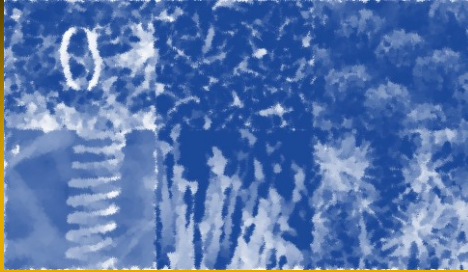


*Matter is bottomless,
so keep digging in!*

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Introduction

Why should we place any value on the concept of infinity if accessing it would be impossible for us, as human beings?

Why is it so vital to believe in the limitless nature of matter's composition, even if we know that infinity is not reachable?

This is a pertinent question for any practical approach. Here is our rationale:

Despite the fact that we intuitively know that infinitude is not at hand, this view can have various useful functions.

We will not accept any finite as an 'end' after we have established that the structure of matter is limitless. We shall be armed with the knowledge that no matter how many layers and echelons we identify, there is no final or ultimate point. Our awareness of the fact that there are always more layers and strata to explore will motivate us to keep looking for new areas.

So, the first utility of the infinitist view is to open an endless pathway for exploring the universe both in the micro as well as in the macro levels. A never-ending way that pushes us towards a ceaseless effort about the boundless composition of matter and its endless spheres of explorations and its immense useful applications.

The second benefit of understanding matter as limitless is that it alters our perception of the material world's scale. We recognize that whatever version of smallness or bigness a phenomenon has, it has an infinite number of levels in its configuration. So, whatever vastness we picture for space, galaxies, clusters, and the cosmos, we'd find the same proportional scopes in the microcosm, with an infinite number of tiers and echelons.

This de-re-scaling approach of the microcosms and macrocosm will bring up the third function of the infinitist view of the universe:

Each layer of the structure of matter offers some new potentials to be explored. We call it *Level-Convenience Existential Comfort* (LCEC).

What is it?

This means that any living being will first connect to the immediate material level of its living milieu. This is what happened to the primitive humans who came into contact with the natural world. What they were using was, at a first stage, what directly surrounds them and in a straight way, like fruits, animals, trees, plants, waterfalls, and so on. All of these elements are instantly accessible to those humans in an immediate way via their sensory abilities: eyesight, hearing, taste, touch, and smell.

This was the first level of environmental connection. We stayed there for a long time before we touch the second scope of nature. In this first step, we were mainly occupied by

- Foraging for food by gazing or browsing immediate surroundings to find the comestible things like mushrooms, edible greens, berries and fruits, various grasses, tubers, seeds, and nuts.
- Hunting for nourishment by killing animals like mammoths, deer, buffalo, bison, wild goats, reindeer, and so on.

In the same way, their tools and tackles are made of what they find as immediate elements of their touch in the nature like rocks, woods, and bones and skin of animals. For more than 2.6 million years these were the only raw materials for the human genus' tool-making.

With time, we see other apparatuses that are a little more sophisticated than the simple sharpen stones or handaxe or kind of knapping. We see there also some “small tools known as geometric microliths, or stone blades or flakes that have been shaped into triangles, crescents

and other geometric forms. When attached to handles made of bone or antler, these could easily be used as projectile weapons, as well as for woodworking and food preparation purposes”.¹

With time, we entered a period of history when the Homo sapiens started to be interested in different levels of natural sources. Now, from the surface of the earth, as a first lasting stratum, they dug deeper into the soil and discover agriculture.

With regard to tools, the hominids began to use what was not anymore the result of immediate usage of raw sources like stone and wood; they learned subtler ways of making new materials. Started then the Bronze Age.

¹ <https://www.history.com/news/hunter-gatherer-tools-breakthroughs>

“The Bronze Age was characterized by the production of the metal bronze (an alloy of copper and tin), the development of a wide range of functional and precious metalwork, and an increase in economic productivity.”²

People discovered metal by encountering the natural form of it. “Humans may have smelted iron sporadically throughout the Bronze Age, though they likely saw iron as an inferior metal. Iron tools and weapons weren’t as hard or durable as their bronze counterparts. The use of iron became more widespread after people learned how to make steel, a much harder metal, by heating iron with carbon.”³

From about 1000 BCE, the ability to heat and forge another metal, iron, brought the Bronze Age to an end and led to the beginning of the Iron Age. This was the beginning of new materials humans used in their tool-making activities and the variety of products they get as the outcome. This

² <http://www.visual-arts-cork.com/ancient-art/bronze-age.htm>

³ <https://www.history.com/topics/pre-history/iron-age>

establishes a trend in human history where any new material brought about many new tools and products.

This brings us to the discipline of *materials science*. The latter “is a part of engineering that involves discovering and designing new materials and analyzing their properties and structure”.⁴ This science classifies materials into four categories: metals, polymers, ceramics, and composites.

If we combine history and materials science to get the “historical materials science’ where we can see how human history evolved following discoveries of new materials and their applications as products and tools.

The interesting point from a sociohistorical angle is that the increased usage and development of ever more sophisticated materials were paralleled by a rise of the consciousness of mankind. In other words, it seems to be that advanced

⁴ <https://study.com/academy/lesson/materials-science-definition-material-classification.html#:~:text=Materials%20can%20be%20classified%20into,polymers%2C%20ceramics%2C%20and%20composites.>

civilizations generally invented and used more elaborate materials. This observation is probably still true in the present days. China currently produces solely some 28.7% of Global Manufacturing Output. ⁵

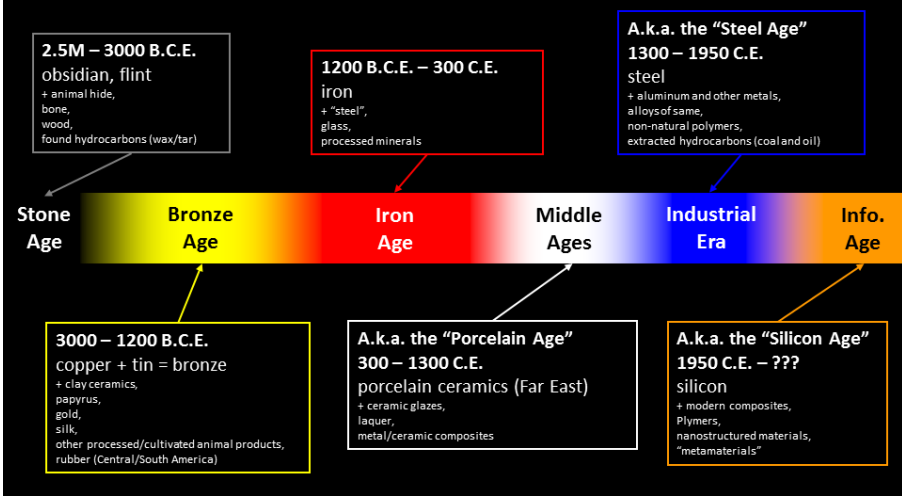
In the below scheme⁶ we can see that the historical evolution of humankind goes hand in hand by the stratum of the nature we touch through our technology and creativity to get new materials and its products and byproducts:

⁵ <https://globalupside.com/top-10-manufacturing-countries-in-the-world/>

⁶ Source: <https://www.cpp.edu/~jbputhoff/history.html>

Materials Development by Era

Different eras in human history* are named after the materials incorporated in the predominant technologies



Infinitism uses this historical trail to say that as all the past pathway shows it, there is no boundary to what we can discover in nature. The structure of matter is infinite and if we keep exploring it at profound levels, we will get new materials, or new potential for combinations of materials through novel possibilities of fusion and fission or, via Nano-isotopic procedures or alike in order to get some new stuff

we have never had. And each new material will open the way to more original composite materials and tools.

Therefore, back to our initial reasoning to justify the usefulness of *Infinitism*, we can see that when we consider the structure of matter as infinitely composite, we create an endless perspective of discoveries and innovations. The two latter have historically had a dialectical relationship:

- More discoveries make possible further inventions.
- Further inventions make possible more discoveries.

By believing in the infinitude of the structure of matter we could use our tools for added discoveries in the endless sublevels of the fabric of reality. Then, with these discoveries, we can get the new materials and possibilities for developing more tools and with these tools, we will discover again some new layers of the configuration of matter. This process is everlasting and unremitting as long

as the human species survives and keeps thriving its civilization,

At a given step in the history of science and technology, we can find solutions to get unlimited sources of energy and materials. That phase will be the end of prehistory since we are then still living in a chapter whose specific is believing hitherto in shortage and scarcity; the exact same belief that our ancestors had had in their cold and unsafe caves thousands of years ago.

According to the logic of *Accumulation/Alteration*, explained in the theory of Infinitism as the main process of the dynamism of matter,⁷ by amassing the results of our search in the deeper and subtler levels of the fabric of matter, we will get an accumulation of productive abilities that bring

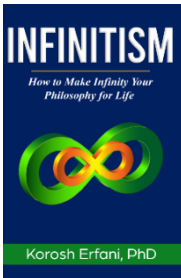
⁷ We elaborated the process of Accumulation/Alteration as the main mechanism that explains the permanent dynamism of inner causal chains in any material phenomenon. Please see the list of the books on Infinitylogy at the end of this paper.

about the changes we dream of: endless resources of materials and energy.

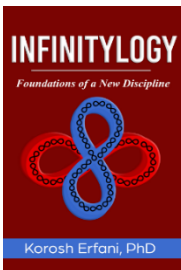
At that time, we will start our real history and the real meaning of civilization as well where there won't be anymore a necessity for somewhat wrongdoing that would purposefully cause pain and sufferance.#

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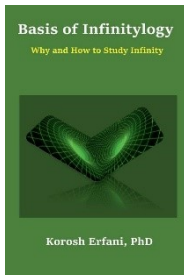
Books published so far:



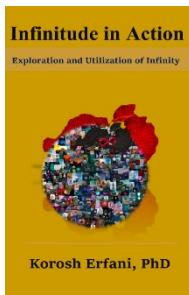
Infinitem: How to make Infinity your philosophy for life, ILCP Publishing House, 2021, 375 pages.



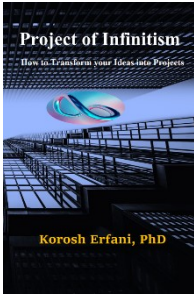
Infinitylogy: Foundations of a New Discipline, ILCP Publishing House, 2021, 148 pages.



Basis of Infinitylogy: How and why to study Infinity, ILCP Publishing House, 2021, 148 pages.



Infinitude in Action: Exploration and Utilization of Infinity, ILCP Publishing House, 2021, 200 pages.



Project of Infitinism: How to Transform your Ideas into Projects, ILCP Publishing House, 2021, 132 pages.

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

www.ilcpbook.com