



# The Visual Consciousness Space: A mathematical proof of the irreducibility of consciousness to physical data

**Iegor REZNIKOFF**

Academic Consortium Academic Center for Coherent Intelligence

[dominiqueleconte@yahoo.fr](mailto:dominiqueleconte@yahoo.fr)

# IEGOR REZNIKOFF,

DÉPARTEMENT DE PHILOSOPHIE  
UNIVERSITÉ DE PARIS OUEST NANTERRE PARIS

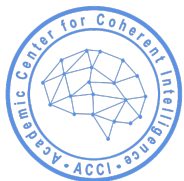


## AREAS OF EXPERTISE

Philosophy and foundation of science; Foundation of ancient art and music; Sound anthropology; Mathematical and mathematical logic.

PhD in Mathematical Sciences, Paris, 1966. Assistant, then Assistant Master in the Department of Mathematics of the University of Paris and Orleans from 1961 to 1965. Lecturer at the Department of Mathematics of the University of Reims (1966 - 1967), Orléans (1967 - 1971). Lecturer in Mathematical Logic at the Ecole Polytechnique (1970 - 1971). Lecturer (1971 - 1975) at the Department of Philosophy of the University of Paris X.

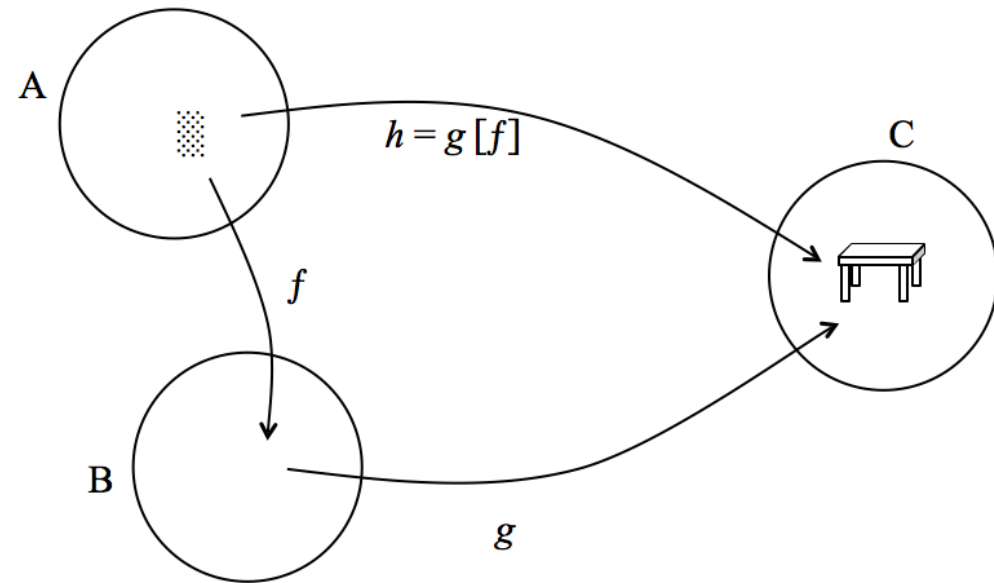
Emeritus Professor in the Department of Philosophy of the University of Paris X - Nanterre.



# THE CONSCIOUSNESS SPACE

**The main purpose of this work is to give a proof of the non reducibility of consciousness to physical data.**

For a given observer, let A be the space of ‘physical reality’ as known by physics, the ‘real’ space of matter with what is included in it: moving atoms, particles and waves; and let B be the observer’s brain regarded as a space, with its physiological and neuronal activity (of course B is included in A); then let C be the space of the observer’s perceptive consciousness: what he sees, hears, touches, etc. considered as a space.



***Proposition 1.*** *The space C is a specific space in itself, different from A and B.*

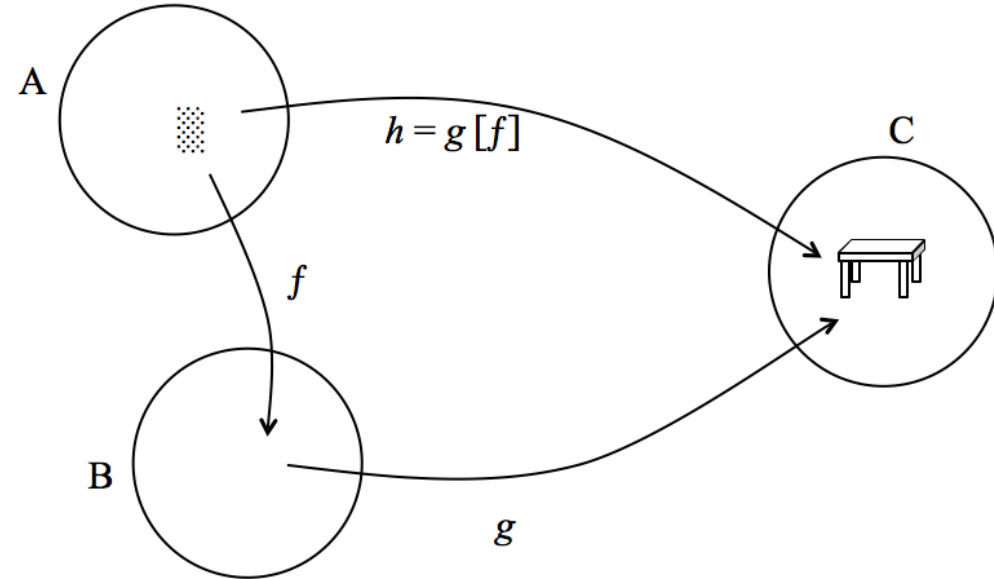
# CONTINUITY OF THE CONSCIOUSNESS SPACE

The main property of consciousness is continuity—the pure reason perceive reality as a single one, whole essence, until the mind begins to categorize it.

How can a discrete moving reality be represented in a continuous way (both in space and time)?

Why does categorization distinguish exactly those compounds of the matter that have overall and community meanings?

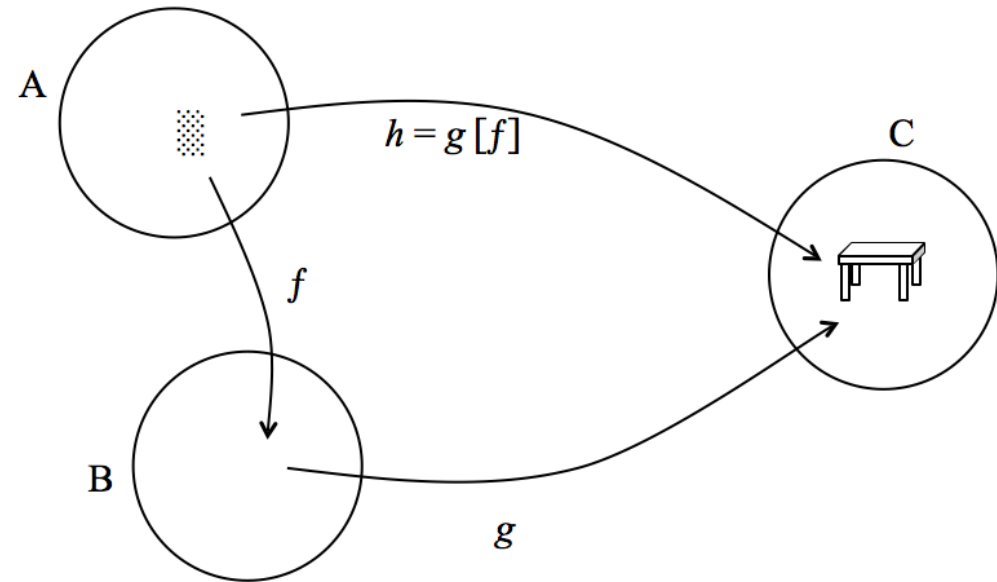
*Proposition2. The property of continuity of the consciousness space C is not reducible to or even explainable in terms of physical reality.*



# THE OBJECTIVITY OF THE CONSCIOUSNESS SPACE C

**Do we all really see the same objects and their meanings are the same for everyone?**

**How does the mind acquire initial meanings of reality, which is a whole essence for him at the beginning?**



*Proposition 3. The properties of C can be seen by everybody: its study is therefore perfectly objective.*

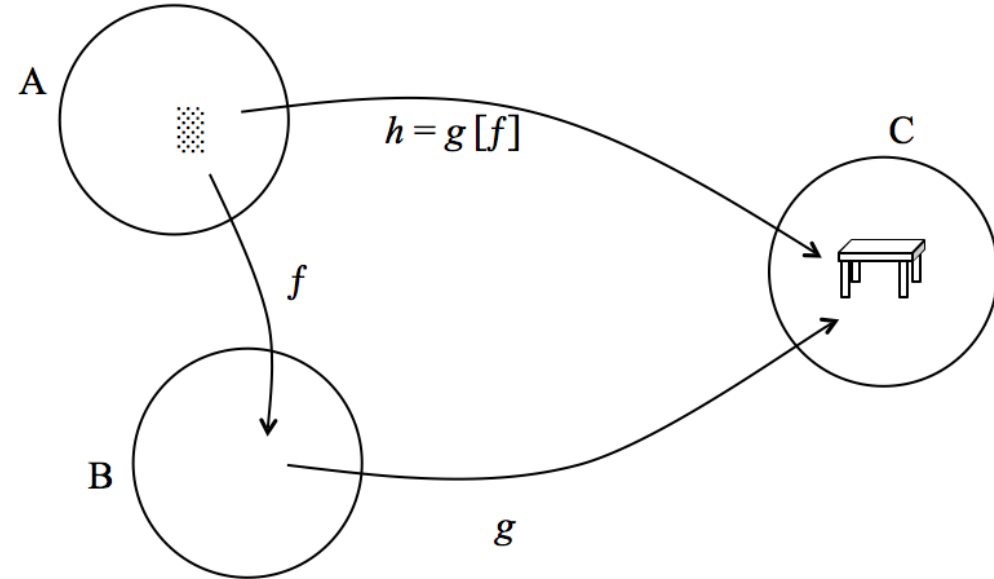
# UNITY OF THE VISUAL CONSCIOUSNESS SPACE

**One of the most remarkable properties of consciousness space is its unity, that is the capacity that consciousness has to gather perceptions as a whole.**

**The unity principle has no equivalent in physics.**

The mind cannot be limited only by knowledge in actual science. This finding opens a window for empirical research on a wide range of hypotheses, even if they seem to contradict the theoretical foundations of Social science.

***Proposition 4. The unity of consciousness is not reducible to physical properties.***



# BIOLOGICAL UNITY

**Unity of the cell. Is it not at this elementary biological level that a principle of irreducible unity has to appear?**

**We have a knowledge of the visual space, of its continuity and unity, certainly clearer, at least in its immediacy, than an as yet unformulated principle of unity in biology.**

Suppose a biological organism of about  $10^9$  (of about 10 to the power of 9) components (e.g., molecules); the probability that all these components should behave together in the right way in order to constitute a biologically viable unity, this probability is at least of the order of  $2(10^9)$  (2 to the power of 10 to the power of 9), which is, as we have seen before, beyond any physical meaning even at the atomic level: the age of the universe would not be sufficient for even one cell to have a chance to exist, not to speak of a more complex organism.

*The mind cannot be limited only by knowledge in actual science*

