

# Psychology of Consciousness as a Universal Phenomenon Proposed Visualization for the Mechanism of Consciousness

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doi:10.56397/SPS.2025.06.02

## Abstract

This is a descriptive, follow-up article on the subject of consciousness, within the framework of what has been mentioned about it in academic writings. It attempts to shed light on it as a fundamental characteristic of the nature of beings in the universe. From this, it concludes that consciousness is a fundamental and psychological characteristic of the nature of beings, because they are constantly changing to achieve specific goals and process specific information.

**Keywords:** psychology of consciousness, universal phenomenon, consciousness nature

## 1. The Meaning of a Psychological Process

There are many definitions for a psychological process, most of them agreed that a psychological process is a series of steps or mechanisms that occur in a regular way -not necessarily a deterministic one- to attain changes in behavior, emotion, or thought. (SciELO Colombia, a checklist to define the psychological process, n.d.)

Another defines a psychological process as a component of three basic steps: (1) information processing, (2) symbol manipulation, and (3) knowledge construction. (Association for Educational Communications and Technology, n.d.)

Psychologists are often interested in *mental processes* (or psychological processes), which are the mechanisms by which people take in stimuli,

react, and behave. (Mental Process Definition, Types & Function., n.d.)

From the above, the psychological process can be generalized as a mechanism for a specific series of steps that include processing information to obtain knowledge that results in acting in a certain way.

In this way, the psychological process becomes an implicit learning process that takes place after it has been acquired at the subconscious level, as the definition of a science direct site; *the internal psychological process of elaboration and acquisition* in which new impulses are connected with the results of prior learning. (ScienceDirect, n.d. a)

## 2. The Meaning of a Universal Phenomenon

Phenomenon means a widespread or far-reaching occurrence or event, which happens in a regular way and spreads widely. (Power

Thesaurus, n.d.)

The phenomenon is widespread and is characterized by exact patterns that do not differ according to circumstances, such as natural phenomena; sunrise and sunset, such as lightning and thunder, as well as psychological phenomena; cognitive bias, selective attention, and the halo effect.

### 3. Consciousness Definition

Consciousness, in its simplest definition, is the sense or awareness of inner and outer existence. Despite thousands of years of analysis, definitions, explanations and discussions among philosophers and scientists, consciousness remains a puzzling and controversial matter as “the most familiar and most mysterious aspect of our lives.” (Wikipedia, n.d.)

Consciousness is the feeling that you know and should do what is right and should avoid doing what is wrong. (Cambridge University Press, n.d.)

Accordingly, consciousness from a broad perspective is to be aware of your decision.

### 4. Consciousness Theory

A theory of consciousness based upon an organism's interactions with environmental stimuli has been developed by Damasio. In this theory, interconnected brain stem, nuclei and somatosensory cortices, which monitor and control the body state, give rise to a sense of self. A collection of proto-self systems has its states mapped in a correlated way with the mappings of sensory objects. Consciousness reflects a neurodynamic melding of object mappings and self-mappings. (ScienceDirect, n.d. b)

Many people have conjectured that consciousness might be linked to cognitive characteristics, such as emotions, imagination and a model of the self. If consciousness depends on functions at the cognitive level, then it should be possible to realize it on any piece of hardware that is capable of carrying out the appropriate processing. (ScienceDirect, n.d. b)

People's folk theory of consciousness encompasses three prototypes of conscious mental functioning: monitoring (awareness), choice, and subjective experience. All three are embedded in a broader folk theory of mind and thus closely linked to the concept of intentionality, action explanation, and a conception of free will. At least some of the prototypes of consciousness play a critical role

in the assignment of personhood and responsibility.

Many other theories of consciousness have positive implications for the possibility of creating consciousness in artificial systems. Various theories for the neural basis of consciousness have been proposed, suggesting a diversity of neural signs and mechanisms. We ask to what extent this diversity is real, or whether many theories share the same basic ideas with a potential for convergence towards a more unified theory of the neural basis of consciousness.

A true scientific theory — in the future — will say how functions such as attention, working memory and decision making interact and come together to form a conscious experience. (ScienceDirect, n.d. b)

### 5. The Mechanism of Consciousness in Nature and How It Occurs

Is consciousness a phenomenon associated with the human brain? Is it associated with relatively rational organisms? Is it associated with living things in particular, or with life and all its components in general?

In 2001, Scaruffi postulated that consciousness is an intrinsic physical property of nature, not the product of the interaction of other components. This hypothesis is supported by Niels, one of the founders of quantum theory. Researchers Hunt and Schooler (2019) believe that synchronous resonance between interacting objects, which allows for the rapid exchange of information, is the key to consciousness. Other scientists believe that organisms generally live in complex, changing environments teeming with competing organisms; therefore, they are forced to exchange materials, energy, and information, leading them to make decisions about how to survive. The repulsion or attraction associated with interactions between charged particles, changing energy levels, and the effects of electromagnetic fields create the ability to recognize interacting entities and thus distinguish between self and non-self. This gives rise to consciousness. From a series of trials and tribulations, memory arises, allowing information to be acquired, stored, and used. All of this leads to awareness and perception. When any of the above components is absent, behavior becomes random; without memory, learning becomes impossible. (Sherif, Muhammad Fayyad, 2017: 211-214)

Scientists define biological cognition (consciousness) as the information processing mechanisms that a living organism is accustomed to, such as understanding, evaluation, behavior, memory, learning, prediction, decision-making, and finally communication. This does not occur in a purely automatic and passive manner, but rather through the organism's interaction with events within a complex, adaptive system with a purpose. An organism's intelligence increases the more it is able to change its behavior to increase its chances of survival. This applies to single-celled organisms as well as to humans, whose brains can process a large amount of information in a specific or short period of time. It also applies to organisms such as viruses, which can only survive inside living cells and know how to employ them to their advantage. (Sherif, Muhammad Fayyad, 2017: 320-325)

A number of scientists believe that the seed of consciousness originated in the atom, a fundamental component of all beings, from living to inanimate. It then expanded through molecules, becoming more complex and diverse with the emergence of primitive life. Consciousness is the product of the interaction of information in two different states: charged-uncharged, negative-positive, particle-wave, high energy-low energy, present particle-missing particle, and so on. (Sharif, Muhammad Fayyad: 330-350). These interactions generate energy fields, whether electric or electromagnetic. Any field is in a continuous state of energy in space, synchronizing with each other, forming a kind of self-referential, circular loop. This is believed to be the basic component of consciousness.

The physical universe is composed of matter and energy. Matter is a condensed state of energy, while the universe is composed of matter composed of millions of particles. Each particle or molecule has its own vibration or frequency. All of these elements, materials, and objects interact with each other at varying degrees of complexity. (Sherif, Muhammad Fayyad, 2017: 330-350)

There are four levels of complexity in nature. The first is the level of the four fundamental forces of nature, which includes electromagnetism, weak and strong nuclear forces, and gravity. The second level includes the atoms and molecules that make up the objects and materials in the universe. The third level

includes the world of living organisms. Finally, the fourth level includes large human societies. Nature at its four levels is characterized by constant movement and continuous, instantaneous change. This occurs through a deliberate mechanism, not spontaneously or randomly. (Sherif, Muhammad Fayyad, 2017: 22-47)

The resonance theory of consciousness assumes that everything in the universe is in a state of motion, constantly vibrating and oscillating at different frequencies. Matter is composed of vibrations of underlying energy fields. The theory describes a phenomenon called spontaneous self-organization, which states that two objects vibrating at different frequencies can combine after a certain period of vibration to resonate at the same frequency, sometimes synchronizing with each other under different conditions. (Frontiers., n.d.)

This theory also proposes a set of laws it calls psychophysical laws, which are:

- 1) All things resonate in some way.
- 2) In many circumstances, we find that many things that resonate in close proximity to each other begin to resonate together at the same frequency, achieving a common resonance.
- 3) This panpsychist view holds that all matter is linked to at least some degree by consciousness.
- 4) Achieving common resonance is what drives conscious microorganisms to merge into larger conscious entities, often resulting in a qualitative transition that accelerates the sharing of information resulting from this common resonance.
- 5) Consciousness is linked to the ability to integrate information, meaning that the degree of consciousness is proportional to and consistent with the ability to integrate information, and the greater the degree, the greater the consciousness.
- 6) All aspects of nature are processes, not fixed objects. All these processes resonate at different frequencies, and processes that resonate close to each other sometimes synchronize and resonate together after a certain time.

## 6. Conclusion

From the previous presentation the following can be concluded:

Consciousness is purposeful activity.

- Activity or movement consists of vibrations or

frequencies of varying degrees.

- Interactions are integrated when the frequencies of interacting entities or objects are synchronized in a way that achieves the goals of the interacting parties.

- An entity is everything that exists in nature, from atoms to galaxies, from cells to humans.

- Consciousness is a psychological phenomenon because it processes information at all levels of existence. It is a fundamental property of nature. All beings change purposefully and non-randomly according to the amount of information they process in order to achieve their goals. Thus, consciousness is a fundamental component of the nature of things in the universe.

## References

Association for Educational Communications and Technology. (n.d.). <https://members.aect.org/edtech/ed1/05/05-04.html>. Retrieved March, 2025.

Cambridge University Press. (n.d.). <https://dictionary.cambridge.org/dictionary/english/conscience>. Retrieved March, 2025.

Frontiers. (n.d.). [www.frontiersin.org/journals/human-neuroscience](http://www.frontiersin.org/journals/human-neuroscience). Retrieved March, 2025.

Mental Process Definition, Types & Function. (n.d.). <https://study.com/academy/lesson/basic-psychological-processes-definition-lesson-quiz.html>. Retrieved March, 2025.

Power Thesaurus. (n.d.). [https://www.powerthesaurus.org/universal\\_phenomenon/definitions](https://www.powerthesaurus.org/universal_phenomenon/definitions). Retrieved March, 2025.

SciELO Colombia, a checklist to define the psychological process. (n.d.). [http://www.scielo.org.co/scielo.php?script=sci\\_arttext&pid=S0121-54692011000200013](http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0121-54692011000200013). Retrieved March, 2025.

ScienceDirect. (n.d.a). <https://www.sciencedirect.com/topics/mathematics/psychological-process>. Retrieved March, 2025.

ScienceDirect. (n.d.b). <https://www.sciencedirect.com/topics/psychology/theory-of-consciousness>. Retrieved March, 2025.

Sherif, Mohamed Fayyad. (2017). *Quantum*

*Biology*. Hindawi Publishing House, Cairo, Egypt.

Wikipedia. (n.d.).

<https://en.wikipedia.org/wiki/Consciousness>. Retrieved March, 2025.