BOOK REVIEW

The Twenty-four Hour Mind: The Role of Sleep and Dreaming in Our Emotional Lives

By Rosalind Cartwright; Oxford University Press, 2010, 208 pp. (list: $27.95; Amazon.com: $20.56; Kindle: $15.37)

Tore Nielsen, PhD

Center for Advanced Research in Sleep Medicine, Hôpital du Sacré Cœur, Montréal, Canada

Rosalind Cartwright, Professor Emeritus of Rush University Medical Center’s Graduate College Neuroscience Division and founder of the first accredited Sleep Disorders and Research Center in the State of Illinois, recently published her fourth book on the topic of sleep and dreaming. She has previously written A Primer on Sleep and Dreaming (1978), Crisis Dreaming (1992), and Night Life (2007). The new book has been very well received. Amazon.com lists 16 reviewers for it—five of them established sleep researchers—all of whom gave it a glowing 5 stars out of 5. It is a highly informative and entertaining blend of medical research, clinical insight and autobiography.

The book begins with a general introduction to the discovery of REM (and NREM) sleep and its association with dreaming, but moves fairly quickly to a survey of more recent brain imaging studies and neurocognitive work demonstrating that processes of memory consolidation depend heavily upon sleep. This readable review sets the stage for a more detailed elaboration of the “24-hr mind” psychological model, but not before we are treated to a series of 7 chapters about the cognitive and emotional consequences of normal sleep gone awry. These chapters include sections on the nature and consequences of short sleep (insomnia), altered sleep and dreaming in depression, violent sleepwalking, lesser-known NREM sleep parasomnias, such as self-injury, sleep eating, sleep exploring, and sleep sex, and the more common nightmare disorders, both the idiopathic form and the forms that characterize posttraumatic stress disorder and REM sleep behavior disorder.

In this clinically oriented section, readers will particularly appreciate the careful attention Cartwright gives to the obscure but fascinating area of violent sleepwalking, and of the medico-legal consequences of some high profile cases of homicidal somnambulism in which she served as an expert witness. Her treatment of the Scott Falater case, in particular, is both a slice of intriguing real-world drama and an informed how-to narrative for sleep experts who might find themselves testifying in similar cases. Falater was a 43-year-old churchgoing father of two with no criminal past when, in 1997, he allegedly stabbed his wife Yarmila 44 times and then “drowned” her in the family pool. Charges of first-degree premeditated murder against him were upheld by both the Maricopa County Court and the Arizona Court of Appeals. Yet Cartwright describes compelling evidence from the case, and from other similar cases, suggesting that Falater had committed the crime while in a rare somnambulistic state. Among the novel information Cartwright brings to this section is background information about her involvement in the trial and her analysis of the motivational and emotional characteristics of dreams that Falater recorded for her while serving his life sentence (14 of the more than 200 dreams are included in an Appendix). Cartwright’s careful clinical treatment of this case constitutes a solid contribution to jurisprudence in this emerging area.

In the context of these illuminating chapters on sleep disturbances and their implications for dreaming and emotion, Cartwright returns to a further review of the question of sleep-dependent learning and puts forth her own approach on the function of sleep and dreaming. This she has developed—and supported empirically—with almost half a century of her own research. In general outline, she stipulates that the mind almost never truly rests, but continues its activities at an unconscious level throughout the 24-hr cycle. This purportedly psychological process is one of continually relating present with past experiences and of preferentially filing emotionally toned recent experiences into long-term memory. Her more specific notion is that this process manifests in its purest form in the dreams of REM sleep, and that the latter modulate and assuage negative emotions associated with the dreams’ source experiences.

She considers the emotional function of REM sleep and dreaming to take place on several levels: the short-term improvement of mood across the night, the longer-term adaptation of an individual to emotionally challenging situations such as divorce, and the emotional changes built up over the lifespan that constitute one’s self-concept. Dreaming is not only a window into the dynamics of these regulating processes, but an integral part of it. She sees dream images as perpetually creative products that both reflect the activity of established schemas and act as filters or evaluators of current experiences. In her own words, dream imagery is formed “by pattern recognition between some current emotionally valued experience matching the condensed representation of similarly toned memories. Networks of these become our familiar style of thinking, which gives our behavior continuity and us a coherent sense of who we are.” (p. 176).

Thus, emotional balance is achieved during sleep by the reduction of dysphoric emotion through the relating of recent memories with past memories of a similar emotional timbre. This process of associating and integrating similar memories continues and deepens with each successive NREM/REM cycle of the night and serves to lessen the dysphoric impact of the source experiences. It also accounts for why dream experiences
become increasingly bizarre across the night. While the adaptive function or functions of sleep and dreaming still have not been proven beyond all doubt, progress has clearly been made, and Cartwright’s overview and integration of this progress is both needed and welcome.

Although Cartwright’s emotional sleep/dream theory (and its implications for affective disorders) has clearly evolved over the decades, it now finds itself in the company of comprehensive competing approaches put forward by a new wave of cognitive neuroscientists. To her credit, she discusses some of the basic research underlying these similar theories (e.g.,1,2), but the theories themselves and their implications for pathology are unfortunately not considered in comparison to her own approach. For example, the sleep-dependent emotional processing theory of Walker3 is not discussed, despite the similarity of its tenets to the 24-hr mind theory and its specific implications for the initiation and maintenance of mood disorders. Similarly, Wagner’s proposal4 that sleep facilitates long-term emotional memory and is implicated in PTSD etiology is not considered.

In sum, Cartwright’s latest book is a spirited account of some of the history of sleep/dream research, of the very human dimension of many lesser-known sleep disorders, and of the 24-hr theory of mental functioning. It is focused particularly on the emotional and cognitive dimensions of sleep and dreaming and as such will appeal to an audience much wider than the sleep research community. The work is focused and concise, emphasizing the author’s own contributions and career experiences to a greater degree than the large corpus of research pertinent to the question of sleep/dream function. It is therefore an excellent primer for the sleep neophyte, an informed guidebook for the practicing clinician, and a solid review of Cartwright’s theoretical position on the function of sleep and dreaming. Readers should be better able to appreciate the “24-hr mind” theory as an increasingly valid perspective in the ever-growing field of nocturnal neuroscience.

DISCLOSURE STATEMENT

The author has indicated no financial conflicts of interest.

REFERENCES