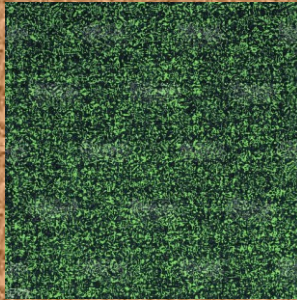


# Patterns as the Fabric of Matter

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## **Introduction:**

There are infinite ways to define existence, the universe, and matter. Whatever is the basis that we choose to elaborate on, the decisive point is if we can practically operate on that to modify it as we desire. This is maybe the best criterion by which we can measure the rightness of our acquaintance with material reality up.

From the time, when we start to work systematically on the theory of Infinitism, we tried numerous possibilities to conceive objectively the matter's constitution. We used several gauges or indicators to explain what the fabric of matter could be. By linking all of them to the question of infinity -as the sole real vector of existence-, we applied a quite significant variety of forms and formulations to explain the fabric of matter. Some of the concepts we have used so far to describe what substantially the matter can be, are:

- Components / Subcomponents
- Sets / Subsets
- Phenomenon / Phenomena
- Entities / Subentities
- Netentity / Netentities

The interesting point is that all the main characteristics of different labeling were more or less identical. This shows that whatever is the way we espouse to define existence, from an infinitist point of view, the outcome would show a huge procedural similarity. Can we take it as a proof of coherency and relevancy in the main assertion of Infinitism according to which everything is infinite or is not? Maybe.

This is also a demonstration of what we called the Sameness of material existence in all its actual or conceptual diversity. Whatever is the echelon of the structure of matter, or the specific aspect of it, we are always talking about just an

apparent variety where the configuration shows a considerable resemblance.

Again here, in this paper, we will proceed to a description of matter through the notion of **patterns**. This is an additional concept to the above-listed ones, but we might see that, without any preconceived upshot, a huge likeness of the dynamism and mechanisms of the fabric of matter would show up, as we already observed through the above concepts.

## **Patterns**

By looking closely at any phenomenon in the macrocosm or microcosm we see some pattern-oriented structure. While we don't forget the involvement of our senses and their epistemological specificity, we nevertheless observe that the main particularity of the patterns is their recognizable iteration. A huge identity looks dominating the whole set in

which these repetitive patterns are intertwined and echeloned.

Here is the image of a “structure of cluster of galaxies”

In the same way, the substructure of matter looks very inclined to follow

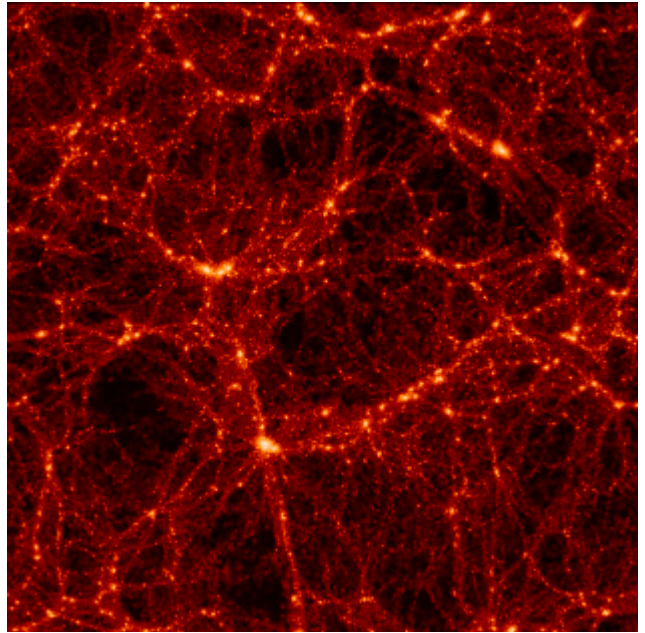
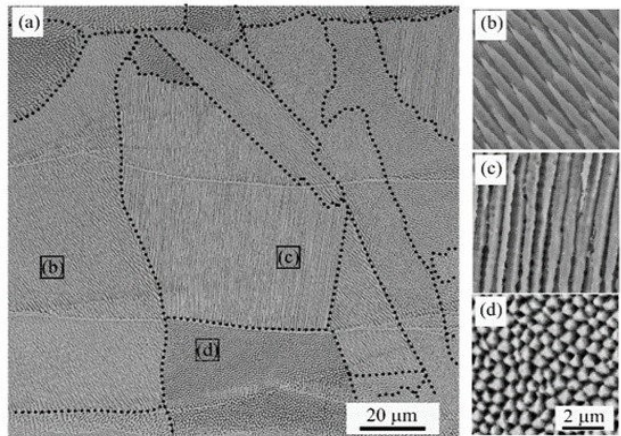


Figure 1 <http://www.astronoo.com/en/galaxy-clusters.html>

forms that are identical and repetitive at different levels.

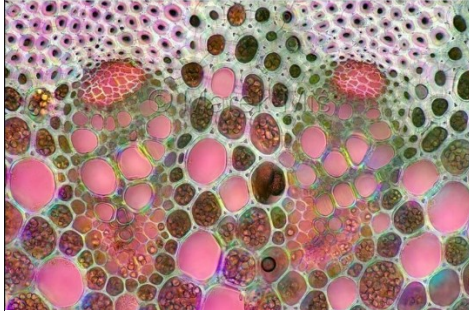
Below is an example of “Cellular Substructure in Laser Powder Bed Fusion”.



Source: Figure 2 <https://www.mdpi.com/2075-4701/9/11/1231/htm>

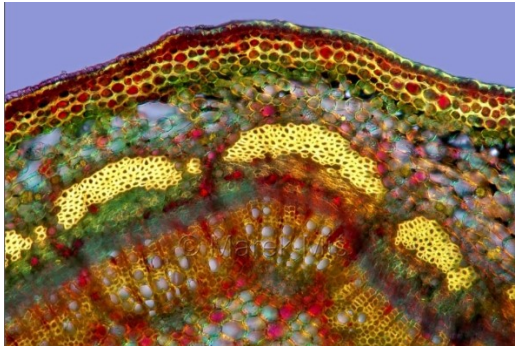
## Patterns everywhere

Here in the Tissues in *Consolida regalis* stalk.



Source: <https://www.instagram.com/p/Cb7HK4djyub/>

Or here in Apple tree stalk transversal section



Source: <https://www.instagram.com/p/Cbo9R6vjfGD/>

Every pattern, like every other thing, is an organic phenomenon, not in the habitual meaning of this term with a biological connotation, but as an action in infinitude, by

the way we defined infinity in these terms. We will develop this organic character of the whole existence in an independent paper, but what we mean by that here is that anything, in all states of matter (solid, liquid, gas, and plasma), is a kind of alive and animate phenomenon since its very existence depends on the vitality of live mechanism through which it can be/exist/live.

If patterns are what the matter is made of, the question is how they take shape? Why and how the structure of what we call matter is formed by these repetitive and interrelated patterns? What dictates their shape and their arrangement? How are determined shape, size, and interrelations of these patterns?

Our infinitist approach provides the conceptual tools and underpins the answers to the above questions: As Infinitism states that the only existential genuineness is infinity and the latter is action in infinitude, we can say that the process

by which these patterns are produced and reproduced is without any starting point, nor ending one.

This means that the process of shaping these patterns is an ongoing course coming from a startless causal chain and going to an ever-ending extension.

The process is self-sufficient. The causal chain needs only itself to be produced and reproduce. Each production of pattern triggers a reproduction process of matter and each reproduction of patterns cause a production of pattern.

The 'production' is when a new pattern is shaped and the reproduction is when an already existing pattern is shaped.

The process is dynamic in the sense that it causes a permanent movement whose trail is the line of production and reproduction of patterns. Any mechanism that is shaping a pattern contains infinite micro/nano mechanisms that are going on and shaping the smaller patterns as well.



Here are some details:

What we call matter is interacting sets of patterns at different levels:

- Microscopic
- Nanostructure
- Molecular structure

All these levels are shaped by patterns.

A pattern is made of smaller patterns.

This search for smaller patterns in the structure of matter doesn't get any limit or end. A pattern is an infinite repetition of [sub-] patterns and nothing else.

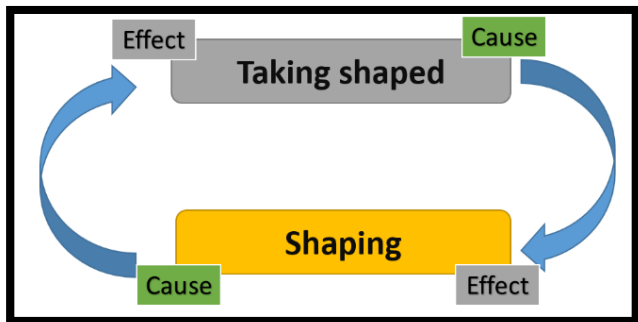
Therefore, all the rules of matter can be extracted from understanding one crucial point: The matter is an imbrication of infinite sizes of patterns where the smaller

ones shape the bigger ones and the bigger ones shape even the bigger, infinitely.

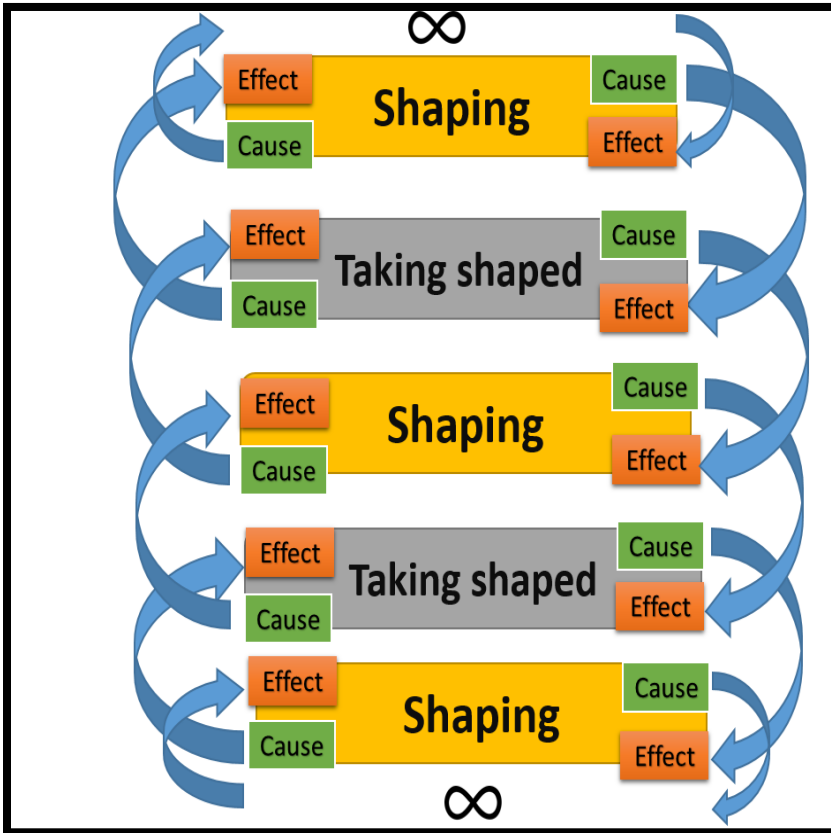
The complexity of each pattern is determined by the way its smaller patterns interact to shape it. But we should notice that the complexity is made of nothing but these patterns and sub-patterns themselves. Life, movement, action, dynamism, and motion, all come from the necessities that a pattern deals with to take shape and by doing so, it shapes other patterns and this process goes endlessly.

Each pattern is the outcome of the interaction of ‘Taking Shape’ and ‘Shaping’. These two facts interact in a dialectical manner where the place of cause and effect exchange

constantly as we can see it in this scheme:



The trend to reproduce the same pattern is an infinite process. The process of shaping the patterns is also the trend to reproduce the same pattern to infinity.



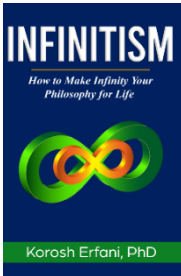
We see this process in the below scheme:

Here is the **summary** of what we said:

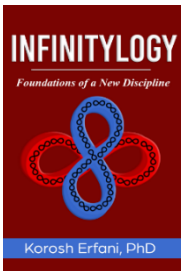
- Matter is made of infinite patterns.
- Pattern is a made of infinite sub-patterns.
- Each pattern is a result of the dynamism between two action of Taking Shape and Shaping.
- Each pattern to take shape, shapes another pattern and this goes endlessly.#

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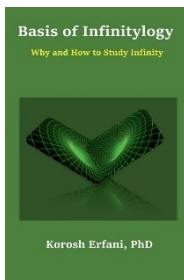
## Books published so far:



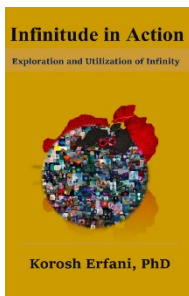
***Infinitem: How to make Infinity your philosophy for life***, ILCP Publishing House, 2021, 375 pages.



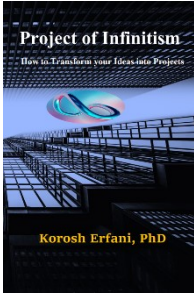
**Infinitylogy: Foundations of a New Discipline**, ILCP Publishing House, 2021, 148 pages.



**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 Infitism: How to Transform your Ideas into Projects**, ILCP Publishing House, 2021, 132 pages.

## The Journal of Infinitylogy



**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**

## 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](http://www.thecrdi.com)

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

[www.infinitism.info](http://www.infinitism.info)

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

[www.infinitylogy.com](http://www.infinitylogy.com)

- Website of the ILCP Publishing House

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