

(To be) conscious or unconscious: that is the question.

The distinction between conscious processes and unconscious ones arguably constitutes one of the central themes in the scientific investigation of consciousness. The brain is constantly bombarded with sensory information, only a fraction of which ends up reaching consciousness. At the same time, even in the complete absence of sensory input, the brain is capable of creating complex conscious sensations all by itself.

The courageous efforts by the authors in this new special issue of *Psyche* aim to distinguish conscious processing in the brain from unconscious processing. The articles in this issue vividly emphasize how little we know about the answer to this conundrum. The topic is addressed from a wide variety of perspectives. Capurro and Rodrigo Quian Quiroga discuss perceptual awareness based on experiments with recording of single neurons. Eckstein et al. highlight how the comparison between indirect measures (e.g., subliminal priming) with direct measures (e.g., conscious reports) may be critical to better understand the conditions under which some of the processes that are usually associated with conscious experience occur without consciousness. Shulman et al. discuss how high brain energy consumption, characteristic of the state of consciousness, supports elevated levels of high frequency neuronal firing observed in the resting awake brain. Andrade et al. discuss emotional conscious and unconscious processes. Gottesmann investigates the neurobiology of conscious and unconscious processes during waking and sleep.

Like in pre-classical physics, a tumultuous and exciting mixture of ideas, experiments and theories pervade the corridors of those laboratories and departments that try to establish the basic principles behind conscious processes in the brain. The weak will find the situation discouraging, to say the least. They will complain about the lack of a unified theory, the discrepancies across experimental findings, the poor agreement across different disciplines, the vague terms and statements. In stark contrast, the brave will embrace these differences and will recognize that light is bound to emerge from the dark, that perhaps sooner than we expect, we may be able to live through the key paradigm shifts towards understanding how consciousness emerges from the activity of neuronal circuits.

This issue of *Psyche* also marks the re-initiation of a long-standing *Psyche* tradition: the publication of book reviews. While the world of publishing has seen radical changes over the last decade (and it is likely that multiple new surprises will emerge in this arena), it is clear that one of the most traditional forms of scientific communication, the printed book is unlikely to disappear any time soon. Electronic formats, with all the allure of speed, networking, basically unlimited space and other features, has yet to find the charm of the printed book. In this issue, we have five new book reviews on a diverse range of topics from the nature of will to the relationship between Physics and consciousness. We hope that some of these books will accompany the reader during his leisurely weekend on the beach, afternoon time on the hammock, or a nice and slow dusk reading during outdoor adventures.

Here is then to the brave in all of you. To those relentless and courageous scientists and philosophers who manage to see beyond the daily struggles with giant problems and who will help shed light on perhaps one of the most fundamental questions of all times: how neuronal circuits lead the brain to consciousness.

Gabriel Kreiman & Stephanie Ortigue