

Preface

A search for a deeper understanding and exploration of consciousness has long been and still is widely studied by scientists and philosophers alike. There are countless examples of individuals making significant changes to their lives in following a brief encounter with state of consciousness. Naturally, a philosopher would want to define this state of consciousness and a scientist would want to measure it. Both philosophers and scientists have the common goal of wanting to explain consciousness. Whether philosophical and scientific approaches will succeed in capturing this elusive “thing” that we so often refer to as consciousness remains to be seen.

The first few chapters present introductory theory and insights into various states and disorders of consciousness. In the opening chapter, I introduce consciousness, its history, various philosophical and scientific theories, contemporary technological advances, natural medical phenomena, solid experimental findings that reveal correlations between physiological processes and consciousness, and finally an overview of the following chapters. Other chapters present various psychophysiological, neurocognitive, neuroscientific and neurobiological theories and models of waking, sleeping, dreaming and meditation, tested with advanced neuroimaging and engineering biomarkers. These chapters highlight the need to utilise the knowledge of consciousness in order to develop corrective treatments for certain disorders and pathological problems of consciousness. The remaining chapters describe the more specific altered states of consciousness, such as hypnagogic phenomena and transcendental meditation, which are generated both internally, within the human body, and externally, as environmental stimuli.

While the main states of consciousness are considered to be wakefulness, sleep and dreaming, there are multiple specific states that originate across these three states and along its borders. Altered states of consciousness are dynamic transitional processes, where a subject continually enters a new state and leaves the old state. One may become aware of these altered states of consciousness where one’s own conscious experiences and perception are characterised by electrophysiological, cognitive and behavioural changes.

The book is not aiming to define or, identify all possible states of consciousness, nor is it claiming to present exact ways to measure the level of these states of consciousness. On the contrary, the idea of writing and compiling this book

emerged from my long fascination with certain intricacies of the phenomenon of consciousness. Whether these intricacies can be identified as states, contents, properties, levels or processes of consciousness is debatable. But what remains important is that they exist and are classified as either normal or disordered consciousness. The invited chapters are meant to serve both as a basic introduction and an in-depth research on some well-known and rare states of consciousness.

We hope that this book will provide inspiration to people from all walks of life, from professionals to students at all levels of education. We also hope that the book will encourage readers to explore certain aspects of consciousness using scientific approaches in order to gain insight in own conscious experiences.

Melbourne, Australia
June 2011

Dean Cvetkovic

States of Consciousness

Experimental Insights into Meditation, Waking, Sleep
and Dreams

Cvetkovic, D.; Cosic, I. (Eds.)

2011, X, 282 p., Hardcover

ISBN: 978-3-642-18046-0