

'There is nothing paranormal about near-death experiences' revisited: comment on Mobbs and Watt

Bruce Greyson¹, Janice Miner Holden² and Pim van Lommel³

¹ Department of Psychiatry and Neurobehavioral Sciences, University of Virginia Health System, 210 10th Street NE, Charlottesville, VA 22902-4754, USA

² College of Education, University of North Texas, 1155 Union Circle #310829, Denton, TX 76203-5017, USA

³ Achtsprong 2, 6881 HA Velp, The Netherlands

In a recent article in this journal entitled 'There is nothing paranormal about near-death experiences', Dean Mobbs and Caroline Watt [1] concluded that '[t]aken together, the scientific evidence suggests that all aspects of the near-death experience have a neurophysiological or psychological basis' (p. 449). We suggest that Mobbs and Watt explained 'all aspects' of near-death experiences (NDEs) by ignoring aspects they could not explain and by overlooking a substantial body of empirical research on NDEs. In a subsequent radio interview, Watt acknowledged that they had avoided looking at any evidence for veridical out-of-body perception, resulting in their being unable to evaluate whether or not there was empirical evidence of anything paranormal about NDEs (<http://bit.ly/MITeGP>). But if Mobbs and Watt did not consider the evidence for possible paranormal features, then their claim that there is nothing paranormal about NDEs is not evidence-based.

Mobbs and Watt attributed out-of-body experiences to REM-intrusion and temporal brain lobe activation. However, near-death experiencers report REM-intrusion phenomena no more often than the general population, and NDEs occur under conditions that in fact inhibit REM [2]. Electrical stimulation of the temporal lobe typically elicits frightening, distorted experiences quite unlike NDEs [3]. Mobbs and Watt attributed movement in NDEs through a tunnel toward a light to narrowing of the visual field from anoxia. However, blood oxygen levels of near-death experiencers have been found to be the same as [4] or in fact greater than those of comparison patients [5].

Mobbs and Watt compared visions of deceased persons in NDEs to hallucinations in neurological disorders. However, hallucinations in these neurologic conditions involve only vision and are usually accompanied by fear and confusion, quite unlike realistic, interactive visions of deceased persons in NDEs, which are usually welcoming and often seen, heard, smelled, and touched [6]. Some near-death experiencers report seeing deceased persons of whose death they had no knowledge or sometimes deceased persons they had never met. The accurate information acquired about the deaths of these deceased persons challenges the interpretation of these visions as hallucinations [7].

Current neurophysiological models of NDEs fail to explain lucid experiences that occur during cardiac arrest,

when conscious experience should be fragmentary or absent. This problem is exacerbated in resuscitated patients who report perceiving events they should not have been able to perceive, yet are later confirmed. Among 107 published cases of such perceptions during NDEs, approximately 91% were completely accurate [8].

The near-death literature of the past four decades has moved beyond collection of anecdotes into rigorous scientific investigation. That investigation rightfully has included, and should continue to include, research into neurophysiological correlates of NDEs. However, scholars need to respond to all relevant data, not just data supporting the *a priori* assumption that NDEs must be reducible to known neurophysiology. In suggesting that there may be some evidence of paranormal features in NDEs, we are not suggesting that those features are supernatural or beyond scientific investigation. They may be paranormal in the sense of being difficult to explain in terms of the currently prevailing reductionistic framework. But we believe that they are entirely lawful and natural phenomena that can and should be studied by scientific methods, rather than dismissed without investigation.

References

- 1 Mobbs, D. and Watt, C. (2011) There is nothing paranormal about near-death experiences. *Trends Cogn. Sci.* 15, 447–449
- 2 Greyson, B. *et al.* (2009) Explanatory models for near-death experiences. In *The Handbook of Near-Death Experiences* (Holden, J.M. *et al.*, eds), pp. 213–234, Praeger/ABC-CLIO
- 3 Gloor, P. (1990) Experiential phenomena of temporal lobe epilepsy. *Brain* 113, 1673–1694
- 4 Klemenc-Ketis, Z. *et al.* (2010) The effect of carbon dioxide on near-death experiences in out-of-hospital cardiac arrest survivors. *Crit. Care* 14, R56
- 5 Parnia, S. *et al.* (2001) A qualitative and quantitative study of the incidence, features and aetiology of near death experiences in cardiac arrest survivors. *Resuscitation* 48, 149–156
- 6 Kelly, E.W. (2001) Near-death experiences with reports of meeting deceased people. *Death Stud.* 25, 229–249
- 7 Greyson, B. (2010) Seeing deceased persons not known to have died. *Anthropol. Hum.* 35, 159–171
- 8 Holden, J.M. (2009) Veridical perception in near-death experiences. In *The Handbook of Near-Death Experiences* (Holden, J.M. *et al.*, eds), pp. 185–211, Praeger/ABC-CLIO

1364-6613/\$ – see front matter © 2012 Elsevier Ltd. All rights reserved.
<http://dx.doi.org/10.1016/j.tics.2012.07.002> Trends in Cognitive Sciences xx (2012) 1–1