The startle reflex is of considerable interest to neurologists, particularly those concerned with movement disorders. While its (broadly) stereotyped pattern of muscle activation is consistent with a reflex, it shows very prominent habituation—to a degree that makes study of startle difficult. Pavlovian conditioning of responses can occur, so it is a reflex capable of ‘learning’.

Human disorders of startle occur both as a genetic disorder (hyperekplexia) and as acquired ones, the latter frequently associated with lesions of the reticular formation. Current neurophysiological issues regarding the startle reflex include its relationship to reticular reflex myoclonus and the issue of whether the (R2 component of the) blink reflex should be considered to be equivalent to the startle responses seen in other muscle groups in the body.

This book treats the startle reflex in its role in psychology and psychiatry. While basic research in rats is presented, no mention is made of the normal human startle reflexes beyond the blink, nor of disordered startle as recognized by the neurologist. Clinical applications focus upon alterations in startle in psycho-pathology, intoxication, schizophrenia and in children. I was interested to learn that startle habituation of the blink response can be detected by the age of 5, but prepulse inhibition is only seen in older children. The blink reflex is suggested as a ‘probe’ in different psychological states. There are said to be characteristic alterations to the usual alterations seen in response to concurrent valance and arousal in psychopathy.

It is a pity that the authors did not include a chapter on the normal human startle reflex and thus ‘close the gap’ somewhat between the physiology presented using the rat and the remainder of the book’s contents. There are only a few typographical errors, but the decision to capitalize after a colon I found irritating.

For psychologists or psychiatrists with an interest in the
use of startle, this book summarizes a broad range of material. To the neurologist or neurophysiologist, the concentration upon the blink reflex and the absence of discussion of abnormalities of the startle reflex in man, are serious shortcomings.

Professor James Colebatch  
Department of Clinical Neurophysiology,  
The Prince of Wales Hospital,  
Sydney, Australia