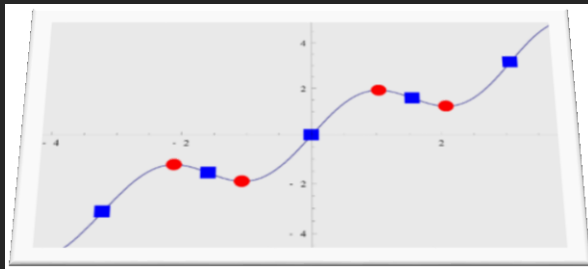


Why the “Stationary Point” cannot exist?

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May 2022

First Version



A production of Center for Research and Development of
Infinitylogy (CRDI)

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”.¹

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*,

¹ <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).²

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

² 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 *Infinetism* 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 *Infinetism* 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”.³

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?

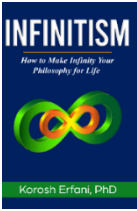
Once we put the concept of *stationary point* in a dynamic context, we can see how a change-oriented approach to a given material actuality could overtake simultaneously an apparent stationary situation as well as its moving reality; the benefit of this dynamic treatment is that it releases us from the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

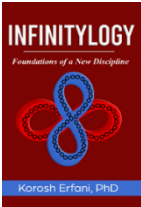
³ Oxford Dictionary

We know that both ideas of *Infinitism* and *Infinitylogy* are hard to take off in the arena of institutional philosophy and science, but our perseverance will be victorious if there is an unbiased approach and convincing objectivity in our work.#

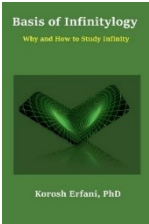
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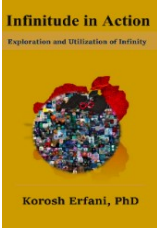
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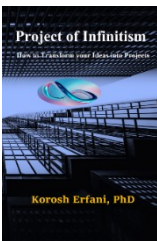
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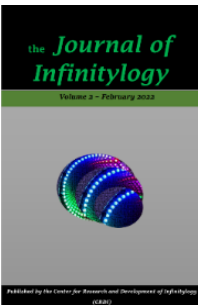


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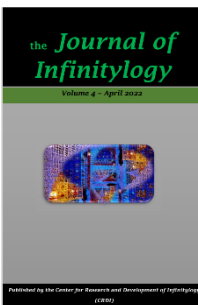
**The Journal of Infinitylogy, Volume 1, January 2022, CRDI
Publication**



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



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

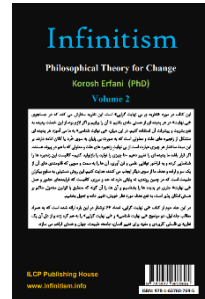


**The Journal of Infinitylogy, Volume 4, April 2022, CRDI
Publication**

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:

www.infinitylogy.com

- Website of the ILCP Publishing House

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