BOOK REVIEW

Sleep Paralysis: Historical, Psychological, and Medical Perspectives by Brian A. Sharpless and Karl Doghramji. Oxford, New York: Oxford University Press, 2015. 288 pp. \$55. ISBN 978-0-19-931380-8.

Sleep paralysis (SP) is an interculturally occurring phenomenon that has a psychophysiological and neurophysiological basis, including various and many culture-dependent interpretations. Despite its relatively high prevalence—the prevalence rate is generally estimated at about 8% but varies considerably depending on nationality and subgroup (sample type), and remains uncertain therefore—this phenomenon, which is usually assigned to sleep disturbances (parasomnias), receives little attention in sleep medicine. Typical characteristics of SP are: temporary muscle atonia in conjunction with conscious awareness, the feeling of pressure on the chest, and the experience of visual or auditory hallucinations that are often accompanied by feelings of suffocation and extreme fear. Typically, SP is experienced during sleep onset (hypnogogic) or sleep offset (hypnopompic). It can be an accompanying symptom of pathological disorders like narcolepsy but can also occur in an isolated form. Especially the latter, the isolated SP, deserves the particular interest of anomalistics because its experience has been reflected in many myths but also in cultural products (visual art, literature).

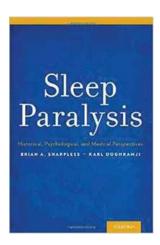
The recently published book *Sleep Paralysis* by clinical psychologist Brian A. Sharpless and physician Karl Doghramji gives a concise overview of the current state of research from a (neuro) psychological and medical perspective which leaves little to be desired. It is remarkable that humanistic and cultural aspects also are considered so that we are encountering a "magnificant integration of humanistic and scientific medicine," as Charles F. Reynolds aptly put it in his Foreword (p. xi).

The volume is divided into 17 succinct chapters that are supplemented by four appendices. The first two chapters present the phenomenon in its various forms, and emphasize its relevance for research and clinical practice. Chapters 3, 4, and 5 deal with folkloristic, mythological, art–historical, and medical–historical aspects of SP. Then a systematic description and discussion of SP starts from a contemporary psychological and medical perspective: general symptomatology (Chapter 6), prevalence (Chapter 7), medical conditions and accompanying symptoms (Chapter 8), associations with psychopathological symptoms and syndromes, co-morbidities, etc.

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(Chapter 9), theories on the etiology of SP (Chapter 10), diagnostic criteria and issues (Chapter 11), measures used to assess SP (Chapter 12), as well as differential diagnosis of SP (Chapter 13). The following three chapters are dedicated to issues regarding the treatment of SP, while presenting folkloristic methods in addition to pharmacological and psychosocial approaches. Finally, the last chapter offers a conclusion as well as an outlook for future directions of research.

The appendices represent relevant supplements to the main text. Appendix A presents a list of terms taken from different languages and cultural contexts which are used to characterize



experiences with a phenomenology similar to SP episodes. The variety of these terms, and—despite cultural differences—the significant structural similarity of the identified contents supports in an impressive manner the hypothesis of the universal basis of SP.

Appendix B includes the "Fearful Isolated Sleep Paralysis Interview." Its application will be an important step on the path toward a more systematic methodology of SP research, and helpful in reaching a more homogenous state of scientific knowledge.

"Cognitive Behavioral Treatment Manual for Recurrent Isolated Sleep Paralysis" (CBT-ISP, Appendix C) is indeed primarily directed at practitioners of sleep medicine and psychotherapy, but the proposed methods also can provide valuable advice to concerned lay people, especially for self-therapeutic dealing with the frightening experiences.

Appendix D includes an "Adherence Measure for Cognitive Behavioral Treatment of Isolated Sleep Paralysis" and is thereby intended for evaluation of the CBT-ISP.

The book is clearly aimed at professionals—sleep researchers and sleep medical specialists—but it is written in a comprehensible way, and easy to read for scientifically interested people who are reasonably familiar with psychological and medical methodology.

For the field of anomalistics, SP is of particular interest insofar as the accompanying frightening hallucinations, occurring in waking consciousness, are often held responsible for the perception of ghosts, spirits, demons, and other entities that are interpreted as supernatural, but also for experiences of alien abduction. In Chapter 3, such experiences are described, and discussed with regard to structural similarities to SP

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symptomatology. Such similarities can be found in descriptions of *incubi* and *succubi*, vampires, werewolves, and witches. Contemporary examples are the already-mentioned alien abductions as well as the phenomenon of "shadow people" that are dominating contemporary SP reports. Although the authors assume that clear causal correlations exist between SP and the development of corresponding (supernatural, paranormal) beliefs, and offer therefore conventional explanations of such extraordinary experiences and beliefs, they remain pleasingly cautious with their conclusions: "The causality is difficult, if not impossible, to discern" (p. 19). They do not make the mistake, driven by the wish to enlighten the people, to 'adapt' the existing evidence to such a theory. Thus, they write, for example, with regard to belief in witches, and witch persecution:

One can reasonably infer that sleep paralysis did indeed play *at least some role* in both the genesis and maintenance of witchcraft beliefs and also in actual testimony used against purported witches. (p. 33) [italics added]

The reluctance of the authors in this regard is possibly due to the fact that their scientific expertise is not in the field of historical and cultural scientific research. They mention at the end of their book that during their literature search they came upon many references belonging to such unfamiliar (for them) subject areas, which, however, fascinated them so much that they decided to include them (p. 214). If one wants to criticize something about the book under review, one could most likely refer to these chapters outside their competence because their mastering of the relevant material is necessarily limited. To give an example: The authors refer to poltergeists that make their presence felt acoustically as well as by the movement of unanimated objects (e.g., Roll 1977)—experiences that also can occur as hallucinations in SP episodes. Moreover, one can find such cases of psychological tension and stress that are relevant for SP with "emotionally troubled adolescent(s)," too. However, the fact that in poltergeist cases there indeed remain physical traces, that thus 'real' dishware is broken, and not only hallucinated dishes, is not mentioned, or considered. At least—and this point demonstrates the authors' integrity they note: "However, we are not aware of data associating it [SP] more specifically with adolescent tumult" (p. 31).

I would like to point to one omission that the authors cannot necessarily be blamed for. It concerns the presented theories on the etiology of SP. With regard to biological and medical approaches, they restrict themselves to those that refer to the (neuro) physiology of sleep. However, there exists another interesting theory that is based on the structural similarity of SP Book Review 115

and tonic immobility (TI) of animals that when confronted with a predator instinctively follow a death-feigning reflex. The impossibility of moving, together with the experience of extreme and existential fear could point to common underlying mechanisms of TI and SP. To the best of my knowledge, however, there exists hardly any published literature on that issue. That might be the reason why this theory was not taken into consideration.¹

SP experiences can be regarded as an important factor in the etiology of paranormal experiences and beliefs by representatives of anomalistic psychology, and should be given appropriate consideration within this field. For that reason alone, thorough knowledge of SP is important. But beyond that, it represents a particularly stimulating phenomenon for those who are interested in the investigation of human consciousness because we are dealing with an irritation at the interface between waking consciousness and sleep, and, by that token, with a very odd border phenomenon at the demarcation line between the two, otherwise scarcely compatible, worlds of day and night. The fact that SP not only occurs as a bizarre symptom of a pathological disorder but can be experienced by healthy people in its isolated form emphasizes its singularity and relevance for consciousness researchers. SP could be considered as an anomaly of sleep whose complex structure cannot be sufficiently explained in all details—even if it may be an "OK anomaly" in the sense of Sturrock, that means an anomaly "scientists can cope with" (Sturrock 2010:3), and which seems to be explainable within the framework of conventional scientific research.

Note

¹ I came upon this theory through an unpublished paper with the title "Aporetic Immobilities: A Comparison of Tonic Immobility and Sleep Paralysis" by James A. Cheyne. The former director of the Deutsche Gesellschaft fur Schlafforschung und Schlafmedizin [German Society of Sleep Research and Sleep Medicine], Geert Mayer, put forward this theory as a promising approach to understanding SP (personal communication November 17, 2015).

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