Evidencing the Ineffable?¹

Chris Roe

University of Northampton

A Review of Connected: The Emergence of Global Consciousness by Roger Nelson. ICRL Press, 2019. Pp. 332. \$18.95. ISBN 978-1-936033-35-5

Roger Nelson is very well placed to write a book about possible nonmaterial linkages between consciousness and physical processes, not only because he is one of the principal actors in the empirical tale, but also because he is as well versed in accounts of reality derived from the great mystical traditions as he is in those derived from contemporary physics. In effect this book provides an account of his research career in parapsychology that aimed to evidence those linkages, from June 1980, when he joined the Princeton Engineering Anomalies Laboratory (PEAR) to conduct formal studies of PK and remote viewing, to retirement in 2002 and his continued involvement in the Global

Consciousness Project (GCP). Nelson gives a charming pen portrait of the personalities and the warm ambience at the PEAR lab, including an introduction to *Murphy*, a random mechanical cascade that occupied a whole wall with 9,000 polystyrene balls tumbling off pegs like a giant pinball machine such that they should produce a normal distribution in the collection bins at the bottom. I would have appreciated a longer description of his earlier non-GCP work, since some of the principles that underpin the GCP could have been introduced here more straightforwardly (particularly the nature of randomness, the *modus operandi* of research grade random number generators [RNGs], and the evidential case for their responsiveness to human intention). I also felt the book would have benefitted from a clearer distinction between the ESP and PK strands of the program which are quite distinct conceptually and operationally but become conflated here as neighboring paragraphs flip from one to the other in a way that could be confusing for the non-specialist.

The book comprises 28 chapters divided into 4 parts (The EGG story, The Instrument, The Results, and Interpretation and Meaning). The chapters are quite short (typically 5-10 pages) and have the quality of a collection of essays. Although they often build one from another, they also allow for quite marked jumps in topic and include quite a bit of (perhaps inevitable) repetition. The agenda of the book is laid out at the outset, as Nelson asserts (p. 12),

¹ Address correspondence to: Prof. Chris Roe, Faculty of Health, Education & Society, The University of Northampton, University Drive, Northampton NN1 5PH, UK, Chris.Roe@northampton.ac.uk

The Global Consciousness Projects research reveals subtle but meaningful structure in what should be random data, collected during periods of time when millions of people share common emotions, suggesting a powerful conclusion: consciousness is instrumental, implying that it is fundamental. It is not just a secondary emanation from the brain, but instead is both part of and independent of the physical substrate of neurons and synapses protected by the skull. Mind has a real and participatory role in the world.

The program and its interpretation are deeply influenced by the teleological teachings of Pierre Teilhard de Chardin, that argued for orthogenesis, the hypothesis that organisms have an innate tendency to evolve in a definite direction towards some goal due to some internal mechanism or driving force. That ultimate goal involves a coming together of individual consciousnesses, a coalescence that would create a *noosphere* for the Earth.

In a section that now seems prescient of the coronavirus outbreak, Nelson draws attention to the various forms of globalization that have heightened our awareness that the whole of the Earth represents just one interconnected community. As a consequence, significant events in one place have greater immediacy and emotional impact around the globe than ever before. Emotional responses transmit rapidly, like a radiating nervous impulse, and much as the coordinated activity of the 100 billion cells of the human brain can give rise to a singular collective experience, so might the attention and intention of the 7.5 billion individuals on the planet give rise to a coherent global consciousness. Of course, he does not claim that this idea is particularly new, and readily draws on the great religious traditions that speak of a *oneness*, a *ground of all being*, and a *Brahman* of which the *Atman* is an inherent part. For Nelson, then, the GCP represents an attempt to detect and characterize the interconnections that link human consciousnesses.

Nelson's book is beautifully written and he offers an intuitively appealing idea, but the proof of the pudding is in the eating. Where might we find evidence of this global mind in action? A solution suggested itself when he learned that a world-wide synchronized meditation, Gaiamind, was planned for January 1997. His past research had indicated that focused attention could interact with RNGs such that their output conformed to those intentions. These effects seemed to be independent of distance, so he asked friends who were conducting research with RNGs to send him output produced during the meditation period. The data across 14 RNGs showed "a significant departure from expectation during the period of 5 minutes set for the meditation" (p. 37). Sadly, he does not at this point explain what is meant by a departure from expectation, and the lay person may have some difficulty in getting a sense of what the output from these devices means or implies. A second test opportunity some months later involved the funeral of Princess Diana. This time data from 12 RNGs from the US and Europe showed "deviations" during the ceremony with odds against chance of about 100 to one. These and other initial tests showed sufficient promise to warrant the establishment of a network of 60-70 RNG devices around the world. The distribution of detectors across the surface of the Earth was reminiscent of the nodes of an EEG device, with each RNG being equivalent to an individual sensor that measures cortical activity in a particular region of the brain, and the network of RNGs creating a multichannel record of activity that is "something like an EEG for the world" (p. 16). Much as brain coherence might be indicated by synchronous activity across different regions of the cortex, so might synchronous activity across different RNGs be indicative of coherence across the noosphere. Thus the network became known as an 'electroGaiaGram, or 'EGG', and the GCP was alternatively known as the EGG project.

The happenings that might produce this coherence tend to be unpredictable, however, and typically can only be identified after the fact (although there are many exceptions, such as New Year celebrations or Royal Weddings). Thus an essential feature of the GCP strategy for nominating events of interest is to ensure that formal predictions about EGG behavior are precisely specified and analysis explicitly pre-planned and registered before the data are seen — this is certainly not a case of noticing an anomaly and then casting around to find an event that might be the nominal cause. The full hypothesis registry is available for scrutiny by independent observers (at http://noosphere.princeton.edu/pred_formal. html). By late 2015, 500 events had been specified and analyzed. Although individual event deviations are typically very small, the cumulative effect is an impressive 7.3 sigma, with odds against chance of a trillion to one (p. 117). A vast amount of control data taken from periods outside the designated events but otherwise using the same parameters gives a reassuring distribution around an average *z* score of zero (p. 182).

Management of the project has been refreshingly transparent, with daily tables (and graphic representations) of data readily available online. There is also a clear emphasis on replication in the sense of looking for similar outcomes from similar events to ensure the effect is not just a statistical aberration. It is also encouraging that meaningful patterns emerge across instances; for example, events involving larger numbers of people produce larger effects, and emotional events produce stronger effects than neutral ones, particularly where they evoke compassion in the perceiver.

Notwithstanding these impressive findings, there are conceptual aspects of the GCP, and therefore of the book, that I remain unclear about or uncomfortable with. Events of interest are described as eliciting "a focus of collective attention or emotion ... that engages people across the world" (p. 104) and implies a degree of interpersonal consistency in that engagement. But what would qualify as an incident that could capture such uniform collective attention? Some cases involve acute events with a very specific point in time and space that very likely captured world attention (such as the Twin Tower attack), but others are much more nebulous both in terms of when they "occurred" and how people might have reacted to them (such as the announcement of the death of Nelson Mandela), and I struggle to see how they can be presumed to give rise to a homogenous response in a wide range of people. To illustrate, Nelson regularly nominates New Year celebrations as an event likely to elicit an EGG response because this coming together stirs common emotions such as "a generous attitude toward fellow celebrants, some hopeful thoughts about the future, perhaps just the simple enjoyment of being together and sharing an easy, human custom" (p. 188). However, not everyone has such a positive association with New Year; for example, The Telegraph reported in 2012 that 10 million Britons described New Year's Eve as the "most depressing night of the year", exacerbating feelings of loss, isolation and inadequacy.² This kind of variation, from positive to negative, extreme interest to indifference, will surely be more pronounced for many of the less well circumscribed events in the database, making any kind of consistent response unlikely.

The claimed global reach of the identified events is also debatable. Generally, there is a pronounced skew towards events of importance to citizens of the USA. For example, at the time of this review the four "latest events" listed on the GCP website included Obama's farewell address, Trump's inauguration, and the Women's March on Washington. The book also adds the Oscars and OJ Simpson's trial (p. 89), among others. Although these may be considered newsworthy around the world, it seems a stretch to suggest that non-Americans were captivated by them. And there seems to be a reciprocal blind spot to unselected serious events around the world that provide the backdrop for events that are singled out. As an early example of a terror attack, Nelson refers to the US Embassy bombings in Nairobi and Tanzania that took place in August 1998, killing 224 people with more than 5,000 wounded. They "exemplify a tearing of the social fabric that would shock a global consciousness" (p. 136). Undoubtedly these are appalling events, but can it truly be said that this was of global significance? These attacks occurred at the same time as a number of other significant conflicts that collectively cost 500,000 lives and displaced a million refugees: the Sierra Leone Civil War, the Algerian Civil War, the Burundian Civil War, the Maoist conflict in Nepal, the Republic of the Congo Civil War, the Kosovo War, and the Eritrean–Ethiopian War. Perhaps most significantly, the second Congo war was escalating in the Autumn of 1998, and involved acts of genocide between the Hutus and Tutsis that led to 350,000 violent deaths and a further 3-5 million deaths attributable to the war. If the EGG network is responding to events that are truly shocking and have broad impact then it is not clear why it should show such a particular sensitivity to US-related events.

It seems to me that few events capture the world's attention in real time. The 12 highest live viewing figures are for recent Olympic Games and World Soccer finals, each drawing an audience of over 3 billion. Some of these figures are inflated because the events run over a number of weeks, but the single match between India and Pakistan as part of the 2015 cricket world cup was watched by over a billion people and would have made a good international target given the intense rivalry between those countries. Nelson has conducted analyses on sporting events, including world cup soccer matches, but surprisingly has found that they "are not reliable sources of resonance and coherent consciousness" (p. 167). This is puzzling given the vast numbers who focus on these events in real time, and the strong emotions that they can elicit. Despite their inherent triviality, they can have much more powerful and direct impacts on ordinary working class people than political or even military events that take place in other parts of the world (as Bill Shankly famously said, "football isn't a matter of life and death — it's much more important than that"), and there is no doubt that nations come together and create a tangible sense of belonging and shared identity during times when their team is doing well. Their failure to be detected by the EGG network is a concern.

The final part of *Connected* explores how the findings might be interpreted. Given the book's poetic style, it is not surprising that Nelson relies on allusion and metaphor when attempting to make sense of the associations he reports. For example, he compares (p. 127) EGG data from a host who sadly died during this period with data from a neighboring site; the former gave significant above chance scoring and the latter significant below chance scoring. Nelson comments, "it is ... difficult to ignore the symmetry and the timing. I think there is a message here — a vision of love and compassion manifesting in data". For some this may seem frustratingly vague — why should love and compassion be reflected in *symmetry* rather than, say, *synchrony*? Would the demise of the host not be better indicated (figuratively) by "negative" deviations rather than positive ones? It leaves open the possibility that *any* deviation could be interpreted after the fact as meaningfully portraying the event to which it is supposed to relate. More generally, key terms like *coherence* and *structure* are left unscrutinized, relying instead on an intuitive understanding of what is meant; but while the poet might be free to leave terms open to interpretation by the reader, the scientist needs to explain and justify his operational definitions. This is particularly true for the notion of consciousness, which is described in terms of "synchronized ... thoughts or emotions" (p. 261), which seems to presume more than it explains. What do we mean by *synchronized*? In what way can two minds ever be said to have the same thought? Most importantly, why should *coherence* of intention in a human mind/brain be expected to give rise to coherence in an electronic device? In what way can these coherences be thought of as equivalent in a way that allows one system to conform to the state of the other?

Notwithstanding these quibbles, I enjoyed reading this book and found the evidence for an anomaly convincing. The empirical strategy seems to me sound and robust. With respect to interpretation, I am left with many more questions than answers, but perhaps that is the *raison d'être* of a book such as this.