Article

Premonitions: A Global Online Statistical Tracking Study of Precognitive Predictions

J. Miguel Gaona[1, 2, 3, *], Francisco Colinas[1], Nicolas Rouleau[1],
Lucas W. E. Tessaro[1], and Joey M. Caswell[1,*]

[1]Transnational Anomalies Research, Sudbury, Ontario, Canada
[2]Centro Europeo Neurosalus, Madrid, Spain
[3]Faculty of Medicine, Universidad Rey Juan Carlos, Madrid Spain

Abstract

A number of interesting and testable theories of precognitive information transfer have been posited, and focus on the potential role of both ultraweak photon emissions and the geomagnetic field. While many experiments examining this anomalous phenomenon have been previously conducted, a precognitive study of a magnitude similar to the Premonitions project (ThePremonitions.com) has not yet been undertaken to our knowledge. By using an internet-based study to statistically examine this intriguing occurrence, the main objective of Premonitions is to acquire data from a large population of participants from across the globe. Furthermore, if some individuals are truly capable of receiving or accessing this apparently non-local information for accurate prediction of future events, a significant increase in the available sample size should increase the "signal resolution" for the detection of global non-local information.

Key Words: Consciousness, premonitions, extrasensory perception, precognition, internet study, anomalies, psi, non-local, geomagnetic field, dreams.

1. Introduction

Premonitions are examples of precognition which involve the prediction of future events without inferential reasoning or *a priori* knowledge [1]. Although premonitions are typically transient, the ability to readily acquire information about an event before it occurs would have marked implications on individuals and societies. As a transient experience, precognition within the whole of a given group would be expected to have a higher frequency of occurrence than in any one individual within that same group. It is therefore a practical approach, in pursuit of an understanding and application of precognitive phenomena, to probe large groups over long periods of time for information relevant to future events. Large-scale statistical analyses upon aggregated precognitive event data would allow for an identification of potential unanticipated details which could predict geopolitical or perhaps natural events before their occurrence. In this

sense, each member of the global community would represent a sensor for precognitive information where, as the participants increase, so does the resolution of the signal.

Modern internet culture represents a medium in which a large scale premonition project is possible. Automated tests which make use of email messaging have already seen application in psychical research [2]. Whereas it was once difficult to maintain longitudinal studies involving participants situated in distant geographical locations, the internet provides a medium in which large quantities of data can be collected non-invasively without expending many resources. Apparent precognitive events also appear to display a propensity to occur during dreaming [3-4] which makes an online initiative of this nature even more attractive, given that potential participants who experience this phenomenon during sleep can easily and, more importantly, immediately report their experience.

Cognition refers to the mental processing of information which is associated with neural activations along myriad pathways within the brain. Classically, subjective experiences associated with objective events follow the events themselves, proceeding along a linear unidirectional model of subjective time. Precognition refers to the subjective experience of a later confirmed objective event and is typically observed on the same day of the event [5]. These experiences violate the assumption of unidirectional subjective time and, if objectively relevant, represent hitherto untapped sources of information.

A meta-analysis of 309 forced-choice experiments involving over 50,000 subjects demonstrated that effect sizes associated with studies of precognition remained constant despite high variability in research quality over time [1]. This suggests a reliability of the phenomenon and has since motivated further quantitative investigation. Physiological predictors of precognition have been reported from the experimental literature which has included heart rate [6] as well as pupillary dilation and spontaneous blinking [7]. Environmental variables which predict precognitive events have also been reported. Lewicki *et al*. [5] demonstrated that global geomagnetic activity on the day of the subjective experience moderately correlated with geomagnetic activity which would occur during the two days preceding the objective event. The study indicated that the electromagnetic environment on the day of the precognitive experience and that of the objective event were fundamentally related. In addition, recent quantitative work indicates that all human brains could access shared information while immersed in the same geomagnetic environment [8]. Together, these findings support the claim that there are subtle shifts in variables intrinsic and extrinsic to the human body which predict objective events that, when phenomenologically accessible as subjective experiences preceding the events, are accessible as explicit forms of information which can be self-reported and subject to predictive analysis.

The acquisition of precognitive information has often been linked with sleep or, more specifically, to dreams and dream-like altered states of consciousness [3-4, 9]. During periods of dream-sleep, it has been demonstrated that the right hemisphere shows characteristics of cerebral dominance, in addition to responding conspicuously to exogenous geomagnetic activity [10-11]. That geomagnetic activity can be correlated with right hemispheric activity bears particular importance in regard to Bókkon's theories [12-13]. Given the requirement of electromagnetic (EM) activation of visual neurons, the fact that dreams incorporate visual imagery suggests these

photic stimuli are produced from within the brain itself; e.g., they are the result of endogenous biophoton emission [12-13].

In a series of studies, Dotta *et al*. [14-15] have demonstrated that conscious thought and imagination can lead to increased ultraweak photon emission (UPE) from the cerebrum localized to the right hemisphere. Given that photons are individual packets of information, it therefore stands to reason that certain forms of hypnogogic imagery may be the result of UPE interactions with visual receptors. However, we submit the following question: if dreams and hypnogogic imagery can be the result of biophoton emission, can that information be transferred to another individual?

Previous experiments have also demonstrated that subjects in isolation from one another during application of the same circumcerebrally applied magnetic field pattern show a correlation in cerebral activity when only one subject received a stimulus, such as a flash of light [16]. These cerebral events were localized to the right parietal region. Given subsequent studies by Dotta *et al*. [17] demonstrating the "doubling" of UPE from cell cultures exposed to identical magnetic field configurations, it follows that biophotons may be the mode of transport for non-local information [17-18].

For example, one individual who has proven himself reliable and consistent in the phenomenon of acquiring information at a distance is Sean Harribance [19]. Countless studies have verified the veracity of his claims, which have also shown increased activity in the right temporoparietal region during his intuitive-state [20-21]. Recent studies have established that Mr. Harribance's cerebral activity is also correlated with cerebral UPE, again localized within the right hemisphere, which would support the hypothesis of biophotons carrying information which can be read by such individuals [22-23].

Indeed, the possibility for photon emissions from non-biological sources carrying non-locally available information about future events can be posited from studies on the Earth's background photon emissions and subsequent earthquake activity. In a series of studies, Persinger *et al*. [24] have shown that protracted background photon emission increases frequently precede major (magnitude M > 8.0) earthquakes. This phenomenon has been observed in interactions with Random Event Generator (REG) devices, where it has been shown that significant deviations in REG output can be predicted using photon emissions occurring two days prior [25]. Furthermore, Caswell *et al*. [26] previously illustrated a number of interesting relationships between human UPE and significant deviations in REG output.

These studies taken together suggest a possible mechanism by which Bókkon's dream-biophoton emission can be related to real life precognitive events. Given that both earthquake and REG output can be predicted by photon emission, it is therefore plausible that this same photon emission could be the carrier of precognitive information at the individual level, as exemplified by Mr. Harribance.

In addition to the photon emission hypotheses related to the non-local access of information and prediction of future events, Persinger [8, 27] has consistently demonstrated relevant convergent dimensional analyses which suggest that the geomagnetic field could hold "information" of every thought from every human being who has lived, with an enormous amount of residual

energy available. With this fascinating and quantified theory in mind, the fact that every human on the planet is immersed in the same planetary magnetic conditions, and that electromagnetic configurations have been shown to produce non-local excess correlations or "entanglement" [16-17], it is possible that the geomagnetic field could allow transfer of and access to this "stored" information associated with human thought.

To further this proposition in the context of premonitory predictions and non-local information access, numerous studies have previously demonstrated that precognitive phenomena typically occur during periods of quiet geomagnetic activity [28], which could suggest a reduction in environmental "noise" might enhance the "signal" by which the acquisition of exogenous information is accomplished. Furthermore, this relationship has also been observed in association with the similar parapsychological phenomenon of remote viewing [29-30], whereby an individual remotely accesses information about an unknown distant target image.

2. About the Premonitions Project

Premonitions (ThePremonitions.com) is a web-based service designed for the purpose of conducting longitudinal, mixed-design online tracking studies of precognitive phenomena. Users from around the world are able to submit and track precognitive predictions, which are then analyzed by the system.

While the project is currently in a preliminary phase, a number of additional features have been proposed and entered various stages of development. The following overall objectives will be reached in future consecutive phases.

2.1. Overview and Objective

The platform consists of a database which is accessed through a simple and friendly web interface, programmed in php, JavaScript and HTML, where the user can input *a priori* predictions of future events, detailing its contents, and labeling them according to a classification of possible scenarios. The main objectives are:

i. Establish a server for safe storage of such *a priori* predictions of the occurrence of each event.

ii. Evaluate premonitions post-event involving accuracy indicators weighted accordingly.

iii. Perform a statistical treatment of the data input for the generation of graphical categories, tags, etc., and their evolution over time.

2.2. Database

i. A database (MySQL type) hosted on multiple servers is used to contain all data on system performance. The database, therefore, will be duplicated in order for an external institution or agency, attesting to the veracity of the protocol followed by the system, and externally to ensure no targeted manipulation of premonitions and entered data.

ii. Periodically, backups will be done to ensure consistency and data security for any eventual downfall and/or cyber-attack to the servers where the system is hosted.

2.3. Registry

The data needed for user registration are:

- A user nickname.

- A password that will be encrypted in the database.

- A contact email to allow access.

- Various demographics such as age, gender, etc.

At all times, the privacy of such data is guaranteed under the Terms and Conditions of Use of the platform.

2.4. Interaction with the Platform

There are two types of interaction: registered and unregistered.

i. Unregistered Users:

Can tell the system that "something" is going to happen, and may categorize a number of user-contributed tags. With this information we generate real-time graphics with a focus on temporal properties.

ii. Registered Users:

In this case, the user can access the system through a login, and enter fully and in detail the content of their prediction. They may also view the history of previous predictions made, but cannot alter or modify the contents thereof.

2.5. Entering Premonitions

The user must fill in all or part of the following fields:

i. Expected date of event if known. Can be completely filled, partially filled, or left blank if the deadline of the prediction is unknown. Users may also state whether the intended date of the event is given precisely or approximately.

ii. Category and sub-category, selecting from a set of possibilities to classify the content of the prediction.

iii. "Strength" of perceived premonition (high, medium or low).

iv. Content of prediction, with the best possible detail of the content.

v. Tags or keywords related to the content provided for statistical purposes.

2.6. Viewing Premonitions Made

The user can view the premonitions, made to appear as a table, temporarily (Newest First) ordered. Users may not, under any circumstances, modify any of the fields filled out when the premonition was introduced. If the premonition is fulfilled, the user will receive information that may inform the outcome of that particular prediction, detailing the incident which has generated such compliance, and may provide supporting documentation where appropriate.

For fulfilled premonitions, users may also consult the system evaluation that was conducted according to certain indicators.

2.7. Viewing Premonitions of Others

A further feature is the ability to view premonitions made by other users. Here, you can see premonitions made by users that have already been fulfilled and evaluated. The reason for not allowing access to the premonitions of other users yet unfulfilled is to avoid creating a "trend of opinion" that may influence the premonitions of other users, and to avoid the phenomenon of self-fulfilling prophecy of a set of individuals. However, implementation of this option is currently being considered.

2.8. Statistics

Apart from the main objective of the system, which is the study of the existence of premonitions as an aspect of the phenomena of extrasensory perception, the entered data undergoes a statistical treatment which is held by the system. Conclusions will be obtained about the most common type(s) of predictions in a sample of users of the system by gender, age, and other demographic characteristics.

Given the strong temporal component of the phenomenon under study, the temporal evolution of the premonitions are discussed in relation to the total amount of reports or forecasts, and in terms of the categories and/or subcategories most frequently given over a specific period of time.

Another aspect to consider is that of the most commonly used tags for premonitions and the corresponding quantitative, statistical analyses which will be performed over time.

2.9. Evaluation of Premonitions

There are two processes which may prompt evaluation of predictions:

- User prompt.

- Expiration of its deadline.

In either case, the system will be notified and it shall assess the accuracy of the predictions made in each case by quantifying the degree of compliance with the actual event. For calculation of the evaluation, a series of weighted indicators, such as the risk of the prediction made (that is, the likelihood that an event of this kind happens), the setting, and detail that is provided are used, as well as the degree of overall precision if the user has provided a deadline for the event.

2.10. Conclusions

This initiative is a project whose long-term evaluation of results depends on the volume of premonitions introduced by users.

Although initially set to have a version in Castilian and English, we will try to include as many languages as possible, thus maximizing the size of the population sample both qualitatively (countries, cultures, societies, etc.) and quantitatively.

3. Discussion

There are approximately $7 \cdot 10^9$ humans on planet Earth, roughly $2.8 \cdot 10^9$ of which could be described as internet users (~40% of global population). Given that a "thought" is associated with a discrete, coherent activation of approximately 10^6 neurons [31], and the upper limit for neurons within the cerebral cortex is $\sim 2 \cdot 10^{10}$ [32], the maximum number of discrete processing clusters available to the Premonitions endeavor when accounting for all internet users is $5.6 \cdot 10^{13}$. Suppose an internet-based project as described here can reach 0.0035% or ~100,000 individuals within the world's internet using population. The total number of thought-processing units available to the project would be $2 \cdot 10^9$ or within the lower range of neurons which comprise a single human neocortex [32]. This global brain, spread out across the Earth's surface ($5.1 \cdot 10^8$ km^2) represents a sensor area density of 3.9 sensor units per km^2. However, only 30% of the Earth's surface area is land, which gives a true sensor area density of 13.07 sensors per km^2 for the available surface area. Of course, the actual distribution will be clustered within discrete geographical locations where the appropriate infrastructure is present. These values describe the receptive field within which extracerebral sources of information might be sequestered. As discussed previously, the geomagnetic field is one potential source for this extracerebral information. Once data has been collected, analyses will attempt to isolate geophysical perturbations which might affect the quantity or quality of the information.

An assembly of self-reported thought patterns, largely uninformative in isolation, could represent collective information indicative of future events. The provision of accurate data on the possible existence of extrasensory perception as premonitions will allow for further exploration into the possibilities of group initiatives such as these and the emergent functions of interconnected brains. The Premonitions project (ThePremonitions.com) is an initiative which aims to explore these properties of interconnectedness and derive applied solutions for predicting events relevant to cultures, societies, and all life on the planet.

References

1) Honorton, C., & Ferrari, D. C. (1989). Future telling: A meta-analysis of forced-choice precognition experiments, 1935–1987. *Journal of Parapsychology*, 53(28) 1-308.

2) Sheldrake, R., & Avraamides, L. (2009). An automated test for telepathy in connection with emails. *Journal of Scientific Exploration*, 23(1).

3) Krippner, S. (1993). The Maimonides ESP-dream studies. *Journal of Parapsychology*, 57(1), 39-54.

4) Dotta, B. T. & Persinger, M. A. (2009). Dreams, time distortion and the experience of future events: A relativistic, neuroquantal perspective. *Sleep and Hypnosis*, 11(2), 29-39.

5) Lewicki, D. R., Schaut, G. H., & Persinger, M. A. (1987). Geophysical variables and behavior: XLIV. Days of subjective precognitive experiences and the days before the actual events display correlated geomagnetic activity. *Perceptual and Motor Skills*, 65(1), 173-174.

6) Sartori, L., Massacessi, S., Martinelli, M., & Tressoldi, P. E. (2004). Physiological correlates of ESP: Heart rate differences between targets and nontargets. *Journal of Parapsychology*, 68(2).

7) Radin, D., & Borges, A. (2009). Intuition through time: What does the seer see?. *Explore: The Journal of Science and Healing*, 5(4), 200-211.

8) Persinger, M. A. (2013). Billions of human brains immersed within a shared geomagnetic field: Quantitative solutions and implications for future adaptations. *Open Biology Journal*, 6, 8-13.

9) Hearne, K. M. (1987). A dream-telepathy study using a home 'dream machine'. *Journal of the Society for Psychical Research*, 54(807).

10) Babayev, E. S. & Allahverdiyeva, A. A. (2007). Effects of geomagnetic activity variations on the physiological and psychological state of functionally healthy humans: Some results of Azerbaijani studies. *Advances in Space Research*, 40(12), 1941-1951.

11) Saroka, K. S., Caswell, J. M., Lapointe, A., & Persinger, M. A. (2014). Greater electroencephalographic coherence between left and right temporal lobe structures during increased geomagnetic activity. *Neuroscience Letters*, 560, 126-130.

12) Bókkon, I. (2005). Dreams and neuroholography: An interdisciplinary interpretation of development of homeotherm state in evolution. *Sleep and Hypnosis*, 7(2), 61-76.

13) Bókkon, I. (2008). Phosphene phenomenon: A new concept. *BioSystems*, 92(2), 168-174.

14) Dotta, B. T. & Persinger, M. A. (2011). Increased photon emissions from the right but not the left hemisphere while imagining white light in the dark: The potential connection between consciousness and cerebral light. *Journal of Consciousness Exploration & Research*, 2(10).

15) Dotta, B., Saroka, K. & Persinger, M. A. (2012). Increased photon emission from the head while imagining light in the dark is correlated with changes in electroencephalographic power: Support for Bókkon's Biophoton Hypothesis. *Neuroscience Letters*, 513(2), 151-154.

16) Persinger, M. A. & Lavallee, C. F. (2010). Theoretical and experimental evidence of macroscopic entanglement between human brain activity and photon emissions: implications for quantum consciousness and future applications. *Journal of Consciousness Exploration & Research*, 1(7).

17) Dotta, B. T., Buckner, C. A., Lafrenie, R. M., & Persinger, M. A. (2011). Photon emissions from human brain and cell culture exposed to distally rotating magnetic fields shared by separate light-stimulated brains and cells. *Brain Research*, 1388, 77-88.

18) Dotta, B. T. & Persinger, M. A. (2012). "Doubling" of local photon emissions when two simultaneous, spatially-separated, chemiluminescent reactions share the same magnetic field configurations. *Journal of Biophysical Chemistry*, 3(1).

19) Harribance, C. C. (1994). *Sean Harribance: A Psychic Predicts the Future*. Sean Harribance Institute of Parapsychology Foundation.

20) Roll, W., Persinger, M., Webster, D., Tiller, S., & Cook, C. (2002). Neurobehavioral and neurometabolic (SPECT) correlates of paranormal information: involvement of the right hemisphere and its sensitivity to weak complex magnetic fields. *International Journal of Neuroscience*, 112(2), 197-224.

21) Hunter, M. D., Mulligan, B. P., Dotta, B. T., Saroka, K. S., Lavallee, C. F., Koren, S. A. & Persinger, M. A. (2010). Cerebral dynamics and discrete energy changes in the personal physical environment during intuitive-like states and perceptions. *Journal of Consciousness Exploration & Research*, 1(9), 1179-1197.

22) Persinger, M. A. & Saroka, K. S. (2012). Protracted parahippocampal activity associated with Sean Harribance. *International Journal of Yoga*, 5(2), 140.

23) Saroka, K. S., Dotta, B. T., & Persinger, M. A. (2013). Concurrent photon emission, changes in quantitative brain activity over the right hemisphere, and alterations in the proximal geomagnetic field while imagining white light. *International Journal of Life Sciences and Medical Research*, 3(1), 30-34.

24) Persinger, M. A., Lafreniere, G. F., & Dotta, B. T. (2012). Marked increases in background photon emissions in Sudbury Ontario more than one week before the magnitude> 8.0 earthquakes in Japan and Chile. *International Journal of Geosciences*, 3(3).

25) Vares, D. E. & Persinger, M. (2013). Predicting Quantum Random Events from Background Photon Density Two Days Previously: Implications for Virtual-to-Matter Determinism and Changing the Future. *Journal of Nonlocality*, 2(2).

26) Caswell, J. M., Dotta, B. T., & Persinger, M. A. (2014). Cerebral biophoton emission as a potential factor in non-local human-machine interaction. *NeuroQuantology*, 12(1), 1-11.

27) Persinger, M.A. (2008). On the possible representation of the electromagnetic equivalents of all human memory within the Earth's magnetic field: Implications for theoretical biology. *Theoretical Biology Insights*, 1, 3-11.

28) Krippner, S. & Persinger, M. (1996). Evidence for enhanced congruence between dreams and distant target material during periods of decreased geomagnetic activity. *Journal of Scientific Exploration*, 10(4), 487-493.

29) Makare, K. & Persinger, M. A. (1987). Geophysical variables and behavior: XLIII. Negative correlation between accuracy of card-guessing and geomagnetic activity: A case study. *Perceptual and Motor Skills*, 65, 105-106.

30) Scott, M. A. & Persinger, M. A. (2013). Quantitative convergence for cerebral processing of information within the geomagnetic environment. *Journal of Signal and Information Processing*, 4(3), 282-287.

31) Levy, I., Hasson, U. & Malach, R. (2004). One picture is worth at least a million neurons. *Current Biology*, 14(11), 996-1001.

32) Pakkenberg, B. & Gundersen, H. J. G. (1997). Neocortical neuron number in humans: Effect of sex and age. *Journal of Comparative Neurology*, 384(2), 312-320.