

# Review of: "Fractal Biology — Evolution from Molecular to Cognitive, and Psychological Dimensions"

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Potential competing interests: No potential competing interests to declare.

## Fractal Biology — Evolution from Molecular to Cognitive, and Psychological Dimensions

The author has been involved in unveiling the dependence of biological systems on fundamental physical principles. It isn't easy to construct an authentic general framework for it, though there are many examples available in the literature.

My major criticism is on the examples that could be presented in a unified form rather than simply citing them. Some of the cases mentioned in the "Conclusion" could be discussed in the main body of the manuscript. It is difficult to visualize how the author composes and fuses a variety of concepts in sufficiently concrete form.

Minor issues: (The statements in the manuscript were printed in italics).

1. Several typos need to be corrected.

2. *'The geometrical representation of gravitational force in Einstein's SRT and GTR showed that...'*

The SRT has nothing to do with gravity, though the Minkowski spacetime is used in GTR.

3. *'Fig.1.....Space, time, symmetry, and relativity are considered as the elements of a tetrahedral meta-structure.'*

I can't visualize how 'relativity' can be considered as the elements of a tetrahedral meta-structure.

4. *'This observation suggests that at the molecular level, we could expect the interaction of different forms of STSR'*<sup>[59]</sup>.

Shouldn't it be STS? What is the role of R (i.e., relativity) here?

5. *'Nature. STSR is closely associated with Heisenberg's uncertainty principle'*<sup>[83][84]</sup>. *The implication of space-time relativity for other fields of inquiry, including topics in biological information processing, cognition, and social science, is in the front line of neuroscience and psychology'*<sup>[29][84]</sup>. *Convincing results are presented at the molecular level'*

What is meant here? What is the role of 'relativity' here?