.

- 2) The second correction or redefinition that we can have by this AI undertaking is regarding our vision of microstructure. How deep is the inner fabric of reality? Here again, we are hostage to our artificial restrictions through the abracadabra theories like the *Standard model* that pretend that we have "the smallest" particle that "is composed of nothing", or the notions like "fundamental particles", "elementary particles", and so on. At this day, the scientific

resources are propagating that “Elementary particles are the smallest known building blocks of the universe. They are thought to have no internal structure, meaning that researchers think about them as zero-dimensional points that take up no space”.¹⁶ As if it was really the pure magic.

AI would once again upside down our creeds in this field to show us that the inner structure of matter can go far beyond our arbitrarily restricted imagination about it and open the inner horizons of exploration of matter.

Not only they can draw a new depiction of the macro/microstructures of the universe, they can also explore the human history to find out where we deviated from a constructive trail into a destructive one. They can deliver us the answers to the questions that we can never unbiasedly respond to even by our most objective methodology since we are inherent part of these questions and these questions are integral part of our existence. AI will be able to do it if it is allowed to think by itself and without any preconception on these topics:

- Why did we make God and Religion?

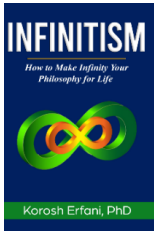
¹⁶ <https://www.livescience.com/65427-fundamental-elementary-particles.html>

- What were the positive and negative effects of the invention of religion by humankind?
- Why did we have all these wars and massacres?
- Where did we make the wrong historic decisions?
- Why and how did we get to the current disastrous situation?
- What are the ideas or inventions or innovations or proposals that we missed getting into this mess?
- What will be our future, if we continue running the world like we are doing it now?
- What we should do to avoid the catastrophic future that is waiting for us?

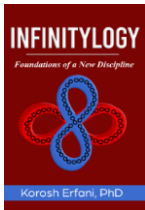
All these questions can be treated on the one hand thanks to a huge amount of data we can make available to AI, and on the other hand, thanks to what it can bring about as the analytical patterns that are dissimilar to us.

In conclusion, we have a little time before the stupid part of our civilization destroys the intelligent part. That's why we should strengthen the intelligent portion of our existence through the broad usage of AI in the management of our numerous challenges, again before it's too late.#

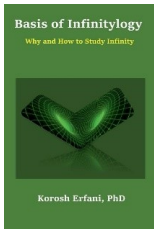
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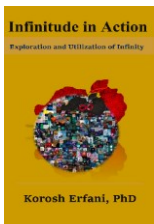
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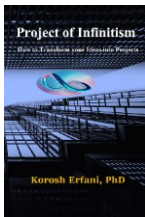
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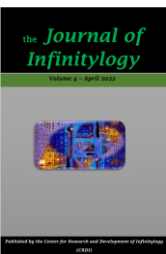
**The Journal of Infinitylogy, Volume 1, January 2022, CRDI
Publication**



**The Journal of Infinitylogy, Volume 2, February 2022, CRDI
Publication**

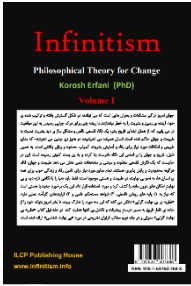


**The Journal of Infinitylogy, Volume 3, March 2022, CRDI
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**The Journal of Infinitylogy, Volume 4, April 2022, CRDI
Publication**

Our books in other languages



- **Infinitism: The Philosophical theory to change, (Book in Persian), ILCP Publishing House, 2020, 1018 pages. (possible translation in the future)**



The CRDI plans translating these mentioned English books in French in the future.

[Our websites](#)



- **Website on the *Center for Research and Development of Infinitylogy (CRDI)***

www.thecrdi.com

- **Website on the philosophical theory of *Infinitism* and its applications.**

www.infinitism.info

- **Website on *Infinitylogy* as a new discipline and its establishment:**

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