

# Can we survive without Free-Will?

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### Abstract

Several studies demonstrate that people believe in free-will (FW) existence; however, people are not so confident in FW when judging others' actions; they self-justify by saying that individual FW may be frustrated by a lot of involuntary interferences. Lacking the demonstration of a Soul-inhabited Self, scientific evidences lead to conclude that FW is an illusion. Yet, why is the idea of possessing FW so deeply rooted in mind?

Our mind manifests two alternative perspectives about the Sense of Agency, i.e. an emotional, 1st-person perspective (1PP) and a rational 3rd-person perspective (3PP), respectively. The first one is raising during action execution, while the second one is raising a-posteriori. Moreover, 1PP deludes the mind that individual FW intervenes in action decision-making, while 3PP denies FW on logical bases.

To explain this apparent paradox, we proposed "The Bignetti Model" (TBM), a cognitive model that stands on two pillars: a) Mind exhibits a dual working modality, respectively corresponding to a conscious (explicit) and an unconscious (implicit) state (note these terms have no connections with psychanalysis); b) FW illusion necessarily plays a fundamental role in cognition.

In synthesis, TBM foresees these compulsory steps:

1) The Unconscious computational mind (U) reacts to

stimuli by applying the paradigm found in long-term-memory (LTM), with the highest probability of success.

2) With a tiny delay, Conscious mind (C) is informed of the action by feed-back sensory signals.

3) Then C feels responsible for the action (FW illusion) and self-congratulates or not, depending on the outcomes (learning process).

4) As in a sort of operant conditioning, C will up-date the paradigm in LTM archives, i.e. a useful step for a future action decision-making (restart from 1).

Up to now, TBM has been challenged only by means of psychophysical press/no-press tests; more studies with imaging techniques are needed.

#### Biography

Enrico Bignetti born in Brescia, Italy (1949). He completed Doctor of Veterinary Medicine at the University of Parma (1974). He worked as an Ass. Prof. of Clinical Biochemistry and Molecular Biology (1985-) c/o Department of Veterinary Medicine, Parma. He has been the Director of the Inst. of Mol. Biol. and Veterinary Biochemistry (1987-1998). He retired in 2017. His Academic interests: Biochemistry, Neurophysiology, Biophysics, Cognitive Sciences. And his extra academic interests are Yoga Teacher; Conceptual Artist.

#### **Publications**

- 1. From Brain to Mind: A Plain Route from Neurobiology to Psychology
- 2. The Functional Role of Free-Will Illusion in Cognition: "The Bignetti Model"
- 3. RATIONAL CURVES MODELING PSYCHOPHYSICAL TESTS DATA: A COMPUTATIONAL APPROACH COMPATIBLE WITH TBM COGNITIVE MODEL
- 4. New Insights into "The Bignetti Model" from Classic and Quantum Mechanics Perspectives Corresponding author
- 5. PSYCHOLOGY AND COGNITIVE SCIENCES From Brain to Mind: A Plain Route from Neurobiology to Psychology Citation
- 6. Which is Necessary for Cognition, "Free Will" or "Free Will Illusion"?
- 7. A Psychophysical Approach to Test: "The Bignetti Model"
- 8. Hake fish bone as a calcium source for efficient bone mineralization



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