



(a) Integrated Knowledge Systems, Inc., Grapevine, Texas, USA

(b) Laboratory for Statistics and Computation ISLA-Instituto Politécnico de Gestão e Tecnológica

(c) International Remote Viewing Association, Mapleton, OR, USA

(d) California Institute for Human Sciences, Encinitas, California, USA

(e) Neuroscience Research Group, Laurentian University, Canada. Radio Amateur – VE3PSE

(f) Research Department, Institute of Noetic Sciences, Novato, CA, USA

(g) Institute of Neuroscience, University of Oregon, Eugene, OR, USA

* Corresponding author:
Jim Houran
jim_houran@yahoo.com

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Magic Flights or Mind's Eye? Further Explorations of Dimensional-Slip Narratives

JAMES HOURAN^{a,b,*}, DEBRA LYNNE KATZ^{c,d}, JESSICA WILLIAMSON^c, STANLEY A. KOREN^e, HELANÉ WAHBEH^f, MARJORIE H. WOOLLACOTT^g

Abstract – This case study examines the phenomenon of dimensional-slips, i.e., anomalous distortions or perceptions of spacetime that may involve transcendental content or themes. Our investigation specifically centers on “Nell,” a known ‘haunted’ woman who documented four experiences of perceived physical transports to other realms. Using a mixed-methods approach, we employed AI-assisted content analyses with secondary evaluations by subject matter experts to assess Nell’s experiences through the competing theoretical lenses of kundalini awakenings, physical mediumship, bilocation-related phenomena, and electromagnetic field (EMF) effects. Findings indicated strong alignment with EMF-related activity and, to some extent, bilocation phenomena, as compared to the other hypotheses explored here. Post-hoc accounts of different dimensional-slips experienced by Nell’s family members in the same geographic vicinity further hinted at the probable influences of environmental variables or behavioral contagion. Finally, we build on key literature cited in the study to introduce a continuum model of bilocation, integrating concepts from psychology, neuroscience, and parapsychology. There was no conclusive evidence that Nell physically moved anywhere, so our findings arguably point to the interplay among boundary-thinness, altered states, and environmental factors in her anomalous cognitions. These results underscore the need for further multidisciplinary inquiries into dimensional-slip narratives and their implications for consciousness studies. Future research should therefore incorporate controlled experiments and broader case studies to refine theoretical models of these extraordinary experiences.

Keywords: encounter experiences, haunted people syndrome, liminality, narrative reality, psi, spacetime

Introduction

Imagine doing routine chores alone at home when suddenly and without explanation you feel physically transported to another ‘time or place’– a distinctly removed realm that is filled with novel and familiar features but also spiritual figures that help you to resolve a personal issue or lingering conflict. A 60-year-old female named “Nell” (pseudonym) who fits the profile of Haunted People Syndrome (HP-S)¹ (Houran & Laythe, 2022) unexpectedly experienced and then promptly documented four such ‘journeys.’ She expressly characterized these occurrences as something other than time expansions, mystical visions, channeling discarnate agents, or out-of-body experiences (OBEs). The events also appeared to be independent from an ongoing ghostly episode at her residence that involved a mixture of subjective (e.g., sensed presences) and objective (e.g., object displacements) phenomena. We therefore refer in this paper to Nell’s novel events as ‘dimensional-slips,’ i.e., anomalous spacetime perceptions or distortions with or without transcendental elements. Her experiences correspondingly suggest that ‘magic flights’ traditional to shamanism or mysticism (Cardena & Krippner, 2018; Walsh, 2001, 2007) can sometimes spontaneously manifest in secular or everyday contexts to individuals with higher transliminality, i.e., a “hypersensitivity to psychological material originating in (a) the unconscious, and/or (b) the external environment” (Thalbourne & Maltby, 2008, p. 1618).

This latter assertion follows from O’Keeffe et al. (2024) who used the large language program ChatGPT-4² to assess Nell’s written descriptions of the dimensional-slips. Specifically, competing content analyses tested diagnostic criteria across five alternative hypotheses that fol-

1 This concept asserts that recurrent encounter-type experiences or ghostly episodes emerge from people with heightened somatic-sensory sensitivities that are stirred by dis-ease states, contextualized with paranormal belief or other sense-making attributions, and reinforced via perceptual contagion and threat-agency detection (Laythe et al., 2021, 2022).

2 ChatGPT-4 is a large language model (LLM) that functions as an AI-powered robot capable of understanding and responding to human language. The process begins with training, where ChatGPT learns from vast amounts of text data, such as books, articles, and websites, to grasp how language is used. When a user interacts with ChatGPT, it analyzes the words to understand their meaning. Based on this understanding and extensive training, it generates a response that fits the context of the query, instruction, or message (OpenAI, 2023). Several researchers have likewise used this software for various qualitative analyses (e.g., Morgan, 2023; Şen et al., 2023; Zhang et al., 2023).

lowed from a preliminary visual inspection of her accounts, i. e., (a) deliberate fabrication, (b) mental time travel, (c) clinical dissociation, (d) psi-type perceptions via remote viewing (RV) related activity or processes, and (e) shamanic-type journeying. Their results suggested that her experiences had a mixed phenomenology which was strongly aligned to several potential mechanisms. O’Keeffe et al. (2024) concluded therefore that “Nell’s dimensional-slips involved self-generated dissociative states or hypnotic episodes which patterned the psychological functions of shamanic journeys, and thus contained projections or personifications of deep-seated fears, desires, or unresolved conflicts, which were knowingly or unwittingly described using some imaginative elaborations during their documentation or retelling” (p. 172).

Their case study nonetheless had methodological limitations stemming in part from its reliance on Occam’s Razor, or the principle of preferring explanations with the fewest assumptions (Vrantsidis & Lombrozo, 2024). As such, that earlier analysis took these accounts seriously but not at face value. O’Keeffe et al. (2024) therefore neither assumed that Nell’s experiences involved physical teleports to ‘parallel dimensions or other-worldly realms,’ nor did they consider a broad range of parapsychological hypotheses. Out of concern for her privacy and psychological well-being (cf. Leshner et al., 2012), they also avoided follow-up interviews with Nell to member-check her narrative details, obtain new information, or affirm the researchers’ interpretations. We therefore heed Beaty’s (2024) call for increased transparency and intellectual humility in research by testing Nell’s narratives against hypotheses apart from O’Keeffe et al. (2024). These fresh efforts often constitute thought exercises, but speculative articles like ours play a vital role in the academic literature by developing ideas that challenge existing paradigms, propose new perspectives, shape academic discourse, and guide future research (Jaakkola, 2020). Accordingly, we did not aim to prove any particular hypothesis or model but rather to highlight our research team’s internal debates about the potential nature or meaning of Nell’s intriguing narratives.

The Present Study

Nell’s complete, unedited written accounts are available at Psi Open Data (see Method section). Her verbal descriptions of the dimensional-slips noted a distinct sense of ‘movement’ that implied something other than mental or psychological phenomena like time expansions, channeling, or mystical visions. Nell specifically stated that she felt “physically transported” to uncanny places, albeit this feature of her experiences was vaguely referenced in her original accounts. Therefore, we requested more detail on this point via a subsequent member-check

(McKim, 2023) that was strictly limited to this one issue. Nell explained the feeling as follows:

Ok, have you ever had a very hard sneeze where you get like an electrical current through your body? Followed by goosebumps? Or being in a heavy-duty thunderstorm with tons of lightning and you get that tingling feeling when lightning strikes are close by? Three of the four episodes felt so similar to that electrical current minus the sneeze and goosebumps. No pain but the momentary current only, that was going in the realm. Exiting from three of the four was same as above; a cool semi-strong breeze hitting the back of me (head to feet) and it stopped immediately (door shut or slit closed). Almost like on a hot day walking into a compressed air-conditioned space like a grocery store and hit with the cool breeze but on my back. The last one I do not recall anything going in or exiting out the realm, except smelling dampness like interior of a cave. Lol, it took me a bit to give an example of that electrical current, and if you have ever experienced either one then you can understand the sensation of it. I described it as if I was going through it all over (personal communication to J. Houran, 19 August 2024).

These extra details further contextualize Nell's dimensional-slips, although we note there was a nearly a two-month gap between her experiences and this supplementary description. Thus, unintended elaboration or distortion is a potential confound here (cf. Drinkwater et al., 2019; Lange et al., 2004), albeit some tangential research on near-death experiences has found no embellishment of perceptual details over time (cf. Alvarado & Zingrone, 1997–1998; Greyson, 2007).

We can nonetheless infer that her perceived 'movement' was more than mere proprioception, i. e., the body's ability to sense its action and location. Indeed, Nell's outward paresthesia and vestibular alterations arguably parallel some features of both (a) kundalini experiences or 'awakenings' (e. g., Maxwell & Katyal, 2022) and (b) electromagnetic field (EMF) stimulation of the temporal lobe via natural or manmade triggers (e. g., Persinger & Cameron, 1986). Then again, we should also consider some essential insights about the potential role of (c) bilocation suggested by the content experts [second and third authors: DLK & JW] who previously assessed the hypothesis of remote viewing (RV) or 'consciousness-casting'³ to explain Nell's experiences (cf. O'Keeffe et al., 2024, pp. 168–170). Although ChatGPT-4 and the content experts agreed there was poor alignment between Nell's experiences and broad RV phenomenology, the experts noted the possibility of fleeting, but distinct bilocation-type

3 O'Keeffe et al.'s (2024, p. 154) term references the function of 'casting your device' or the process of wirelessly displaying the screen of a person's technological device (like a smartphone, tablet, or computer) onto another screen, such as television or computer monitors.

experiences as occasionally reported by some RVerS. They further speculated that Nell's case might have involved (d) physical mediumship, i.e., when a psychic purportedly facilitates clear, physical phenomena like object displacements, voice manifestations, or tangible materializations via spiritual or supernatural forces (Braude, 2003). Such events are typically associated with séances and often require the medium to enter a trance-like state.

This study used a multi-team system (MTS) approach to explore these four additional hypotheses and then revisit O'Keeffe et al.'s (2024) initial data and conclusions in light of the findings. MTSs are used to accomplish multifaceted tasks in challenging environments, as they comprise interdependent teams that work towards their own proximal goals within and across teams also to accomplish a shared superordinate goal (Shuffler et al., 2015). ChatGPT-4 (OpenAI, 2023) again featured in a series of content analyses with a narrative lens, involving a deductive approach that applies existing theories (and codes that follow from them) to qualitative data (Braun & Clarke, 2006). First, we collected AI-based ratings across diagnostic criteria set by ChatGPT-4. This particular software was alone used for the analyses, similar to studies that have relied on the proficiency of a single AI language model (e.g., Odiah & Gosling, 2024). Next, content experts cross-checked and amended these outputs as deemed appropriate (cf. Hamilton et al., 2023). In all but one instance, the content experts also were blinded both to O'Keeffe et al.'s (2024) results and the findings from the competing analyses reported here. Lastly, we integrate the results via a grounded theory interpretation of all the available information. This research does not necessarily aim to resolve Nell's anomalous experiences, but we expect the cumulative results to advance model-building or theory formation on the phenomenon of dimensional-slips.

Method

Transparency and Openness

This study was reviewed and approved by the Ethics Committee at Integrated Knowledge System. We adhered to the Journal Article Reporting Standards (Kazak, 2018) and specify how we determined our research samples, data exclusions (if any), research questions, applicable manipulations, and all measures and data abstractions used in the content analyses (cf. Vassar & Holzmann, 2013). Our research protocols were not pre-registered but largely reproduce O'Keeffe et al.'s (2024) procedures. The subsections below individually describe each hypothesis and associated exploration for better organizational clarity and are successively ordered by their conceptual or procedural intricacy as judged by our team. This is important to note given the

mixed methods used to evaluate the two rather complex hypotheses of Bilocation Phenomena and EMF-Related Effects (as explained below).

Narrative Material

Nell documented her dimensional-slips via four separate first-person narratives that reportedly were written soon after the experiences occurred. Therefore, we did not dictate their format or word length. The Appendix summarizes each narrative, but her full accounts [Narrative A: Brother Jerry Realm (2,323 words), Narrative B: Underground Realm (1,960 words), Narrative C: Green Labyrinth Realm (1,001 words), and Narrative D: My Mother Realm (1,226 words)] are available for review at Psi Open Data: <https://open-data.spr.ac.uk/dataset/nells-dimensional-slips-narrative-set>). As part of the informed consent, Nell gave her approval for this textual material to be published in part or whole for educational and research purposes.

Procedure

We obtained Nell's informed consent to collect and share the four narratives, analyze their contents and features, and publicly report the findings. We neither explained our research approach to Nell beforehand, nor agreed to any stipulations about releasing the results.

ChatGPT-4 was not trained on any specific guidelines, research, or other benchmarks prior to the various content analyses. Rather, we applied a common prompt to each of the five scenarios, i.e.: "Perform two tasks based on the attached set of Narratives (A, B, C, & D): (a) Collectively compare them to the known features or characteristics of [Kundalini Awakenings/ Physical Mediumship/ Electromagnetic Field Activity & Temporal Lobe Stimulation] derived from peer-reviewed academic studies; and (b) Rate how well the features or characteristics of the attached narrative set match each of the distinct features or characteristics of [Kundalini Awakenings/ Physical Mediumship/ Electromagnetic Field Activity & Temporal Lobe Stimulation] using a four-point Likert system: "0 = Very Poor Match, 1 = Poor Match, 2 = Good Match, 3 = Very Good Match."

We also instructed the program to specify the references or resources it used to set the diagnostic criteria for hypotheses. Each research team member then studied the outputs of their assigned hypothesis to affirm or refine the results based on their independent assessment of the narrative set. Each used the same rating system given to ChatGPT-4 and also worked independently and blindly to the results or conclusions of the other team members. The only exceptions to the above processes concerned our tests for the hypotheses of (a) Bilocation

Phenomena, which used a conceptual review of the literature [though not blinded to O’Keeffe et al.’s (2024) prior results] versus an AI content analysis, and (b) Electromagnetic-Related Effects, which supplemented the AI review with a separate empirical review of environmental data (see Results sections below for details on both).

Hypothesis 1: Unrecognized Kundalini Experiences?

“Kundalini” is the feminine form of the Sanskrit adjective meaning “circular” or “coiled.” In the Hindu tradition, kundalini experiences involve the apparent awakening of a type of cosmic energy at the base of the spine. These occurrences are often profound, transformative, and associated with heightened states of consciousness (for overviews, see e.g., Benning et al., 2019; Suchandra et al., 2020; Taylor, 2015).

Table 1

Comparison of dimensional-slips features to known phenomenology of Kundalini experiences

Criterion	Definition	AI-Ratings	Analyst-Ratings
Energy Awakening	Feeling of energy rising from the base of the spine (where the Kundalini is believed to reside) upwards through the chakras, often described as a serpent-like movement.	2 – The sensation of an electrical current and tingling feelings could be interpreted as a form of energy awakening, although the narrative does not explicitly describe a rising energy from the base of the spine.	2 – This is reasonable match in that persons talk of the feeling of electrical currents moving through the body in K. awakenings. However, she uses examples like sneezing, and being near a lightning storm, which doesn't seem quite right.
Physical Sensations	Spontaneous movements, known as kriyas, or changes in breathing patterns.	3 – Sensations like tingling and a cool breeze, which parallel physical sensations commonly reported in Kundalini experiences.	1 – There were no changes in breathing patterns. Also, the feeling of a cool breeze does not sound like a Kundalini experience or what is expected from kriyas.
Psychic Phenomena	Visions, altered perceptions, or heightened intuition. Some report extrasensory perceptions or a sense of oneness with the universe.	1 – The narratives do not indicate any visions, altered perceptions, or heightened intuitions.	1 – These sound like visions, but they do not seem mystical in the usual sense, but rather like going to a different time/place or reality.

Emotional Release	Intense emotional experiences are common, ranging from bliss and ecstasy to fear and anxiety.	0 – There is no mention of intense emotional experiences or purification processes.	1 – The narratives did not feel like an emotional release, but more like a simple adventure in another time/space realm in which the percipient learned of 'hidden' events.
Spiritual Insights	Deep insights into the nature of reality, consciousness, and their purpose in life. This can lead to profound shifts in beliefs and worldview.	0 – The narrative does not mention any deep insights or shifts in beliefs.	1 – A distinct shift in worldview or in the percipient's life purpose was not detected, as is expected from a kundalini experience. However, the percipient did mention that someone considered her to a prophet in some ways.
Altered State	Trance-like states, expanded awareness, or a sense of timelessness. Some individuals describe mystical or transcendent experiences	2 – The description of sensations and experiences might suggest some form of altered state, although this is not explicitly indicated.	1 – These were clearly altered states, with what seemed like time travel, but they seemed more like a simple receiving of information about 'sinister' events that had occurred.
Healing Crises	The Kundalini energy ostensibly clears blockages in the body, causing some physical or emotional discomfort	1 – The narrative doesn't explicitly mention discomfort or crises associated with clearing blockages, so this feature is not strongly represented.	1 – There was nothing about healing within the percipient's body, as might be expected from a kundalini experience. There was emotional discomfort, but not related to what is typically expected with kundalini experiences.
Long-Term Transformation	Over time, Kundalini awakenings can lead to lasting changes in personality, behavior, and spiritual outlook, often marked by a sense of inner peace and connection	0 – There's no mention of long-term changes in personality, behavior, or spiritual outlook, so it doesn't match this feature.	1 – Positive transformations in the percipient's personality or spiritual outlook were noted.

0 = Very Poor Match, 1 = Poor Match, 2 = Good Match, 3 = Very Good Match

Phenomenology

When prompted for a description, ChatGPT-4 stated that kundalini experiences (or physio-kundalini syndrome) have eight common features (cf. Corneille & Luke, 2021; Greyson, 1993; Maxwell & Katyal, 2022; Sanches & Daniels, 2008; Sannella, 1992; Suchandra et al., 2020; Woollacott et al., 2021), namely, (a) Energy Awakening, (b) Physical Sensations; (c) Psychic Phenomena; (d) Emotional Release; (e) Spiritual Insights; (f) Altered State of Consciousness; (g) Healing Crises; and (h) Long-term Transformation. Table 1 defines each feature.

Analysis and Results

We prompted ChatGPT-4 to conduct a content analysis of Nell's narratives guided by the eight diagnostic criteria for Kundalini experiences. As shown in Table 1, ChatGPT-4 rated only three out of the eight features (or 38%) as generally consistent with aspects of Nell's narratives, i.e., "Altered State of Consciousness" and "Energy Awakening" ("Good Matches"), as well as "Physical Sensations" ("Very Good Match"). ChatGPT-4 therefore gave this hypothesis a low, averaged fit index of 1.1 (0–3 scale).

The content expert [sixth author, MHW] reviewed and amended the AI-based ratings as appropriate, given her expertise on Kundalini experiences (e.g., Edwards & Woollacott, 2022; Woollacott et al., 2021). MHW agreed only with the relatively higher AI rating ("Good Match") on "Energy Awakening" and the relatively lower AI ratings ("Poor Match") for "Psychic Phenomena" and "Healing Crises." The AI rating (i.e., "Good Match") for "Altered State of Consciousness" was adjusted down to a "Poor Match," but MHW saw fit to increase the extremely low AI ratings ("Very Poor Match") for "Emotional Release," "Spiritual Insights," and "Long-Term Transformation" to reflect a more modest "Poor Match." These adjusted ratings were justified by certain content or references in the narratives that could be construed as somewhat consistent (vs specific or strong matches) with these three features. MHW's amended averaged fit index for this hypothesis produced a lower averaged fit index of 0.78 (0–3 scale), which did not deviate too strongly from the AI-based fit index noted above.

Conclusions

Many of the perceptions described in Nell's narratives were deemed sufficiently ambiguous to be interpreted as potential, though unconvincing, examples of nearly all eight experiential fea-

tures of kundalini. However, Nell's specific reference to feeling an "electrical current" moving through her body was the singular feature that appeared to be a good match to a kundalini experience. This newly discovered detail of Nell's narratives (cf. The Present Study section) originally motivated us to explore this particular hypothesis, but the analyses by both ChatGPT-4 and the content expert nevertheless suggest that her dimensional-slips are unlikely to represent a kundalini awakening or physio-kundalini syndrome.

Hypothesis 2: A Form of Physical Mediumship?

Mediumship is the practice of ostensible communication between the living and spirits of the dead or other 'discarnate agents' (Gauld, 1982, 2022; Rock, 2014). Such practitioners are known as channelers or (spirit) mediums. 'Physical' mediumship involves the perceptible manifestations of energies and energy systems by ostensible spirits, as indicated by loud raps and noises, voices, materialized objects, or apports, i.e., when a material object (living or inanimate) appears suddenly and anomalously, often during a séance, through the powers of a medium. Physical mediumship differs from the concept of 'mental' mediumship, which involves non-physical communication like mentally 'hearing' (clairaudience), 'seeing' (clairvoyance), or 'feeling' (clairsentience) messages from ostensible spirits (Gauld, 1982). Similar to RV and related psi phenomena, mediumship is highly controversial in a scientific sense (Martin & Augustine, 2015). Aside from detailed case studies as suggested above, we can first elect to explore for correspondences between Nell's dimensional-slips and the general features of physical mediumship that ChatGPT-4 identified.

Phenomenology

When prompted for a description, ChatGPT-4 stated that researchers and mediums both reference nine experiential features of physical mediumship, i.e., (a) Physical Effects, (b) Spirit Materializations, (c) Apports, (d) Voice Effects, (e) Spirit Lights, (f) Temperature Changes, (g) Healing Phenomena, (h) Séance Conditions, and (i) Mediumistic Trance (e.g., Braude, 1996; Doyle, 1926/2021; Harrison, 2008; Findlay, 2010; Flint, 1971; Radin, 1997; Schwartz, 2002). Table 2 defines each feature.

Table 2

Comparison of dimensional-slips features to known phenomenology of physical mediumship

Criterion	Definition	AI-Ratings	Expert-Ratings
Physical Effects	Tangible and observable events, such as object movements or unexplained sounds like raps and knocks	2 – Multiple narratives describe physical sensations and interactions, such as hugging, touching objects, and feeling environmental changes. While these aren't full physical manifestations as typically defined in physical mediumship, they still suggest a strong sense of physicality in the experiences.	1 – Nell is experiencing sensations but I am not convinced they are happening in the 3D physical realm and would not consider the interactions as physical mediumship.
Spirit Materializations	The full or partial manifestation of a spirit into a physical form that can be seen, touched, or interacted with	2 – Spirits manifest in physical forms, especially in Narrative A (brother) and Narrative D (mother), but without the dramatic materializations often associated with physical mediumship (e.g., full body apparitions emerging from ectoplasm).	1 – Not convinced the experiences are happening in the 3D physical realm and would not consider the interactions as physical mediumship.
Apports	Objects that seemingly appear or disappear	0 – Aside from possibly Nell herself, no objects materialize or are apported or in any of the narratives.	1 – Perhaps journal could have been asported and apported to new location. Or perhaps she moved it and did not remember or someone else did?
Voice Effects	Mysterious voices heard speaking independently of the medium	1 – In a few narratives, spirits speak directly to the narrator (e.g., the brother in Narrative A, the mother in Narrative D), but this isn't the classic independent "disembodied voice" often associated with direct voice phenomena in physical mediumship.	1 – Agree with AI. Conversation ensues with loved ones but not in classic physical mediumship sense.

Spirit Lights	Unexplained lights or luminous phenomena	1 – Some narratives (especially A and B) mention slits of light, but these aren't clearly linked to spirits manifestations.	1 – Agree with AI. Light split initiates experiences but none of the light descriptions represent alleged spirits.
Temperature Changes	Sudden, unexplained shifts in temperature, often reported as cold drafts or heat surges	1 – There are some mentions of physical or emotional coldness (especially in Narrative A), but these aren't strong or consistent enough across the narratives to signify a major temperature shift associated with spirit activity.	1 – Nell does mention changes in temperature, especially in the follow-up information.
Healing Phenomena	Spontaneous or anomalous healing of various ailments	0 – None of the narratives describe healing or physical restoration, which can sometimes occur in physical mediumship.	1 – Although one could argue for some emotional healing from her time with mom.
Séance Conditions	Often controlled and low-light environments that facilitate anomalous phenomena	0 – None of the narratives take place in the typical séance environment, and all experiences occurred spontaneously.	1 – Spontaneous cases.
Mediumistic Trance	State of semi-consciousness where a person may appear to be asleep but can still see, hear, or respond to others	0 – Nell does not clearly enter a trance state.	1 – One instance where Nell describes “automatic writing” that sounds like she is in a trance.

0 = Very poor fit, 1 = Poor fit, 2 = Good fit, 3 = Very good fit

Analysis and Results

We again prompted ChatGPT-4 to compare the contents of Nell's narratives against the nine diagnostic criteria for physical mediumship. As shown in Table 2, ChatGPT-4 rated only two (i.e., “Physical Effects” and “Spirit Manifestations”) of the nine features (or 22%) as a “Good Match.” The phenomena of “Apports” is interesting because it could be argued that Nell's journey was itself a potential apport. However, the absence of clear evidence for this and most other physical mediumship features resulted in ChatGPT-4 giving this hypothesis a very low, averaged fit index of 0.78 (0–3 scale).

Next, the fifth author [HW] served as the content expert to review and amend these AI ratings as appropriate. She judged that the AI program rated some of the features higher than perhaps warranted because it considered the criteria individually versus holistically. For example, ChatGPT-4 rated the physical effects criterion a ‘2’ (“Good Match”), but its associated commentary acknowledged that “While these aren’t full physical manifestations as typically defined in physical mediumship, they still suggest a strong sense of physicality in the experiences.” Although accurate, this observation arguably should not be interpreted as a “Good Match.” On the other hand, HW adjusted slightly up the AI-ratings for “Apports” and “Mediumistic Trance” for reasons outlined in Table 2. Overall, however, the content expert’s average fit index of 0.78 (0–3 scale) ultimately agreed with the AI’s overall assessment.

Conclusions

Aspects of Nell’s dimensional-slips might slightly align with some features of physical mediumship, but she did not report engaging in any spiritual practices involving trance-like states. O’Keeffe et al. (2024, pp. 172–173) nevertheless explained that a lack of intentional stimulants or triggers for dissociative or other altered states does not negate the role of natural or accidental priming or induction. Illustratively, Nell stated that “I personally don’t do any kind of relaxation exercises or meditation, and I had been doing physical labor in so many words getting my house sorted and packed up for my move” (personal communication to J. Houran, 15 August 2024). However, the mundane or repetitive nature of Nell’s housework immediately preceding her dimensional-slips allowed for possible daydreaming (or mind-wandering, Fox et al., 2013), as well as Nell’s television watching may have been a deliberate or incidental activity that promoted suitable conditions for self-hypnosis (Eason & Parris, 2024).

Taken altogether, the overall feature pattern shows more discrepancies than consistencies with the hypothesis of physical mediumship. Future research might yet explore the best cases of physical mediumship in the literature for obvious parallels with Nell’s experiences (cf. Katz, 2022; Keen, 2001; McClenon, 2024; Nahm, 2014; Weaver, 2015), including bilocation, teleportation, light phenomena, opening of portals, and communications with the deceased involving physical contact like hugging and hand holding or even moving from one location to another. Looking for examples of how ‘spirit entities’ communicate about past events and mentions of materialization of a movie-type screen to project memories might help to shed light on Nell’s case. We further recommend a deeper dive into the multicultural literature involving similar cases as this one, particularly any first-person, phenomenologically based narratives from percipients.

Hypothesis 3: A Bilocation Phenomenon?

O’Keeffe et al.’s (2024) content analysts for the RV hypothesis [i. e., DLK & JW] originally criticized the assumption that Nell was not ‘literally or physically’ transported, in some way, to other locations during her dimensional-slips. They argued that if Nell experienced a complete and total shift in consciousness during her ‘journeys’ this would implicate something other than standard RV phenomena, such as possibly being at the far end of the ‘bilocation continuum’ per characterizations by Swann (1993) and McNear (2023) described below. Moreover, Swann (1993) defined RV “not as a psychic ability” but as a “type of experiment,” one that utilizes blinding and feedback procedures, explaining that “while it utilizes intuitive processing, it’s the scientific manner in which it is set up that distinguishes it from other designs” (p. 81). Targ and Kantra (2000), on the other hand, allowed for a looser definition by asserting that “remote viewing is the acquisition and description by mental means of information blocked from ordinary perception by distance, shielding, or time” (p. 4). Thalbourne (2003) similarly described RV as “a neutral term for general extrasensory perception,” although with the caveat “...especially in the context of an experimental design” (p. 107). The International Remote Viewing Association’s (IRVA) website defines RV as “a novel perceptual discipline for gaining information that is not available to the ordinary physical senses. Used extensively by so-called ‘psychic spies’ during the Cold War for classified military projects, it has a long history both as an intelligence-gathering tool and as the subject of research and applications in the civilian world” (para. 1).

These definitions clarify that RV is not a synonym for ESP, psi, or clairvoyance; rather, it is regarded as a procedure or set of practices, that involves intentionality, planning and structure. Nevertheless, it should be noted that many people in the public at large often refer to RV in the context of their spontaneous psi experiences, and particularly relative to what they perceive to be information gleaned during suspected out-of-body (OBEs) experiences. Trained and experienced RVers tend to balk at these statements, insisting that what spontaneous experiencers do is not RV because there was no intentionality or intended target. As former police detective turned RVer John Herlosky (2021) put it this way: “People say they are natural ‘remote viewers’ and that they’ve been doing remote viewing all their life. Nothing could be further from the truth. You can’t be ‘born a remote viewer.’ You can’t have been ‘remote viewing’ all your life. Remote viewing isn’t even psychic functioning! It’s a totally artificial way of utilizing psychic functioning to enhance and keep it within scientific boundaries” (n.p.). One reason for his reaction is the factors that are seen as important features of a valid RV experiment or project, such as blinding, randomization, separation of roles, formalized reporting, feedback or pre-planned analysis. Yet these are never present in spontaneous psi experiences (Hein, 2019).

Phenomenology

Notwithstanding the caveats above, we can apply terminology that originally described what was apparently happening during an RV session – e.g., ‘psi,’ ‘intuitive functioning,’ ‘consciousness casting’ (O’Keeffe et al., 2024), ‘nonlocal perception’ (Targ & Puthoff, 1994), or ‘anomalous cognitions’ (Escolà-Gascón et al, 2022; Tressoldi & Storm, 2021; Utts, 1996) – to certain spontaneous experiences of an ostensible parapsychological nature. But even if we avoid referring to the dimensional-slips as ‘RV,’ there is nothing precluding us from focusing on the ‘bilocation’ and ‘aesthetic impact’ aspects of some experiences that have been reported in the RV literature, and which might occur outside the bounds of a formalized, structured session. Below we conceptually explore these particular ideas relative to Nell’s dimensional-slips and propose a new framework that subsumes the phenomena of psychological absorption (or immersion), aesthetic impact, RV-type consciousness casting, and ‘miraculous’ bilocation within a common continuum (cf. Figure 1 in the Conclusions subsection below).

To give these terms some context before defining them, some RV history could be helpful. ‘Remote viewing’ is a term originally coined by Ingo Swann, Karlis Osis, and Janet Lee Mitchell in the early 1970’s while they studied OBEs together at the American Society for Psychical Research (Mitchell, 1987; Swann, 1993). In their lab, Mitchell would place an object or picture on a shelf approximately 10-feet above a viewer who was strapped in a bed and then invited to rise above his/her body to perceive and describe the object. Not only did they discover learning curves per each object but that the act of writing and sketching one’s impressions proved both to better help with representing the object and to enable a viewer to call forth even more information. While Mitchell (1987) asserted that they had statistically proven that it was possible to access detailed information at a distance through intuitive functioning, she admitted that neither they nor others had yet devised a way to measure whether or not consciousness (or one’s ‘spirit, soul, or astral body’) is truly leaving a physical body at the point of information retrieval from the distant location. At a meeting with one of the present authors [DLK] in 2020, she reiterated they had not made much progress in this area even 40 years later.

That said, Swann and others (e.g., Atwater, 2001) later developed training techniques involving imagined movements that allowed RVers to access information from different vantage points. With each movement (i. e., “move above the target and look down; go through the door, go up the stairs and observe what’s up there”) the RVer will receive a fresh flow of impressions. This allows the viewer to build a more comprehensive picture of a location compared to a scenario where they simply received an initial image and just waited for something else to happen. These imagined movements, especially when aided by a helper, referred to as a ‘monitor’ or ‘inter-

viewer,' is potentially what enabled RV to receive higher success rates than just about any other free-response type of parapsychological experiment, although that is just one proposal (Tressoldi & Katz, 2023). We also should note that RV studies have appeared in the mainstream scientific literature (see e.g., Escolà-Gascón et al., 2023).

Aesthetic Impact in RV Sessions

According to longtime RV instructor Lori Williams (2020), a more commonly reported experience related to the above is 'aesthetic impact' (AIM). With AIM, "The viewer has gone from simply saying random words that describe the target to having perceptions that include both him/her *and* the target" (Williams, 2020, para. 6, emphasis added), which indicates further target integration. It is thus similar to bilocation but with an emphasis on the 'self' as an experient. The perception can be quite subtle or quite intense. However, the experience is often fleeting – lasting a few moments – although it can be repeated within the same RV session. The key distinguishing feature of an AIM is that RVers are often compelled to report their data from a first-person perspective via "I" statements in their reports or mentations. They do not intend to do this; it just happens, thereby signaling that they are now, in fact, more integrated with the RV target location. AIM may also involve a strong emotion or sense of relationship, movement, or dimensionality between the RVer and another object, structure, or person at the location. The physical senses can also be involved in that RVers feel or perceive stimuli in a visceral way. Examples of AIM descriptions include "*there is a large building looming over me*," or "*a bright light is shining down blinding me*," or "*there is great sadness here, and I don't know why I'm crying*," or "*I feel like I'm suffocating*."

In the formal CRV manual that some of Swann's students reconstructed for use at Ft. Meade, it was explained that the information that a RVer receives and reports relative to an AIM experience is often more accurate than the information they receive prior to its occurrence. As a result, Swann built it into his stage-based training methodology. Advancement from the Stage 2 to Stage 3 training was contingent on having an AIM experience, at which point the RVer needed to indicate this on their report so the 'monitor,' interviewer, or project manager would know they had become more fully integrated into the RV target. However, a downside of AIM (and similar to that with total target immersion) is the experience can be so emotionally or sensorily compelling that RVers tend to persevere on the information gleaned during the sessions while ignoring other important data which is perceived in a more depersonalized, unemotional, or uninteresting way (Smith, 2013).

Bilocation in RV Sessions

Some of the viewers who were part of the U.S. Government's programs and serving at the Fort George G. Meade Army installation (1978 to 1995) began reporting occasional experiences that became known as 'bilocation.' Viewers described these as having an unusual sense of being fully integrated at a distant location to the point where it felt real – or even more real – than the location in which one's physical body was currently located (Brown, 2005; McMoneagle, 1997; Smith, 2005; Swann, 1998; Targ & Puthoff, 1977). Tom McNear received extensive training in a specific methodology developed primarily by Ingo Swann under the supervision of Hal Puthoff when Swann was under contract with the U.S. military. This is referred to as Controlled Remote Viewing (CRV). Swann required McNear and all his students to take copious notes and was a stickler for ensuring definitions be properly applied. McNear (2023) wrote a chapter and spoke at length on the topic of bilocation in this context. According to McNear, Swann taught the ideal state for RVer to have their consciousness divided "more or less evenly between the viewing room and the target; maintaining a balance between the two locations, two locations, not one" (p. 291). McNear shared that Swann thought that bilocation operated on a continuum, defined as the "zone in which the viewer maintains conscious or subconscious awareness" (p. 290).

McNear (2023) further wrote, "I do not dispute that sometimes remote viewers have intense experiences as if they are at the target, fully experiencing the target, and sometimes losing awareness they are physically in the viewing room, but bilocation is not the word that should be used to describe the experience. In such a case the RVer is describing one location, not two; the viewer is fully on target. The experience should not be called bilocation but rather target immersion" (p. 290, emphasis added). This distinction was deemed important because while 'bilocation' is desirable at all times during an RV session, when complete target immersion occurs, it could be 'excessive' in that "the viewer is no longer accurately or completely reporting/recording their perceptions in the viewing room" (p. 291). Conversely, if bilocation (i.e., immersion) does not occur at all, the RVer will not be able to 'access' the target effectively.

Bilocation as a Religious Phenomenon

Putative bilocation is certainly not exclusive to RV. This phenomenon is noted in ancient Greek legends involving Pythagoras, Apollonius of Tyana, and Hermotimus of Clazomenae (Dodds, 2004). The Catholic Church has long studied such reports relative to events surrounding saints that were reported to have appeared in multiple places at the same time. This is arguably reminiscent of the results from the classic *Census of Hallucinations* (Sidgwick et al., 1894), which

found that about two-thirds of the survey respondents who described an apparition they had seen stated it was someone living rather than deceased.

One of the rigorous criteria used by Catholic investigators to conclude whether a 'miracle' has occurred is the extent and quality of the eyewitness testimony (Regulation of the Medical Board of the Congregation for the Causes of Saints Witness, 2016). Corresponding examples of saints determined to have bilocated include St. Alphonsus Mary De Liguori (d. 1787) whose body was seen in a catatonic by servants for two days while he claimed to be attending to the dying pope; St. Gerard Majella (d. 1755), who was seen by multiple people at a monastery while being seen at a location he had expressed a desire to visit; St. Paul of the Cross (d. 1775), who while aboard a ship simultaneously appeared at a doctor's house at the same time and then disappeared when questioned about how he could possibly now be on land. Another example is John Edward Lamy, who claimed to have visited a property that he could not get to and which allowed him to create detailed pictures of it.

Two of the most impressive cases were the bilocation of St. Ignatius Loyola, who appeared at the bedside of the ailing Alexander Petronius, and St. Padre Pio of Pietrelcina, who supposedly appeared before Nazi warplanes causing their planes to stop working while being observed by others to be sitting quietly inside his church (Cruz, 1997). A direct witness to this latter event was the general of the Italian Air Force, Bernardo Rosini, who recounted that:

...as soon as they reached the target, he and his pilots had seen the figure of a friar with his hands raised in the sky. The bombs had dropped by themselves, falling in the woods, and the planes had reversed course, without any intervention by the pilots. Everyone wondered who the ghost was that the planes had mysteriously obeyed. Someone told the commanding general that in San Giovanni Rotondo there lived a friar with stigmata, considered by all to be a saint and that perhaps he could be the hijacker. After the war, the general, accompanied by some pilots, went to the Capuchin convent. As soon as he crossed the threshold of the sacristy, he found himself in front of several friars, among whom he immediately recognized the one who had stopped his planes. Padre Pio approached him and, putting his hand on his shoulder, said: So you are the one who wanted to do away with us all. The general knelt before him. Padre Pio had spoken, as usual, in the Benevento dialect, but the general was convinced that the friar had spoken in English. The two became friends. The general, who was a Protestant, converted to Catholicism (Bosco, 2020, para. 1-6).

Even with those cases where bilocated saints have received the Churches official designation of a 'miracle,' there remains similar questions that both Swann and Mcnear raised, as noted by Father Ryan Erlenbush (2010):

St. Pio of Pietrelcina was known to have bilocated many times throughout his life, a phenomenon which has become central to the telling of his mystical life. Of course, Padre Pio was not the only saint to have bilocated, but he is certainly the saint most associated with the mysterious gift. Without denying the fact of bilocation as a phenomenon, there is still some difficulty in explaining just what this event really is. By “bilocation,” do we mean that Padre Pio was present in two places at the same time? If yes, was he present both in his soul and in his body, or just in his soul? If just in his soul, was he materially present, having acted through a momentarily constructed physical body, or was his presence only a spiritual action visible only to the intellect? (n.p.).


Bilocation as a Flow Experience

Our rapid critical review of the literature for this paper found that mainstream research has examined or contextualized some forms of ‘bilocation,’ not as a parapsychological phenomenon, but rather as a natural psychological mechanism which occurs when people lose awareness of their body during a ‘flow’ state (Csikszentmihaly, 1990), e.g., when reading a compelling book, playing a musical instrument, or engaging with video games or virtual environments. It is also well-known that flow states often involve the experience of temporal distortions (Abuhamdeh, 2020). This effect is also known as ‘immersion,’ i.e., a deeply engaged state in which a person becomes absorbed in an experience, often losing awareness of their physical surroundings (Ryan, 2001). Even earlier, Tellegen and Atkinson (1974) described the construct of psychological absorption as “... an allocentric perceptual mode ... involving ‘totality of interest,’ and openness to the object in all its aspects with all one’s senses” (p. 271). Further, this attentional style is total, “... involving a full commitment of available perceptual, motoric, imaginative and ideational resources to a unified representation of the attentional object” (p. 274).

Irwin (1985) later argued that absorption must be seen not only as an innate capacity for a particular mode of attentional deployment but also understood as comprising three sub-dimensions: ‘need’ for such experiences; ‘opportunity’ made for these experiences; and one’s overall capacity for absorptive experiences (for a discussion of absorption and immersion within spiritual context, see Lifshitz et al., 2019). But Furlanetto et al. (2013) asked, “Does the human mind allow for self-locating at more than one place at a time? Evidence from neurology, cognitive neuroscience, and experimental psychology suggests that mental bilocation is a complex, but genuine experience, occurring more frequently than commonly thought” (p. 1). Of course, potential psychological or physiological mechanism(s) do not negate the idea of parapsychological aspects or sequelae of bilocation experiences. Likewise, a flow or immersive state seems to be a particularly relevant descriptor for the mindset of RVerS who report AIM or bilocation.

Figure 1

A four-point continuum of bilocation phenomena



Mild	Intermediate <i>(with aesthetic impact)</i>	Strong	Intense
Bilocated consciousness as normal immersion or psychological absorption involving flow states	On the Remote Viewing (RV) – Bilocation Continuum: Consciousness spread equally between RV room and target location, ideal for RV	Full site integration, or complete “target Immersion” in RV, too intense to report correctly or completely	‘Miraculous’ physical or visible bilocation, e.g., multiple witnesses report seeing the bilocated individual at two or more locations

Analysis and Results

As shown in Figure 1, the above descriptions might collectively suggest a four-point model of bilocation that situates ordinary ‘bilocated consciousness’ (i.e., immersion or psychological absorption) on one end of the continuum, the AIM and Swann-McNear bilocation phenomena in the middle, and ‘miraculous bilocation’ as defined by the Catholic Church (i.e., requiring observations of a person by multiple witnesses at two or more places at once on the other) at the other end of the continuum. Still, there is anecdotal evidence that indicates RVerS are sometimes perceived by other RVerS when they are assigned the same target. This circumstance would move these individuals closer to the end of the continuum designated for saints.

Moreover, some people report unusual experiences when simply watching TV. One of the present authors [DLK] has dubbed her own personal experiences of smelling pictures on the TV as “smell-a-vision.” This raises the interesting prospect of a link between RV/bilocation phenomena and synesthesia (i.e., cross-modal sensory perceptions), which can occur with thin boundary (or high transliminality) individuals (Thalbourne et al., 2001). Father Erlenbushe’s question of how to think about bilocation in relation to Padre Pio certainly applies to the present case. Nothing in Nell’s four accounts enables us to know definitively whether her physical body ‘transferred’ or ‘teleported’ to another dimension with her consciousness, or if it was just her conscious awareness that was ‘cast’ to some other time or place. There was neither mention of anyone else being home during these incidents, nor were the locations to which she ‘journeyed’ known, physical places with corroborated details. There was also no evidence to suggest that anyone observed her ‘presence’ while she experienced the dimensional-slips.

It might be worthwhile here to compare our bilocation continuum against the tiered progression of dissociative phenomena per Lange et al.'s (2022) path analysis model, comprising the structural chain of “*Derealization* (i.e., distorted perceptions of external reality) → *Depersonalization* (i.e., distorted feelings of bodily-self) → *Dissociated identity* (i.e., distorted feelings of identity-self)” (cf. Caputo et al., 2021). Both frameworks describe a gradually altering consciousness, with increasing disruption to normal perception. In dissociation, this manifests as detachment from reality and self, while in bilocation, it presents as a shift between two locations or states of being. In their early stages, derealization and mild bilocation both involve a sense of dual awareness – one part of the mind remains in its usual environment, while another is absorbed elsewhere. As these experiences intensify, depersonalization and intermediate bilocation further separate an individual from their ordinary sense of self or physical location. At their peak, dissociated identity and miraculous bilocation both imply a complete departure from the ordinary singular experience of identity and space, either through self-fragmentation or a fully realized presence in multiple locations.

Despite these ‘structural’ similarities, the two models diverge in important ways. Dissociation is often linked to trauma, stress, or psychopathology (Boyer et al., 2022), where the breakdown of reality and self can be distressing or maladaptive. In contrast, bilocation is typically framed as a functional or neutral phenomenon that occurs in more controlled settings like RV, meditation, or spiritual experiences. Furthermore, dissociation is an inward process that leads to an individual’s disconnection from external reality, whereas bilocation is an outward process that expands consciousness toward external locations. The final outcome of dissociation is fragmentation and detachment, whereas the peak of bilocation is paradoxically an increased presence, sometimes even to the extent of physical manifestation. In essence, while both frameworks describe progressive alterations in perception and identity, dissociation tends to erode the sense-of-self, whereas bilocation increases it, allowing for engagement with multiple realities rather than detachment from them.

Conclusions

We must conservatively assume that only Nell’s ‘conscious awareness’ was transported elsewhere, though it is unclear whether those journeys involved encounters either with external environments or her own inner psyche (for a discussion, see O’Keeffe et al., 2024, pp. 173–174). In fact, we might question whether there were any parapsychological aspects to her dimensional-slips given there were no clear indications that (a) Nell gained veridical information during the experiences, or (b) was observed to be bilocated per Swann (1993) and McNear’s (2023) RV-related

characterizations. Although direct evidence is lacking, model-building or theory formation could nonetheless be served by examining the documented contexts or features of the purported bilocations of certain saints or mystics.

Hypothesis 4: Electromagnetic Field (EMF)-Related Effects?

Reports of (entity) encounter experiences and ghostly episodes sometimes correlate with principles of environmental psychology, including Gestalt variables that help to shape people's holistic impressions of settings or spaces (Houran et al., 2023) and fluctuations of physical variables in the ambient environment like embedded cues (e.g., colors or objects), temperature, lighting levels, air quality, infrasound, or EMF activity (Dagnall et al., 2020). We were unable to assess most of the possible environmental factors in Nell's case, but specific geographical coordinates, dates, and times of Nell's dimensional-slips do allow for meaningful cross-referencing with geomagnetic and solar activity data that might suggest potential triggers for the experiences. The available data allowed a two-part test of the EMF hypothesis, i.e., Part A consists of an environmental (i.e., geomagnetic and solar flare) analysis, whereas Part B involved the standard AI-based thematic analysis, with a supplemental review of the results by content experts.

Phenomenology

Michael A. Persinger was a neuroscientist known for his field and laboratory studies of how certain EMFs from natural or manmade sources can stimulate the brain (notably the temporal lobe) to evoke various subjective experiences that percipients often interpret as being mystical or paranormal in nature. This same or related EMF activity might also cause anomalous physical effects (Laythe & Houran, 2019; Persinger & Cameron, 1986). Though various investigators have challenged some of Persinger's ideas (e.g., Braithwaite, 2008; French et al., 2009; Granqvist et al., 2005; Maugé, 1986; Rutowski, 1984), much research is consistent with his hypothesis of EMF-stimulation (for overviews, see Persinger, 1983b; Persinger & Koren, 2001). Table 7 (given after the detailed EMF survey below) defines the nine features of these experiences as drawn from this latter literature, i.e., (a) Induced Mystical and Religious Experiences, (b) Altered States of Consciousness, (c) Sensed Presences, (d) Memory and Emotional Responses, (e) Effects on Temporal Lobe Epilepsy (TLE), (f) Hemispheric Lateralization Effects, and (g) Low Intensity, Complex EMF Patterns.

Part A: EMF Environmental Analysis and Results

The fourth author [SAK] – who was blinded to O’Keeffe et al.’s (2024) findings and the other information reported in this paper – conducted extensive environmental analyses. In particular, four dates and time ranges were provided for a specific geographic location in the vicinity of San Antonio Texas, USA near 29.4252° North, 98.4946° West. Global geomagnetic and solar data were obtained from various terrestrial monitoring stations including SpaceWeatherLive.com (planetary Kp-index), the Oulu Finland Neutron (Cosmic ray) monitoring station, and the Kilpisjärvi Finland magnetometer search coil spectrum analyzer [0–4 hertz (Hz) in the extremely low frequency (ELF) band: $F < 300$ Hz]. Sunspot numbers for the target time frame were collected from the Royal Observatory of Belgium; Solar Influences Data Center (Sunspot Number | SIDC., n.d.).

SAK also conducted a geophysical survey for the area where the reported dimensional-slips occurred. In examining maps of this area, he discovered that the event locations in Texas were near all three factors that can characterize it as a ‘special’ location, i.e., the position is near (a) fault lines, (b) major groundwater spring systems, and (c) significant veins of quartz. Table 3 presents the four target periods for the event location along with their conversion from local time to UTC. It is important to note that depending on the time of day; the target date can change especially if the conversion to Zulu time is near midnight, in areas far from Greenwich UK, or near the International Date line. In the target times for this particular survey, there were no date changes required.

Table 3

Time correction for Daylight Saving Time and Standard Time conversion to UTC (Event Location Texas)

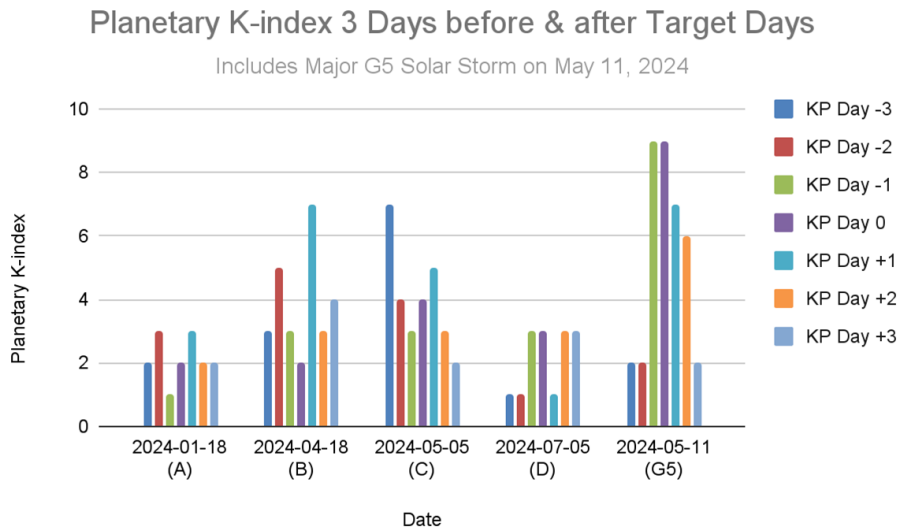
Narrative	Target Date	Zone	UTC=	Target T1	Target T2	UTC1	UTC2
A	January 18, 2024	CST	CST+6	1420	1455	2020	2055
B	April 18, 2024	CDT	CDT+5	1200	1400	1700	1900
C	May 5, 2024	CDT	CDT+5	1111	1155	1611	1655
D	July 5, 2024	CDT	CDT+5	1330	1331	1830	1831

Note: Local Time Conversion is UTC=CST+6 before March 10 2024 and Local Time conversion is UTC=CDT+5 is applied after March 10, 2024. Key: UTC=Coordinated Universal Time; CST=Central Standard Time; CDT=Central Daylight Time.

Global Kp-indices were gathered online (SpaceWeatherLive.com Website, n.d.) for the four target days (i.e., corresponding to narratives A, B, C, D) listed above, as well as three days before and after the target days in Figure 2. Since a major G5 geomagnetic storm occurred on May 11 during the target time frame (January to July 2024) the Kp data for this major storm was also included in the Kp data collection for comparison purposes. The May 2024 storm window was added and labeled G5 in Figure 2. The Kp-index indicates a relatively active geomagnetic period as all target days ranged between Kp2–Kp4 indicating unsettled conditions (Aurora Borealis Observatory, 2020).

Figure 2

Comparison of Global KP index values for all four target dates (Day 0) including three-day window before and after (Day-3 to Day+3). A major geomagnetic storm occurred on May 11, 2024 and it was included for comparison purposes and labeled G5 (Space Weather Archive, n. d.)



In order to provide an overview of the complete data window (January to July 2024) data from the Oulu Finland cosmic ray monitor station (Oulu Cosmic Ray Station, n. d.) were sampled. Figure S22⁴ charts the counts of cosmic rays, which are composed of highly charged particles

⁴ Our 'Supplemental Data File' provides all charts not included in the main text, as indicated by a Figure number with the prefix of 'S,' e.g., Figure S1:
https://www.anomalistik.de/images/pdf/zfa/supp_mat/JAnom25-1_Houran_SupplementalData.pdf

or neutrons. It is widely known that the level of cosmic rays reaching the earth drops during solar storms (Forbush, 1957; Miroshnichenko, 2015). As seen in Figure S22, the neutron or cosmic ray counts in Oulu Finland dropped dramatically after the major geomagnetic storm on 11 May 2024. In fact, the ionosphere shows a marked effect indicated by the time taken to recover back to typical levels. The counts reached normal levels almost two months later around target date D, on 5 July 2024. This is consistent with literature describing the charge levels on the ionosphere persisting for a number of weeks after a solar storm (Forbush, 1938b), and the Forbush decrease on both 24 March and 11 May 2024 that was described as unusually long by researchers in Greece (Mavromichalaki et al., 2024).

The Forbush Decrease associated with powerful geomagnetic Solar storms has been implicated with a rise in myocardial infarction (Dorman et al., 1995) and slower human reaction time (Dorman, 1999). There were also indications of the human heart rate tracking faster with higher cosmic ray levels and lower with lower radiation levels (Papailiou et al., 2009). Other research has shown that an increase in cosmic rays improves cognitive abilities of animals and increasing exploration activity or curiosity (Kokhan et al, 2023).

Figure S22 shows that the target dates occurred near an average cosmic ray count. However, the year can be characterized by large fluctuations when compared to quieter periods of the 11-year solar cycle. There were also quite a number of minor storms that occurred within the target range most notably on February 9, 16, 21, 22; March 23, 28; May 3, 5, 6, 9, 10, 11, 14, 15, 27, 29, 31; June 1, 10; and July 14, 16, 22 (Top 50 solar flares of the year 2024 | Solar activity, n.d.). Take special note that that target date C on 5 May 2024 coincided with a minor solar storm event.

The following spectrogram recordings originated at the University of Oulu Finland, Geophysical station (SGO Pulsation Measurements, n.d). The EMF pulsations were recorded in the Kilpisjärvi search coil located in Finland. The recordings (Figure 3) are presented for four target dates (A, B, C, D), a major G5 storm on 11 May 2024, and for a Quiet control date (7 Jan 2024). These charts represent a real-time recording of the earth's magnetic signature of the global geomagnetic conditions during the target times of Nell's dimensional-slips.

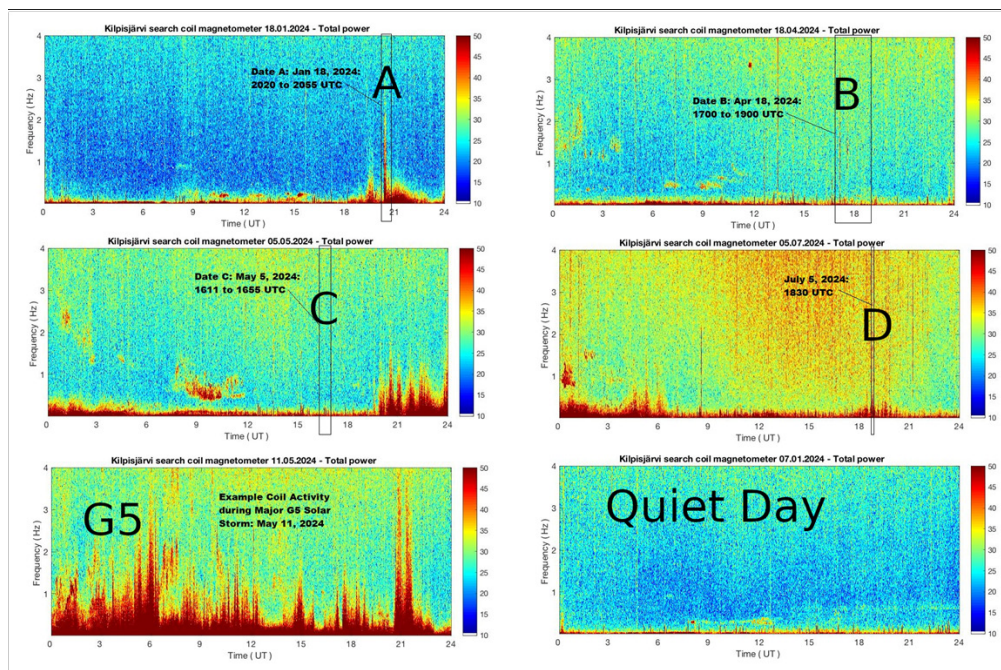
The charts show that: (a) Narrative A: 18 Jan 2024 indicates a direct hit in terms of an ELF pulsation occurring during the recorded event; (b) Narrative B: Presents with numerous Pc1 pulsations before event (12 UTC 3.5Hz) and many bands of red and green indicating a moderately noisy EMF signature; (c) Narrative C: Shows major Pc1 pulsations (7–10 UTC 1Hz) before event plus many high energy (red) spikes; and (d) Narrative D: A very noisy day with Pc1 pulsations (0–3 UTC 1–1.5 Hz) and a huge swath of high energy EMF before and during event appearing as red and yellow shading between 9 and 20 UTC encompassing event time.

G5: Included for comparison of a major G5 storm on 11 May 2024. Quiet Day: Included to compare a quiet or calm geomagnetic space weather day on 7 January 2024 (SGO Pulsation Measurements, n.d.).

Pc1 ‘pearl structure’ pulsations can be seen especially in Figure 3 target date C where the major Pc1 type pulsation manifests in the cluster of activity occurring between 7- and 12-hours UTC. This type of pulsation usually occurs after major solar storms and is generated by cyclotron radiation which is produced by oscillations of electrons around the earth’s magnetic field flux lines (Bortnik et al., 2008). The Pc1 type pulsations have been shown to be able to affect delta rhythms and partially influence theta rhythms in human brains (Rusov et al, 2012). At the most basic level Delta (δ) frequency between 0.5–4 Hz equates simply with sleep and Theta (θ) frequency range of 4–8 Hz is associated with deep relaxation and inward focus (Brain Waves – An overview | ScienceDirect Topics, n.d.).

Figure 3

The four target days plus a G5 storm day and a quiet day are presented for comparison. The sense-coil data is blue for low EMF and red for high EMF (SGO Pulsation measurements, n.d.)



The four target dates plus the solar G5 storm that occurred on 11 May 2024 were demarcated on a chart (Figure S21) presenting solar sunspot data for the target date window from January to July 2024. Three of the dates occur at local maximum (Narratives A, B, C and D transpires after a local maximum occurs within a local minimum). The solar storm that took place on 11 May 2024 was also included in this series for comparison.

Discussion of Target Dates Relative to Geophysical and Solar Indices

It is interesting to note that the four target dates expressed moderate to mid-levels of geomagnetic activity. Targets A and D were clustered at the mid-level and Target B and C were clustered at the moderate-level. That is, target A and D grouped together, whereas target B and C made a second group. They were within the range of Kp-4, which was said to have been within optimal range of generating effects on the human brain (Saroka & Persinger, 2014). A summary of the magnetic field findings for each target date (A–D), a major solar storm, and a very solar quiet day are presented in Tables 4 and 5 (n.b., it can be seen that each target day exceeds the parameters of a typical quiet geomagnetic active day).

Table 4

Comparison of the various parameters recorded in this geomagnetic survey for the target dates plus example quiet and G5 storm days

Label	Date (2024)	Kp-Index Range (Avg)	Cosmic rays change	ELF Sense Coils	ELF Sense Coils Fractal Dimension*
Date A	Jan 18	1 to 3 (2.14)	+ 0.2 %	50 (0-4hz)	1.87
Date B	Apr 18	2 to 7 (4.14)	- 0.2 %	50 (0-3hz)	1.66
Date C	May 05	2 to 7 (4.00)	+ 1.0 %	50 (0-3hz)	1.66
Date D	Jul 05	1 to 3 (2.14)	+1.5 %	50 (0-2hz)	1.67
G5	May 11	2 to 9 (5.29)	+1.5 %	50 (0-4hz)	1.73
Quiet Day**	Jan 07	0 to 2 (1.71)	0.0%	50 (0-0.2hz)	1.79
Fig Num(s)		2	S22	3; S1-S6	3; S1-S6

Note: Fractal Score was computed with this online resource: The Fractal Lab (n.d.)

Table 5

Comparison of the various parameters recorded in this geomagnetic survey for the target dates plus example quiet and G5 storm days

Label	Date (2024)	Pc1 pulsations	Magnetic Field (max nT)	Sunspots Count (avg over +/- 7 Days)	Entropy on Sense Coil*	Comments
Date A	Jan 18	7	400	130 (148.20)	100.00	Direct Hit
Date B	Apr 18	7	100	224 (196.20)	93.88	Spikes
Date C	May 05	8	800	185 (159.30)	92.12	Large Pc1's
Date D	Jul 05	4	400	137 (165.50)	88.15	Small Pc1's
G5	May 11	4	3000	173 (194.30)	86.65	Major Storm
Quiet Day**	Jan 07	2	100	172 (137.93)	98.55	Quiet Day sample
Fig Num(s)		3; S1–S6	S7–S12	S21	3; S1–S6	

Note: The entropy indicates the relative amount of information in the sense coil chart images. A more active day will have higher entropy scores. The major storm is lower because there are more larger contiguous spike structures meaning less information. The values were obtained using JPGE standard file compression and normalizing the resulting file size values.

Geolocation factors and special geological features for event location Texas: As shown in Figure S18, it is important to note that event location Texas sits directly above a fault line (Faults of Texas, USA | Data Basin. n.d.). There have also been reports of paranormal and religious experiences and premonition events occurring near fault lines and working in conjunction with geomagnetic storms (Derr & Persinger, 1989; Persinger 1975; Persinger 1983a; Persinger 1987; Persinger & Lafrenière, 1977; Suess & Persinger 2001; Williams et al. 2007). This area is also riddled with hydrological features in the form of special (described as sacred) groundwater springs and this map is presented in Figure S19. This would imply hydrological loading in this area leading to ground currents and magnetic fields. In research in the Bancroft Ontario, Canada site, Persinger's lab in Sudbury, Canada found that the groundwater conditions and hydrological loading there produced electrical fields conducive with creativity and altered states (Mulligan, 2012). The third factor is the existence of a quartz lattice near seismic fault lines as illustrated on the map in Figure S20. The pressure exerted by seismic strain on quartz structures are reported to produce signals in the ELF or the human brain's delta band (Persinger, 1975). Quartz structures in the ground have been measured producing

ground currents and electromagnetic fields due to piezoelectric effect induced by shifting seismic pressures (Giannouloupoulou et al., 2018).

Summary of the EMF survey findings: The four target dates occurred during a time period characterized by major solar activity. This is nicely illustrated in Figure S22 (Cosmic Ray Counts) and Figure S21 (Sunspot Numbers) where the entire time window (January to July 2024) is encompassed in a single chart. The wide variations in the cosmic rays in Figure S22 indicates the major solar activity throughout the time window and sudden decreases in counts mark the times of major solar geomagnetic activity. The sunspot counts in Figure S21 are indicative of a very active solar geomagnetic year as the values are consistently above 50 to a maximum of 250. In contrast, during a quiet year the sunspot numbers are typically between 0 and 50 (NASA, 2022). The sense coil data examples for ELF are presented in Figure 3 where a comparison between the target dates, a major G5 storm, and a calm space weather day can be clearly seen. The four target dates have much more activity than the quiet day and much more complexity or information than the major storm day.

The complete summary of the geomagnetic survey can be found in Tables 4 and 5. Note that a relatively quiet day was included in the survey as a control and that all target dates in this study exceed the geomagnetic parameters of a typical quiet example day. A summary of the significant parameters on each target date is presented in Table 6. A special note on the geological survey that indicates the hydrological, geological, and mineral deposits that are indicative of a special area as discussed above. The maps are presented in Figures S18, S19, and S20 (Supplemental Data). It is interesting to note that the ground water springs denoted in Figure S19 are referred to as the ‘Sacred Springs’ of Texas (About the Sacred Springs – The Watershed Association, 2022). As referenced above, these three features in combination with geomagnetic conditions have been hypothesized to produce a synergistic energy powerful enough to affect human brain functioning.

Table 6

Summary of the major correlates of the geophysical measures on each of the target dates

Date (2024)	Time UTC	Summary
A: Jan 18	2020–2055	At the precise time of this event; there was a steep spike as seen in Fig. 4 and there were small Pc1 pulsations in the hours before the event at around 10 hrs & 15 hrs UTC. Planetary Kp-index was ~Kp2 ranged: (Kp1-Kp3). Geomag max of 400 nT (Fig. S7) and the highest complexity in terms of entropy and fractal dimension score.
B: Apr 18	1700–1900	At the precise event time there were two steep high rise time time-narrow spike (Figs. 2 & 5) and Pc1 pulsations in the hours before the event at around 7, 9 and 12 hrs UTC (Fig. 4). In terms of planetary Kp-index ~Kp4 ranged:(Kp2-Kp7). Geomag: max of 100 nT (Fig. S8). This low number is likely because of the high rise time narrow spikes with little area under the curve. This date showed the highest number of sunspots at 224 (Fig. S14).
C: May 5	1611–1655	At the precise event time there were two steep high rise time-narrow spikes as seen in Figs. 2 & 5 and there was also a major Pc1 pulsation before the event between 7 and 12 hrs UTC (Fig4). Planetary Kp-index: ~Kp4 ranged: (Kp2-Kp7). Geomag: max 800 nT (Fig S9).
D: July 5	1830–1831	At the precise event time there was one steep high rise time time-narrow spike and there were also Pc1 pulsations in the hours before the event between 0 and 2 hrs UTC (Fig. S4). Planetary Kp-index: ~Kp2 ranged: (Kp1-Kp3). Geomag: max ~400 nT (Fig. S10).

Table 7

Comparison of dimensional-slips features to known phenomenology of EMF stimulation

Criterion	Definition	AI-Ratings & Rationale	Analyst-Ratings & Rationale
Induced Mystical and Religious Experiences	Research with the 'God Helmet' suggests temporal lobe stimulation with specific EMF patterns can induce experiences described as mystical or religious, e.g., feelings of a divine presence, out-of-body sensations, and deep emotional responses	3 – The set of narratives collectively presents intense mystical experiences, including encounters with deceased family members (Narratives A, D), religious figures (Narrative B), and spiritual symbols like the "Book of Life" (Narrative B). The experiences evoke strong spiritual or paranormal undertones, resembling phenomena often associated with Persinger's research on temporal lobe stimulation. The subjects feel guided by higher powers and sense an otherworldly presence, which aligns well with Persinger's notion that EMF stimulation can produce mystical or religious sensations.	3 – The narratives constitute the definition of memory hallucinations (Bancaud et al, 1994) created by direct electrical stimulation of the temporal lobes. The notion of "dreamy states" or déjà vu phenomena or vivid hallucinations that are remembered were shown to be direct products of a surgical electrical stimulation of the frontal lobe in 85% of cases (Bancaud et al, 1994). When compared to indirect Electromagnetic stimulation similar to geomagnetic storms in nature, similar results were recorded in experiments by Persinger. (Persinger & Saroka, 2013). In (A & D) bereavement experience occurs presenting dead family members consistent with temporal lobe microseizuring during sudden geomagnetic onset (Persinger, 1988, 1993).
Altered States of Consciousness	EMF stimulation, especially when applied to the temporal lobes, could shift individuals into altered states of consciousness. This included sensations of floating, intense focus, or the feeling of being in a "dream-like" state while awake	3 – Each narrative describes episodes where the subject experiences a shift from normal reality into a different state of consciousness. For example, the slit of light leads the subject into alternate realms or dimensions, and there's a vivid perception of moving between physical and non-physical spaces. The experiences happen abruptly, without the subject consciously trying to induce them, which is in line with the altered states Persinger discusses in his research. The transitions into these experiences are not described as dreams but as sudden, vivid shifts in awareness.	3 – Consistent with the generation of mystical and altered states using man-made EMF patterns that mimic the effect of solar geomagnetic storms in nature (Persinger et al., 2010).

Sensed Presence	Feeling that another entity or person is present, even when the person is alone.	3 – The narratives frequently describe the sensation of another presence. In Narrative A, the subject senses and interacts with the deceased brother, Jerry, and in Narrative D, the presence of the deceased mother is strongly felt, even down to the texture of her skin and smell of her perfume. This mirrors Persinger's findings on EMF stimulation inducing the "sensed presence" of unseen figures, often attributed to spiritual entities or deceased loved ones.	3 – Consistent with bereavement hallucinations and microseizuring in the temporal lobe (Persinger, 1988, 1993).
Memory & Emotional Responses	The temporal lobes are crucial for emotional processing and memory, so EMF stimulation often evokes vivid memories or emotional experiences which are sometimes spontaneous and not directly related to the external environment.	3 – Strong emotional responses and vivid memory recall are present throughout the narratives. In Narrative A, memories of past events, emotional connections with the brother, and deeply personal experiences are recalled. Similarly, Narrative D includes a highly emotional and detailed conversation with the mother, touching on family history and past regrets. These align well with Persinger's observations that temporal lobe stimulation can evoke both emotional and memory-based experiences.	3 – During electromagnetic induction of mystical and altered states Persinger found that manmade patterned EMF fields which mimicked earth's geomagnetic fields induced mystical experiences in a normal population (Persinger et al, 2010).
Effects on Temporal Lobe Epilepsy (TLE)	TLE sufferers often describe spiritual or out-of-body experiences during seizures, suggesting that the stimulation might be mimicking similar neural processes	2 – While none of the narratives explicitly mention epilepsy or seizures, the nature of the experiences described – vivid sensory details, out-of-body sensations, and feelings of fear or awe – shares characteristics with temporal lobe epilepsy episodes. The sense of altered time, combined with strong emotional responses and visual hallucinations (like the slit of light), is reminiscent of symptoms reported by people with TLE. This correlation is subtle but present.	3 – The appearance of the slit of light in all of the narratives is definitely a sign of TLE. In fact, the Kp index recorded on the target dates of the experiences correspond to the TLE "sweet spot" of around KP4 (Saroka et al., 2014). See KP bar charts Fig__.

Dimensional-Slips Revisited

Lateralization Effects	The right hemisphere, particularly the right temporal lobe, seems more involved in generating mystical or paranormal-like experiences. Left temporal stimulation sometimes produced more rational or logical effects, while right-sided stimulation evoked emotional or spiritual responses.	1 – The experiences described appear to have a strong emotional and spiritual component, which suggests right hemisphere involvement. The content of the visions leans heavily on emotional and non-rational (mystical, symbolic) experiences vs. logical or analytical ones, supporting the idea of right temporal lobe stimulation. But no direct evidence for lateralization effects in the present context.	3 – In all narratives, a sorting task preceded the reported experience. The tasks may constitute a primer in terms of the active portion of brain at time of EMF storm onset and subsequent experience. Sorting clothing (A), Sorting Religious Statues (B), Sorting brick-a-brac (C), Sorting Mail (D). Although sorting is logical; there is a strong visual-spatial component which points to specific brain function and in particular temporal lobe activity. That includes non-verbal activity and logical processing as a possible pre-cursor to experience (Milner, 1963; Persinger et al., 2010). Interesting to note as well; during increased geomagnetic activity Saroka found increased coherence between L & R neural processes which may also play an unknown role in laterization effects (Saroka et al., 2014).
Low Intensity, Complex EMF Patterns	The magnetic fields used in Persinger's experiments were weak and complex, mimicking natural geomagnetic and biological signals. This highlighted the idea that even subtle changes in electromagnetic activity could influence neural processing and perception.	1 – The narratives do not explicitly reference external electromagnetic stimuli but imply some environmental trigger, particularly the recurring theme of a slit of light opening up a portal to another realm. This recurring motif could be interpreted as an experience tied to subtle, undetected environmental factors, which could potentially include EMF influences.	3 – The KP index for the 7 day window surrounding the target days (fig__kp bar chart) all show a relatively high level of geomagnetic activity. Target B & C are especially at the KP4 sweet spot for TLE experiences. (Saroka et al., 2014). Target A & D are within range as well at KP3. Even though a storm is considered KP5 and higher; Saroka and colleagues found that TLE events were more common around KP4. It is also important to note that the geomagnetic conditions were clustered similarly for A & D (Deceased Family members) and B & C (Interaction with strangers).

0 = Very poor fit, 1 = Poor fit, 2 = Good fit, 3 = Very good fit

Part B: EMF Content Analysis and Results

After the EMF survey, we prompted ChatGPT-4 to analyze Nell's narratives against the seven common features of EMF-stimulated experiences that it mined from its corpus (see Table 7). The narratives were collectively judged to align very well with key features of EMF-related perceptual experiences. Specifically, the AI program rated most of the criteria as "Very Good" matches (i.e., "Induced Mystical & Religious Experiences," "Altered States of Consciousness," "Sensed Presence," and "Memory & Emotional Responses." The feature of Effects on Temporal Lobe Epilepsy" was deemed a "Good Match," whereas "Lateralization Effects" was the only feature rated as a "Very Poor Match." While Nell did not explicitly describe any conditions that were clearly conducive for EMF activity, the underlying themes in her experiences consistently suggest that her dimensional-slips could have plausibly been influenced by environmental or neurological triggers consistent with the hypothesis of EMF-related Effects. Accordingly, ChatGPT-4 gave the EMF-stimulation hypothesis an averaged fit index of 2.29 (0–3 scale).

SAK subsequently formed a team of content experts comprising two doctoral-level researchers, who were collectively affiliated with Laurentian University's Behavioural Neuroscience program, i.e., Persinger's former laboratory. This team studied the narratives, considered the EMF-related criteria, and discussed the suitability of the AI ratings. Table 3 shows that the content experts agreed with all the high AI ratings but consistently disagreed with the low AI ratings. In particular, the team thought that ChatGPT-4 underestimated the ratings for the two EMF criteria it rated relatively lower (i.e., "Effects on Temporal Lobe Epilepsy" and "Lateralization Effects"). The content experts therefore amended the averaged fit index to a perfect '3' ("Very Good Fit") for the hypothesis of EMF-Related Effects.

General Conclusions

Both the AI program and content experts rated highly the hypothesis of EMF-Related Effects. This appears decisive, but we must acknowledge the potential for some degree of confirmation bias with SAK's research team (cf. Sheldrake, 1998). In particular, their content analysis was not fully blinded to the results of SAK's survey of the geomagnetic and solar data. The content experts could therefore have been inclined to give higher ratings across the EMF criteria in alignment with the environmental data. Assuming it was infeasible to conduct Parts A and B analyses independently, this aspect of our MTS study might have been bolstered by SAK's team first completing the environmental surveys and then using the results to predict the strength-

of-fit with specific EMF-related criteria. As it stands, however, the empirical environmental evidence for this hypothesis is the most important and compelling outcome here, whereas the thematic analyses by ChatGPT-4 and the content experts should be considered, at best, as secondary or supplementary support.

Table 8

Potential dimensional-slips reported by Nell's Daughter ('Jill')

Age at the Time	Date	Location	Verbatim Account
8 years old	July, 1992	San Antonio, Texas	I lived with mom and grandparents at the time. Grandparents had taken a trip to Las Vegas (mom and I stayed home). I can remember being in a casino holding my grandmothers hand and helping her look for my grandfather. I remember seeing really big lion statues, lots of slot machines and greenery (live vines). I remember telling mom about it, and her saying I had never been to Las Vegas, so it wasn't possible. My grandmother had called at some point to check in and told mom about losing my grandfather at the casino (MGM). Mom had asked her to describe the inside of the casino which matched my description, but I had never been there.
11 years old	March, 1996	San Antonio, Texas	I had a "dream." I was standing in a hotel room and saw a man laying on the floor wearing a white button down shirt and slacks. It was an older man and I remember the front of his shirt had a large amount of blood on it. I remember seeing a woman on her knees by the man (clearly distraught). I woke up and told both my mom and grandmother about my dream. Around an hour later a family member called to let my grandmother know her brother (my uncle Joe) had had an abdominal aortic aneurysm rupture while on business in South Carolina. They let my grandmother know that he collapsed in his hotel room on the floor. He had to have emergency surgery and his abdomen was full of blood.
27 years old	month unknown, 2011	San Antonio, Texas	I had left to the store with my dad to get a few things, mom was home alone cleaning. While shopping she called me asking where I was. I told her Rod and I were still at the store. She said that was impossible because she just saw me walk through the kitchen. She didn't believe me (that I was at the store) had to speak to Rob to verify we were still at the store.

38 years old	February, 2023	San Antonio, Texas	I was sleeping, had a dream I was standing in a bedroom and saw a man lying on the floor on his side in the fetal position. I was down on the floor with him. I could see three sets of feet encircling him, telling him very negative things like “hurry up and die” “just die already” I kept telling him “just hang on” “I’m right here with you, you’re not alone”. I remember he was fighting very hard to stay alive, the negative comments kept coming and my encouraging comments as well. I could see how tired he was getting, and I asked him if he wanted to let go and he shook his head yes (we were looking at each other square in the eyes). I told him if he wanted to go it was ok he’s not alone. He passed away, and I was woken up by my phone ringing. Mom was calling and she let me know that my uncle Jerry (her brother) had just passed away. The following day I told mom about my dream and that same day we got confirmation he did pass away on the floor on his side.
39 years old	October, 2024	San Antonio, Texas	I had previously mentioned to you about Kara seeing a road that wasn’t actually there and she would see it from time to time. On this date I myself saw the road. I was leaving a gas station and turned onto Castle Cross Road (heading home from picking up Kara from school). About 30 seconds from getting on the road I saw the road straight ahead of me. It was a cement road with trees all around it. No cars, trash or anything on this road. I could see it had an incline. I told Kara I see the road and briefly looked away. When I looked back it was gone.

Post-Hoc Reports of a ‘Family Wave’ of Dimensional-Slips

Additional information about Nell’s family came to light during this study that might relate to the present case. To clarify, Houran and Laythe (2022, p. 4) noted that Nell’s ongoing ghostly episode also involved her husband (“Rod”) and daughter (“Jill”) (pseudonyms) – both of whom scored slightly above-average on transliminality and noticeably above-average on paranormal belief. The researchers also found that Nell and Jill’s anomalous experiences during the ghostly episode were somehow linked, as evidenced by a moderately strong inverse correlation [$r(3) = -.63, p = 0.26$] between the number and perceptual depth of their respective experiences over the course of the family’s successive moves to new residences (pp. 9–10). This finding implies that Jill’s ghostly perceptions often would ‘flare up’ as Nell’s ghostly perceptions would ‘calm down’ and vice versa.

It is not surprising therefore that Jill and her teenage daughter (pseudonym “Kara”) also reported having had some dimensional-slips, albeit with different content than Nell’s experiences. We became aware of these latter accounts almost accidentally. Jill knew that her mother had told us about her four dimensional-slips, which motivated her to share a curious series of recent experiences that began with Kara:

I am 14 years old, and about a month ago I started seeing a road appearing and disappearing. On the way to school there is an S-like road that goes under train tracks and is around a wooded area. Around a month ago it was like usual my mom [“Jill”] was taking me to school and like normal we took this road but this time I began noticing that sometimes on the way to school I would see this road. I kept it to myself because I thought it was nothing, and I was just getting the roads mixed up. I thought this until one morning we were on the way to school like usual and I didn’t see the road this morning, and I finally asked my mom if she saw the road disappearing and reappearing. She said “no” and started asking me questions about the road. I haven’t seen it in a few weeks, but I remember it. The concrete was pretty light-gray but looked like a normal road. It had an incline like a hill. There was skinny trees around the road, no bushes, trash or anything in that sort. Ever since I spoke out about the road, I have stopped seeing it” (personal comm to J. Houran, 12 November 2024).

Jill later reported to have briefly seen this same ‘(dis)appearing road’ (cf. Table 8). The timing of these events might suggest a connection to Nell’s dimensional-slips, similar to what was previously observed with the family’s haunt-type perceptions. Further questioning by the first author [JH] revealed that this mysterious road was not Jill’s first instance of an ostensible dimensional-slip. Table 8 lists several examples throughout her life that she remembered in some detail. We reiterate that this circumstance contrasts with Nell’s history, which apparently did not include any such experiences prior to the four dimensional-slips studied here. On reflection, however, Nell recounted other recent spacetime-related anomalies involving her husband Rod that likewise could link to the present case:

Rod was placed in a nursing home in late January 2022, I saw him in the house several times from April to June 2023 and since then four times in my apartment at my bedroom door from June 2024 to present date 2-14-2025, yet he was in his room at the nursing home (personal communication to J. Houran, 16 February 2025).

These events curiously parallel the *Census* results (Sidwick et al., 1894) that corroborated reports of “apparitions of the living.” Other accounts involving Rod sound somewhat similar to bilocation-type phenomena:

...at the nursing home, two his nurses have told me that Rod appeared out of nowhere in back of them at the nurse's station, no way he could have gotten there without him being seen. One nurse had this happen about a year ago, but the other experienced it within the last six months (personal communication to J. Houran, 16 February 2025).

It is difficult to know definitively how, if at all, Jill and Kara's anomalous experiences relate to Nell's four dimensional-slips or the recent 'bilocations' of Rod. Further research might implicate the roles of perceptual or social contagion effects (e.g., Lange & Houran, 2001), some form of inter-brain or phase synchronization⁵ (Valencia & Froese, 2020), or the family's geographical location in San Antonio, Texas as a 'hotspot' for EMF-related phenomena that triggers or amplifies various perceptual or physical anomalies (e.g., Persinger & Cameron, 1986). But behavioral contagion is a questionable factor given Jill's claim that, "Kara was seeing the road for a while before she even said anything to me. The other realms that mom was experiencing had been going on with her for a time, and she never said anything to me. We actually don't speak much about paranormal stuff" (personal communication to J. Houran, 12 March 2025). Nevertheless, we decided to document these supplementary accounts for the sake of context and completeness with this case study.

Towards a Grounded Theory of Nell's Dimensional-Slips

Grounded theory is a research method used to develop a model or explanatory framework based on data collected from real-life experiences or observations. Instead of starting with a hypothesis, researchers gather and analyze data, allowing patterns and insights to emerge naturally. The theory is therefore 'grounded' in the actual data, meaning that it evolves directly from what is observed rather than from preconceived ideas (Bryant, 2017). By adopting this approach, we can use the present findings to revisit and potentially update O'Keeffe et al.'s (2024) original conclusions about this case. It should be emphasized, however, that this exercise

5 Inter-brain synchronization is associated with self-reported levels of social connectedness, engagement, and cooperativeness, as well as experiences of 'social cohesion' and 'self-other merging' (Froese, 2018). These results might challenge the traditional view of consciousness as wholly first-person singular or private (Froese, 2018; Valencia & Froese, 2020; Müller & Lindenberger, 2019). For example, research suggests that consciousness may not be confined to individual brains but could involve interconnected experiences between individuals. That is, synchronized neural activity could facilitate shared conscious states. One illustrative study demonstrated that pairs of participants who meditated together and formed an intentional connection exhibited synchronized brain activity. This effect was absent in unconnected pairs, suggesting that shared experiences can foster an 'expanded consciousness' (Froese, 2018).

simply yields speculative results given the limited observations and types of data available in the present context.

Recall that Houran and Laythe (2022) originally profiled Nell as an encounter-prone individual, i.e., someone fitting an HP-S profile. Her scaled score (30.9, $SE = 3.4$) on Lange et al.'s (2000) Revised Transliminality Scale (RTS) – a popular Rasch scaled measure of thin mental boundary functioning (Lange et al., 2019) – was one SD higher than the average ($M = 25$, $SD = 5$) and therefore seems to be a key factor here. Higher scores on the RTS positively correlate with a range of syncretic cognitions, non-ordinary experiences, and lower perceptual thresholds (Evans et al., 2019; Lange et al., 2019; Rosen et al., 2023; Simmonds-Moore, 2024; Swami et al., 2024), as well as mediate sensory-processing sensitivity (Roxburgh et al., 2024). Increased transliminality also links to greater paranormal belief (Thalbourne & Houran, 2003; Thalbourne & Storm, 2012) and empirical indices of putative psi ability or performance (Ventola et al. 2019).

Anomalous experiences and events have correspondingly manifested throughout her life and culminated in a moderately-intense ghostly episode that has persisted now for several years. Nell's event history also includes prior two 'entity encounters' that stood apart from her haunt-type experiences, i.e., an alleged abduction experience and what could be construed as a Men-in-Black (MIB) type of interaction (for details, see Houran & Laythe, 2022, p. 9). Any holistic understanding of her recent dimensional-slips should consider this important background information in conjunction with the recent learnings listed below.

O'Keeffe et al. (2024) found that:

- Experiences resembling dimensional-slips or 'magic flights' have some precedent in haunt-type contexts like Nell's circumstances.
- The experiences were apparently spontaneous.
- The experiences were novel to Nell's lifetime history of anomalous experiences.
- They did not happen at the same time as the subjective and objective anomalies that defined Nell's prior haunt-type perceptions.
- The experiences always involved interactions with spiritistic figures and mystical locations rather than a mere transportation to a different but wholly familiar point in space-time.
- The experiences ostensibly showed a mixed phenomenology that best matched the features of deliberate fabrication, clinical dissociation, and shamanic journeys.

The Present Study found that:

- The experiences were accompanied by a tingling feeling akin to an electrical current running through Nell's body.
- The experiences ostensibly showed a phenomenology that was a poor match to the features of kundalini awakenings and physical mediumship, but instead a "good-to-very good" match with the features of EMF-related effects and, to some extent, mild-to-strong experiences along the proposed bilocation-continuum, involving psychological absorption (or immersion), aesthetic impact, and marked consciousness-casting (or projection).
- The experiences manifested in a particular geographic area shown to have three characteristics shared by mystical locations: (a) ground water springs, (b) fault lines, and (c) quartz veins. All have been implicated in affecting electrical and magnetic fields induced into the earth by geomagnetic fields and hypothesized to influence the electrical activity of the human brain.

Our reconciliation of the cumulative information suggests a multivariate model for the experiences considered here, involving a series of complex interplays of mind and environment that were likely spontaneous (i.e., unplanned or unprimed) but not random. In particular, one aptly grounded explanation is that Nell's dimensional-slips were real in experience, but not in physical movement: (a) Without her realization, Nell's highly transliminal mind entered altered states – similar to trance or self-hypnosis – via her inherent somatic-sensory sensitivities and formative (even occasionally traumatic) life experiences; (b) Environmental conditions like geomagnetic fluctuations amplified these states, as the tingling sensations and waves of energy that she described are quite similar to what some people feel when exposed to certain EMFs, particularly those affecting the temporal lobe, i.e., the primary seat of a rich complex of memory and fantasy (cf. Thalbourne et al., 2003); (c) The perceptual contents of these states were shaped by memories, emotions, or subconscious narratives that allowed her to temporarily 'step into' vivid, hyper-real mental constructions, similar to the psychology and potential parapsychology of shamanic journeys; and (d) The contents of these states were then knowingly or unwittingly described using some imaginative elaborations during their documentation or retelling.

Consciousness-casting via putative psi remains a possibility, yet this hypothesis might be undermined by the ostensible role of EMF activity in this case. In particular, preliminary data suggest that certain magnetic fields can mask or distort the information that an RVer is trying to access (Koren & Persinger, 2002). We speculate that this effect could likewise apply

to certain spontaneous psi-type experiences. There also was no obvious evidence that Nell's dimensional-slips involved either physical teleports or the receipt of any veridical information. Therefore, we agree with O'Keeffe et al.'s (2024) basic conclusions (cf. Introduction section) but would characterize her experiences more specifically as a fusion of environmental phenomena, somatic-sensory sensitivities intrinsic to higher transliminality, and possibly consciousness-related anomalies. Though we think it is unlikely that Nell materially traveled to other locations, she undoubtedly journeyed 'somewhere' – whether into the depths of her own psyche (e.g., O'Keeffe et al., 2024, p. 173–174), the fringes of a strange physical phenomenon (e.g., Sheehan, 2024), or a point in spacetime where both may intertwine (e.g., Moussa et al., 2023). In our estimation, the latter scenario is the most parsimonious interpretation of the prevailing evidence.

Discussion

This MTS study extends O'Keeffe et al.'s (2024) earlier effort to understand Nell's intriguing series of dimensional-slips. She provided very specific and sensorial rich descriptions in three of her four accounts. They also were logical narratives, although Narrative B involving St. Benedict was somewhat confusing to follow and had 'plot holes.' She provided a physical description of that mysterious realm, yet at the point where she noticed the painted ceiling, Nell stated that she suddenly recognized the location. However, she then failed to explain where she was in her summary. In the other three passages, Nell was much clearer and detailed in just about every moment of the incident. Far too often, we hear percipients of anomalous or non-ordinary experiences give accounts that are meandering, lacking details, or too heavily inundated by commentary instead of a direct statement about the perceived events in a logical sequence. None of these confounds were present in this case. She instead kept most of her commentary in check, until she was finished telling her narrative. Therefore, if we only analyze this case on the merits of the written narratives, we can confidently state that 'something' authentic and unusual happened to Nell.

Her accounts nevertheless remain an open-ended mystery, offering more questions than answers – but also underscoring the intriguing and perhaps untapped potential of perception, imagination, and personality. To be sure, Nell's experiences do not neatly fit into existing explanatory paradigms. While elements of dissociation, EMF sensitivity, impression management, and consciousness-casting were identified, no singular framework fully accounts for all the nuances and complexities of her accounts. This suggests that dimensional-slips may represent a hybrid phenomenon, incorporating aspects of psychological absorption, altered states of consciousness, and external environmental triggers. The introduction of a bilocation continuum model

further complicates our interpretation, as it challenges traditional distinctions between psychological and potentially parapsychological experiences. Future studies should aim to refine these models by integrating insights from neuroscience, parapsychology, and environmental psychology. It also seems pertinent to pursue in-depth descriptive and comparative analyses of historical accounts related to the contents and contexts of bilocation manifestations of saints and RVerS in light of the current findings. For instance, we might predict that the most intense experiences result from individuals with above-average transliminality profiles who are exposed to environmental conditions that further facilitate or exacerbate thin-boundary functioning (cf. Nute, 2024; Persinger & Cameron, 1986). Indeed, the present results are consistent with Laythe et al.'s (2018) conclusion that (entity) encounter experiences are an interactionist phenomenon involving “the right people in the right settings” (p. 210).

That said, our study also highlights the strengths and limitations of AI-assisted qualitative analyses. ChatGPT-4 is a convenient and efficient tool that initially provided good insights, but the technology at this time arguably lacks a nuanced understanding of textual data or its context (Batubara et al., 2024). Using other large language programs also might produce different results. We therefore needed to leverage expert reviews to contextualize the AI findings more holistically. Further, some readers could question the ethics of AI-generated analyses or data (Resnik et al., 2025), or the epistemic value of our four-point Likert system that was filtered through different evidential criteria with their own nuances or complexities. The reliance on retrospective narratives also can introduce potential biases, including memory distortions and unconscious elaboration. Future research should incorporate real-time data collection methods, such as physiological monitoring or neuroimaging, to explore whether distinct neural signatures typify dimensional-slip experiences. Additionally, the role of cultural and personal belief systems in shaping such encounters warrants more investigation. The likely influence of environmental factors, particularly EMF fluctuations, aligns with ongoing research on anomalous experiences at ‘uncanny geographies’ (Houran et al., 2023) and geomagnetic hotspots (e.g., Hough, 2025). However, establishing a causal link remains elusive. Controlled exposure experiments, such as French et al.'s (2009) instructive protocol, could help to determine whether specific environmental conditions can induce similar perceptual phenomena. Moreover, the familial dimension of this case introduces the possibility of intersubjective influences, such as social or genetic predispositions toward transliminal experiences. Comparative studies with individuals reporting similar events could clarify whether dimensional-slips are idiosyncratic or part of a broader psychological and environmental pattern.

Research in this domain and accompanying scientific models are in their infancy. This case therefore underscores the need for a more systematic classification of dimensional-slips relative to White and Brown's (1998) standard array of other exceptional human experiences. Rather than viewing these occurrences as isolated anomalies, they might also be examined as part of a spectrum of altered states inherent to thin-boundary functioning (Evans et al., 2019; Laythe et al., 2018; Rosen et al., 2023; Roxburgh et al., 2024; Simmonds-Moore, 2024; Swami et al., 2024; Woollacott & Weiler, 2025). We reiterate that fusing ideas or principles from consciousness studies (including parapsychology) with environmental psychology should nevertheless enable a more comprehensive understanding of how individuals like Nell experience subjective or measurable shifts in space or time. Indeed, her dimensional-slips seemingly resist a clear and convincing holistic explanation and thus provide a valuable opportunity to reconsider the intersection of consciousness and environmental influences, as well as a deeper comprehension of both the ontological and experiential facets of the spacetime construct. Future research could therefore use controlled field experiments, longitudinal case studies, and broader comparative analyses to refine theoretical models or assess the replicability of these extraordinary encounters. By doing so, we might not only demystify dimensional-slips but also meaningfully expand our scientific understanding of the nature and limits of human consciousness.

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Erweitertes deutsches Abstract

Magische Flüge oder geistiges Auge?

Weitere qualitativ-quantitative Untersuchungen zu Narrativen über Dimensionssprünge

Grundüberlegung: Diese Studie untersucht das Phänomen der Dimensionssprünge, also anomale Erfahrungen, bei denen sich Personen physisch in andere Realitäten versetzt fühlen. Im Gegensatz zu traditionellen mystischen Visionen, außerkörperlichen Erfahrungen (AKEs) oder medialen Begegnungen zeichnen sich diese Episoden durch ein ausgeprägtes Bewegungsgefühl, intensive Sine-seindrücke und Interaktionen mit scheinbar externen Wesenheiten aus. Die Forschung konzentriert sich auf den Fall von „Nell“, einer Frau mit einer Vorgeschichte von Spuk-Erfahrungen, die vier solcher Ereignisse dokumentiert hat. Um diese Ereignisse besser zu verstehen, bewertet die Studie konkurrierende Hypothesen, darunter Kundalini-Erwachen, physische Medialität, Bilokation und Umwelteinflüsse – insbesondere die mögliche Rolle von elektromagnetischen Feldern (EMF) und geomagnetischer Aktivität.

Methode: Wir verwendeten einen Mixed-Methods-Ansatz, bei dem wir KI-gestützte Inhaltsanalysen mit Expertenbewertungen kombinierten, um die Phänomenologie von Nells Erfahrungen zu bewerten. Mithilfe einer thematischen KI-Kodierung wurden ihre Erzählungen mit bekannten Merkmalen von Kundalini-Erwachen, medialen Phänomenen, Bilokationserfahrungen und EMF-induzierten Wahrnehmungsverzerrungen verglichen. Zusätzlich wurde eine Umweltanalyse durchgeführt, um festzustellen, ob Schwankungen im elektromagnetischen Umfeld der Erde mit ihren Erlebnissen korrelierten. Darüber hinaus wurden anekdotische Berichte von Nells Familienmitgliedern gesammelt, um festzustellen, ob ähnliche Erlebnisse in ihrem unmittelbaren sozialen und geografischen Umfeld aufgetreten waren.

Ergebnisse: Die Ergebnisse deuteten darauf hin, dass Nells Erfahrungen nicht eindeutig mit Kundalini-Erwachen oder physischer Medialität übereinstimmten. Zwar zeigten bestimmte Elemente – wie veränderte Bewusstseinszustände und energetische Empfindungen – teilweise Übereinstimmungen, doch das Gesamtbild stützte diese Erklärungen nicht. Die Bilokationshypothese war noch unklarer. Bestimmte Aspekte ihrer Erzählungen ähnelten Beschreibungen aus der Remote-Viewing-Forschung (RV), insbesondere der Target-Immersion, also dem mentalen „Eintauchen“ in das Ziel, und der ästhetischen Wirkung, bei der Personen das Gefühl haben, mental oder physisch an einem anderen Ort zu sein. Ohne eine bestätigende Zielverifizierung bleibt jedoch unklar, ob ihr Bewusstsein tatsächlich an einen anderen Ort projiziert wurde oder ob diese Erfahrungen intern konstruiert wurden. Die überzeugendsten Beweise ergaben sich für die EMF-Hypothese. Umweltdaten zeigten, dass ihre Erfahrungen mit erhöhter geomagnetischer und solarer Aktivität, einschließlich ELF-Schwankungen (extrem niederfrequente Schwingungen), zusammenfielen. Diese Bedingungen wurden bereits zuvor mit veränderten Bewusstseinszuständen, wahrgenommenen Präsenzen und räumlicher Desorientierung in Verbindung gebracht, wahrscheinlich aufgrund ihrer Auswirkungen auf die Temporallappen. Eine KI-gestützte Inhaltsanalyse ergab darüber hinaus eine starke themati-

sche Übereinstimmung zwischen Nells Berichten und Fällen von EMF-induzierten Wahrnehmungsverzerrungen. Darüber hinaus deuten Berichte von Nells Familienangehörigen darauf hin, dass ähnliche anomale Erfahrungen in zeitlicher und räumlicher Nähe aufgetreten sein könnten, was Fragen nach einer möglichen Verhaltensansteckung, gemeinsamen Umweltauslösern oder einer familiären Veranlagung für solche Wahrnehmungen aufwirft.

Schlussfolgerungen: Es gab keine schlüssigen Beweise dafür, dass Nell physisch in eine andere Dimension wechselte. Stattdessen deuten die Ergebnisse darauf hin, dass Dimensionssprünge aus einem komplexen Zusammenspiel von Transliminalität, veränderten Bewusstseinszuständen, Umwelteinflüssen und narrativer Interpretation entstehen können. Die Studie stellt ein Kontinuumsmodell der Bilokation vor, das Perspektiven aus Psychologie, Neurowissenschaften und Parapsychologie integriert, um anomale Wahrnehmungen von Raum und Zeit zu konzeptualisieren. Zukünftige Forschung sollte sich auf kontrollierte experimentelle Paradigmen, interkulturelle Analysen und die Untersuchung des Zusammenspiels individueller kognitiver Eigenschaften mit Umwelt- und sozialen Faktoren bei der Gestaltung außergewöhnlicher Erfahrungen konzentrieren. Diese Arbeit unterstreicht die Bedeutung eines multidisziplinären Ansatzes zur Erforschung der Grenzen von Bewusstsein und Wahrnehmung.