The first question when holding this book in my hands was: Why is it so expensive? For a book of 100 pages, $68 is not a usual price. The author has informed me that he was unaware of this high price when he closed an agreement with the publisher, so I regard it as a matter of publisher policy. Materialistic issues aside, the book is valuable in several regards. It starts with an approving Foreword by Stanley Krippner, and continues with an Introduction to the contents of the book. After that, three somewhat heterogeneous chapters follow. The first describes an experimental study the author has performed, the second chapter is a review of modern research in parapsychology, and the third consists of a review of the research performed in the field of bioenergetic effects on organisms. I will highlight the contents of these different sections below.

The Introduction contains a short description of the skeptical movement in Sweden and some of their critics. Among them is Martin Gustafsson of the University of Stockholm. Brusewitz summarizes an interesting line of reasoning put forward by Gustafsson. Among other “ideals,” the Swedish skeptics profess to continue to use the principles of the philosophers of the Enlightenment era to strengthen the resistance of people to irrationalism by popularizing the methods of and the results gained in science. However, Gustafsson argues that there is an obvious discrepancy between the aim of the philosophers of the Enlightenment, who aimed at awakening people’s motivation to educate themselves and not to simply trust in authorities, and to persuade people to trust in the methods and results of academic authorities. Clearly, this latter recommendation is not what the philosophers of the Enlightenment had promoted. Gustafsson makes a good point here, and it might be appreciated by all those who argue with skeptics every now and then. This revelation is characteristic of the book: The author draws much of his work from Scandinavian and Eastern European literature that is not well-known in the West by those writing on the border areas of science, and I found it refreshing to read about persons and experiments I had never heard of before.

The first chapter describes an experiment that Brusewitz performed at the University of Stockholm to detect effects in electrodermal activity in persons as a response to remote “sending” individuals—effects that had been reported in earlier studies. However, the replication attempt by Brusewitz failed. To account for the negative results, the author raises several methodological issues and provides suggestions for future research.

The second chapter contains the mentioned overview on recent research
in parapsychology, supplemented by an impressive reference list. Among other
topics, Brusewitz includes such diverse themes as Ganzfeld studies, fMRI
studies, telepathy between twins and also between animals and humans, near-
death experiences, apparitions and hauntings, but also an overview on the
cutting edge studies on quantum physics in biological processes.

Chapter Three, titled “Biomagnetism, Biofields and Holistic Biology,”
constitutes the most important part of the book, being a valuable introduction
into studies assessing bioenergetic or psychoenergetic effects on organisms.
Brusewitz expounds on many different aspects of research into bioelectricity
and biomagnetism, such as the influence of electrical and magnetical fields
on organisms, bioelectrical systems operating in the body, “biolight” (infra-
red light that is said to stimulate wound healing), and “biophotons” (very low
amounts of coherent light emitted by organisms), the role of the heart in the body
apart from being a blood pump, but also animal navigation, aspects of dowsing,
and possible connections between this field of research and parapsychological
findings. He briefly discusses holistic biology and vitalistic concepts of life, and
concludes by describing the basics of a new view of life, which he conceives as
being rooted in some kind of bioelectrical field. All this results in an intriguing
line of reasoning, which updates previous similar concepts and weaves together
aspects of diverse contemporary fields of research. However, there is one detail
in this chapter that I found particularly intriguing. Here, Brusewitz briefly
summarizes research performed by Swedish artist Göte Andersson. Andersson
had experimented with an apparently highly psychic boy, who, among several
other remarkable faculties, seemed to be able to perceive luminous emanations
around the poles of magnets. Apparently, these emanations seemed of different
quality above each pole to the boy, and he was able to distinguish correctly the
poles of a magnet in prolonged series of blind and double-blind trials—making
no mistakes. This curious ability has been reported before, starting with the first
writings of Baron Karl von Reichenbach (1849) on the “Od” he claimed to have
discovered, a universal vital force permeating all matter, but being concentrated
in crystals, magnets, and living organisms. The experiments performed by von
Reichenbach with his “sensitive” persons are usually regarded as ill-founded,
with the results produced by (auto-) suggestion, but it remains remarkable that
the observations described were also reported by several subsequent authors
(e.g., Barrett et al., 1882–1883, Büchner, 1854, de Rochas, 1895, Durville,
1895–1896). One of them, Floris Jansen (1907) in The Netherlands, has even
implemented a fully automatized laboratory setting. It is intriguing that a
boy who has stated that he had never heard of these experiments before 2010
(Brusewitz, personal communication, 2011) seemed to confirm these earlier
reports. And, as with other things in his book, Brusewitz deserves credit for his
making this quite-unknown Scandinavian episode known to a broader audience.
However, I’d also like to highlight one weakness of the book. Sometimes important background information and historical concepts dealing with the introduced phenomena are described too superficially for my (admittedly historically biased) taste, or even misleadingly. For example, the concepts of holistic biology and vitalism as discussed by Brusewitz need clarification. The author acknowledges that there are unsolved problems in biology, and he seems to think that electrical processes in the bodies play an important role in governing some of these phenomena. He seems to conceive holistic biology as being based on bioelectrical foundations, a perspective that appears too limited. Similarly, Brusewitz asserts that vitalists “believe that biological life is based on electricity and solid-state physics in biology” (p. 50), apparently relying on secondary sources that have characterized vitalism in inappropriate terms. The essence of (neo-) vitalistic concepts lies in the propositions that the functions of a living organism are not explicable by the laws of physics and (organic) chemistry alone, but are mediated by a vital principle distinct from the factors governing physico–chemical reactions, and that organisms display self-determining and autonomous qualities (Driesch, 1928, 1935a, von Hartmann, 1925, Merriam-Webster Dictionary, http://www.merriam-webster.com). In short, vitalistic concepts typically go far beyond entailing electric fields as a vital principle of organisms, and several influential vitalists such as Hans Driesch and Eduard von Hartmann explicitly referred to this vitalistic life principle as being immaterial by nature. Hence the many writings of Driesch about possible connections between vitalism and the phenomena assessed in parapsychological research, most of which certainly cannot be explained by some kind of (bio-) electrical field or force (e.g., Driesch, 1933, 1939). Moreover, Brusewitz characterized Driesch as having postulated an “extrabiological” principle guiding the structural development of organisms—quite misleading terminology. Rather than being “extrabiological,” the vital guiding principle in Driesch’s philosophy, entelechy, is the fundamental and dynamic source of life without which no biology would be possible. It lies at the heart of all biology and distinguishes life from inanimate matter. Apart from governing physiological processes and form development on a mere biological level, it also comprises a soul-like quality that also governs actions on a higher level of biological organization—then being termed psychoid (Driesch, 1928). In addition, it entails a primordial quality of wholeness that mediates
the orchestrated functioning of an organism by implying a characteristic form of causality that Driesch had termed *wholeness-causality*. It can be conceived as an advanced form of the older—and, according to Driesch, sometimes ambiguous—concepts of *teleology* and the *causa finalis* in the Aristotelian philosophy (Driesch, 1927, 1928, 1935b).

The misconception that vitalists endorsed electrochemistry to explain unsolved riddles in biology becomes also apparent when Brusewitz states that a specific chemical model which describes hypothetical pathways leading to the origins of life, relying on electrochemical properties of the molecules involved, could provide connections to the vitalistic view of life (p. 50). No vitalist I am aware of would have subscribed to this idea. And, I take the opportunity here to stress that the origins of life are far from being understood at present, despite recurrent proclamations in scientific journals and in popular newspapers that state the opposite. In a previous publication (Nahm, 2007), I have identified and discussed 24 serious problems for pre-biotic chemistry that need to be overcome both in theory and in practice before it can be stated with justification that life has developed “by itself” through mere physicochemical reactions, including the fashionable concept of self-organization as a means to enhance these hypothetical processes. Although interesting articles have been published in the meantime (e.g., Powner et al., 2009), the situation has basically remained unchanged. Almost 60 years after the famous Urey-Miller experiments, we still don’t have the slightest clue about the historical pathways that have led to the origins of life on our planet. On closer look at the details, all we have are highly speculative and problematic hypotheses that rest on doubtful experiments with largely disappointing results, focusing on isolated and primitive aspects of organic chemistry.

Be that as it may, I conclude by stating that apart from the conceptual drawbacks just discussed, I deeply appreciate the way in which Brusewitz has highlighted unsolved problems in biology, has pointed to their possible connection with related findings in parapsychology, and has underscored that the prevalent paradigm in mainstream biology, namely focusing on molecular biology and biochemistry, implies severe deficits prohibiting a deeper understanding of the nature of life. For my part, I am sure that he is on the right track here, and that following this track has the potential to provide an important step forward toward a fruitful and innovative branch of future biology. May his book contribute to increasing the interest in these intriguing phenomena, and in their implications for a better understanding of life, including human nature.

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