Rethinking a Ghostly Episode in the Legacy Literature

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Abstract – The grounded theory of Haunted People Syndrome (HP-S) contends that spontaneous 'ghostly episodes' recurrently experienced by certain people are an interactionist phenomenon involving heightened somatic-sensory sensitivities which are stirred by dis-ease states, contextualized with paranormal belief, and reinforced via perceptual contagion and threat-agency detection. A historical report of a poltergeist-like outbreak that was touted in a non-psi journal was used to test the applicability of this psychological model. Two independent and blinded raters used the *Survey of Strange Events* (SSE: Houran et al., 2019b) to map the anomalous phenomena in the case, as well as a Recognition Pattern Checklist to assess for contextual variables that the HP-S model links to the features and dynamics of sustained haunt-type anomalies. High inter-rater agreement on the raters' scores suggested that the available details of this case corresponded to (a) an occur-

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rence with above-average 'haunt intensity' compared to published norms, and (b) 100% 'agreement' on the ostensible presence of all five proposed recognition patterns of HP-S. Furthermore, a review of this episode's general structure using an SSE based Decision-Tree process cautioned against a purely parapsychological interpretation of some or all the reported anomalies. This basic analysis serves as a practical primer for using the SSE tool and HP-S model to guide future investigations of ghostly episodes by professional parapsychologists and citizen scientists alike.

Keywords: case study - citizen science - haunted people syndrome - interactionism - liminality

Überdenken einer geisterhaften Episode aus der älteren Literatur

Zusammenfassung² – Die Grounded Theory des Haunted-People-Syndroms (HP-S) geht davon aus, dass spontane "geisterhafte Episoden", die von bestimmten Menschen immer wieder erlebt werden, ein interaktionistisches Phänomen darstellen, das erhöhte somatisch-sensorische Empfindlichkeiten beinhaltet, die durch Krankheitszustände ausgelöst, mit paranormalen Überzeugungen kontextualisiert und durch perzeptuelle Ansteckung und das Verspüren einer Bedrohung verstärkt werden. Die Anwendbarkeit dieses psychologischen Modells wurde anhand eines historischen Berichts über einen poltergeistähnlichen Ausbruch geprüft, der in einer nicht-parapsychologischen Zeitschrift veröffentlicht wurde. Zwei unabhängige und verblindete Rater verwendeten den Survey of Strange Events (SSE: Houran et al., 2019b), um die anomalen Phänomene in dem Fall zu erfassen, sowie eine Recognition Pattern Checklist, um kontextuelle Variablen zu bewerten, die das HP-S-Modell mit den Merkmalen und der Dynamik anhaltender spukartiger Anomalien verbindet. Die hohe Übereinstimmung zwischen den Ratern bei den Bewertungen deutet darauf hin, dass die verfügbaren Details dieses Falles (a) einem Ereignis mit überdurchschnittlicher "Spukintensität" im Vergleich zu den veröffentlichten Normwerten und (b) einer 100 %igen "Übereinstimmung" bezüglich des offensichtlichen Vorhandenseins aller fünf vorgeschlagenen Erkennungsmuster von HP-S entsprechen. Darüber hinaus warnte eine Überprüfung der allgemeinen Struktur dieser Episode unter Verwendung eines SSE-basierten Entscheidungsbaum-Prozesses vor einer rein parapsychologischen Interpretation einiger oder aller berichteten Anomalien. Diese grundlegende Analyse dient als praktischer Leitfaden für die Verwendung des SSE-Tools und des HP-S-Modells, um zukünftige Untersuchungen von Geisterepisoden durch professionelle Parapsychologen und Laienwissenschaftler gleichermaßen anzuleiten.

Schlüsselbegriffe: Fallstudie – Laienwissenschaft – Haunted-People-Syndrom – Interaktionismus – Liminalität

² Eine erweiterte deutsche Zusammenfassung befindet sich am Ende des Artikels.

Introduction

Reports of so-called haunt and poltergeist episodes are familiar in the parapsychological literature, but case studies and commentaries also appear occasionally in non-psi journals (e.g., Dagnall et al., 2020; Persinger & Koren, 2001; Wiseman et al., 2003; for a discussion of mainstream research in this domain, see Houran, 2022). For example, in *Studies: An Irish Quarterly Review*³ essayist Herbert Thurston (1935) discussed a first-hand account of a prepubescent boy in India who was the focus of apparent 'paranormal' activity replete with lengthy quotes from the participants of the story and outlining their terrifying encounters with poltergeist-like phenomena. The Indian boy's adoptive parents were both scholars – something Thurston pointed out to further legitimize the story – and other academics visited and evidently took notes on the case. Thurston ultimately concluded that he had no reason to doubt the veracity of these reported paranormal encounters.

For context, Thurston was a prominent member of the Society of Psychical Research and a Jesuit scholar with a passion for macro-psi including ghostly outbreaks. He contributed many essays to the *Studies* journal, but his most important publications arguably include the post-humously published treatises, *The Physical Phenomena of Mysticism* (1952) and *Ghosts and Poltergeists* (1954). Note too that Thurston's (1935) essay and related others were reprinted in his 1954 book (see Chapters 13 and 18). This spontaneous case that so impressed Thurston has been dubbed the 'Poona Poltergeist' — an anomalous episode involving a variety of phenomena that were originally documented in three reports by Price and Kohn (1930a, 1930b, 1930c). The famous investigator Harry Price⁴ added a short introduction and listed himself as first author, though Kohn primarily authored the bulk of these articles which recounted her personal observations.

Ms. H. Kohn, sister of the boy's adoptive mother, resided with the family while the anomalous events were actively occurring. She sent copies of her case notes to Thurston with a letter that stated "I took especial care to avoid even the slightest exaggeration or inaccuracy, and the events were always recorded immediately after their occurrence" (Thurston, 1935, p. 88). Our Method section summarizes more details about this case, but Kohn's notes indicated that some people framed the disturbances within a Spiritist or survival-context because the afflicted boy's family had a 'paranormal' history and the associated phenomena involved seeing and com-

³ Published since 1912, this quarterly journal by the Irish Jesuits examines Irish social, political, cultural and economic issues in the light of Christian values and explores the Irish dimension in literature, history, philosophy and religion.

⁴ Interested readers can learn about this controversial figure at: https://psi-encyclopedia.spr.ac.uk/articles/harry-price

municating with apparitions of the deceased, as well as hearing inexplicable noises. Thurston obviously preferred not to mention these aspects, presumably because he was highly critical of Spiritism. He instead emphasized the physical anomalies in his selective portrayal of the case. Therefore, the source material is vital reading to fully appreciate the reported anomalies, attending circumstances, and varying interpretations.

'Haunted People Syndrome' - A Phenomenological Perspective

We collectively denote 'ghosts, poltergeists, and haunted houses' as *ghostly episodes* in this paper following a phenomenological perspective (Houran et al., 2019a, 2019b, 2021). To clarify, 'poltergeist disturbances' are clusters of unusual psychological or 'subjective' experiences (*S*, e.g., apparitions, sensed presences, hearing voices, and unusual somatic or emotional manifestations) and physical or 'objective' events (*O*, e.g., apparent object movements, malfunctioning electrical or mechanical equipment, and inexplicable percussive sounds like raps or knocks), which focus on the presence of certain people (for a recent discussion, see Ventola et al., 2019). Similar *S/O* anomalies that apparently persist at particular locations are called 'hauntings' (Houran & Lange, 2001). Researchers traditionally differentiate haunts and poltergeists, but some research indicates that the *S/O* anomalies characterizing each type of occurrence reliably form a probabilistic and unidimensional factor, i. e., a literal 'Haunt Hierarchy' (Houran et al., 2019a, 2019b). Moreover, people with 'thin or permeable' mental boundaries (as measured by variables like Transliminality and Paranormal Belief) are most likely to perceive or report these interconnected anomalies (Houran et al., 2002; Kumar & Pekala, 2001; Laythe et al., 2018).

The fact that we are ostensibly dealing with an ordered set of 'signs or symptoms' in people of a distinct perceptual-personality profile arguably suggests the existence of a core 'encounter' phenomenon which resembles a biomedical syndrome (Laythe et al., 2021a). This bold interpretation does not mean to pathologize focus persons or other witnesses, although it is well-documented that episodes often coincide with 'dis-ease,' or circumstances in which an individual's natural state of 'ease' becomes notably disrupted or imbalanced (Rogo, 1982; Roll, 1977; Ventola et al., 2019). Instead, the term 'syndrome' merely refers to a "... recognizable complex of symptoms and physical findings which indicate a specific condition for which a direct cause is not necessarily understood" (Calvo et al., 2003, p. 802; cf. British Medical Association, 2018).

Accordingly, Laythe et al.'s (2021a, 2022) theory of *Haunted People Syndrome* (HP-S) integrated a considerable amount of psychometric and phenomenological research to describe ghostly episodes that are recurrently manifesting to specific people as an interactionist phenomenon involving heightened somatic-sensory sensitivities which are acerbated by dis-ease states, contextualized with paranormal belief, and reinforced with perceptual contagion and threat-agency detection. In short, the HP-S model equates the psychology of these spontaneous experiences to some of the fundamental mechanisms that stoke outbreaks of mass (contagious) psychogenic illness or autohypnotic phenomena (cf. Lange & Houran, 2001a; Lifshitz et al., 2019; Ross & Joshi, 1992). Recent survey and retrospective coding research (Lange et al., 2020; Laythe et al., 2018; Ventola et al., 2019), including studies of modern cases (Houran et al., 2022; Houran & Laythe, 2022; Jawer, 2010; Laythe et al., 2021c; O'Keeffe et al., 2019), lends credence to key components of this framework. However, it is unclear whether putative HP-S might be a contemporary phenomenon driven by popular media or cultural forces (Hill et al., 2018, 2019; Waskul & Eaton, 2018) or whether the model also helps to contextualize historic accounts like the Poona Poltergeist. Spontaneous ghostly episodes no doubt involve many complexities and nuances, so we simply offer our approach as one competing perspective to other prevailing views on this controversial topic.

The Present Study

This opportunistic research does not canvass the academic literature or online public forums for an assortment of spontaneous cases to analyze relative to the HP-S model. Rather, we decided only to scrutinize Price and Kohn's (1930a, 1930b, 1930c) reports after an initial inspection of Thurston (1935) summary indicated that this ghostly episode might serve well as an 'illustrative case study.' These are descriptive studies that depict one or more circumstances of an event to explain the situation. More specifically, Hayes et al. (2015) noted that this type of case study is used to "describe a situation or a phenomenon, what is happening with it, and why it is happening" (p. 8). In doing so, the present exercise also effectively demonstrates the rationale and use of several fresh approaches and related tools for professionally-trained researchers and citizen scientists in parapsychology to support cumulative model-building and theory formation in this domain (cf. Hill et al., 2019; Houran et al., 2022; Laythe et al., 2022, pp. 162–164).

Retrospective case studies are not particularly robust research designs due to their inherent limitations (Talari & Goyal, 2020), but they can be useful for examining the predictive validity of new theories on existing datasets. This is very important given the rarity of 'authentic and active' ghostly episodes that are available to investigators for real-time data collection and testing of competing hypotheses. Thus, we conducted a content analysis of this historical episode to augment our prior studies of haunt-type narratives (e.g., Houran & Laythe, 2022; Houran et al., 2022; Lange et al., 2020; Laythe et al., 2021a; Little et al., 2021; O'Keeffe et al., 2019). This research accordingly explored whether the contents and contextual details in the available case reports align to the five recognition patterns of HP-S as outlined by Laythe et al. (2021a, 2022).

Specifically, two coders independently assessed this historical ghostly episode for clear indications that: (a) Transliminality was the foundation for percipients' anomalous experiences, reinforced by Belief in the Paranormal; (b) 'Dis-ease' (or psychological dissonance) was a catalyst for the onset of anomalous experiences; (c) Recurrent anomalous experiences exhibited temporal patterns (or 'flurries') suggestive of psychological contagion; (d) Attributions for the anomalous experiences aligned to the percipient's biopsychosocial context; and (e) Anxiety levels of the percipients related to the nature, proximity, and spontaneity of the anomalous experiences. We further sought to corroborate contagious processes in this case by testing for statistical snowballing effects in the temporal patterns of the *S/O* anomalies chronicled in Price and Kohn (1930a, 1930b, 1930c). Finally, we outline the practical implications of our results for future research by professional scientists and amateur investigators in this domain.

Method

'Poona Poltergeist' Case Summary

Price and Kohn's original reports (collectively comprising 28 pages) should be consulted for more details on this ghostly episode, but readers might appreciate a case synopsis to better frame our study. The disturbances occurred in Poona, India and principally focused on an eight-year-old boy named Damodar Bapat, who was adopted in May of 1923 by Dr. and Mrs. Ketkar after the suicide of his mother and passing of his father some years later. Damodar was separated from his 18-year-old brother Ramkrishna Bapat, who also reported poltergeist phenomena until the end of his adolescence, stopping after puberty.

Ms. H. Kohn had contacted Harry Price after the publication of the Eleonore Zugun poltergeist case (cf. Price, 1926, 1927a, 1927b) due to its surprising similarity to what she and her sister's family were experiencing, and in aspirations to relieve the young boy of his phenomenon. The family did not claim to be spiritualist or interested in the paranormal, but with the repeated falling of objects, malicious throwing, and overall abundance of object displacements they openly began to reconsider the possibility of a 'spirit'. They hired many different people with different beliefs and philosophies to visit and help the boy and a variety of responses ensured. Mediums largely claimed that the hostile actions were caused by either the first son of his second wife, Lakshman, who died at about 9-years-old, or to the first wife herself in vengeance of remarriage. Exorcists suggested more evil and sinister forces such as 'demons.'

Regardless of the proposed origins of the anomalies, nothing worked as a reliable deterrent, i. e., neither the use of amulets, rituals, nor prayers, although the last of these was most effective according to Kohn. She kept very extensive records of day-to-day occurrences and who was

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around to observe them aside from the boy, who happened to be asleep a large portion of the time. Her diary references the disappearance and movement of objects in plain sight, inexplicable feelings the focus boy had before *S/O* anomalies occurred, and how the phenomena reacted to serious attempts at exorcism and the like. There are also entries of apparitions appearing to others beside the boy and coins miraculously falling from the air, all which Kohn noted with times, dates, and settings.

Raters

Inter-rater reliability is the level of agreement between two or more raters or judges (Hallgren, 2012). Additional raters do not change how often (or the degree to which) raters agree. Inter-rater reliability is instead affected by the skill of the raters (relative to the difficulty of the task) and the degree to which raters are making the same assessment, i. e., if raters understand the task or observed information in the same way. Thus, we used only two raters for pragmatic reasons. This approach allowed us to establish confidence estimates for the ratings used in our analyses, while simultaneously cross-checking whether our coding materials could be effectively used by disparate investigators. Note that our two volunteer coders had some prior research experience but came from markedly different backgrounds: (a) one person was a Ph. D.-level parapsychologist with multiple publications, and (b) the other individual was a college student who actively supports and practices citizen science efforts.

Measures

1. Survey of Strange Events (SSE: Houran et al., 2019b). This is a 32-item, 'true/false' Rasch (1960/1980) scaled measure of the overall 'haunt intensity' (or perceptual depth) of a ghostly account or narrative via a checklist of anomalous experiences inherent to these episodes. The SSE's Rasch item hierarchy represents the probabilistic ordering of *S/O* events according to their endorsement rates but rescaled into a metric called 'logits.' Higher logit values denote higher positions (or greater difficulty) on the Rasch scale (Bond & Fox, 2015). More information about the conceptual background and psychometric development of this instrument is provided by Houran et al. (2019a, 2019b, 2021). Rasch scaled scores range from 22.3 (= raw score of 0) to 90.9 (= raw score of 32), with a mean of 50 and SD = 10, and Rasch reliability = 0.87. Higher scores correspond to a greater number and perceptual intensity of anomalies that define a percipient's cumulative experience of a ghostly episode. Supporting the SSE's construct and predictive validities, Houran et al. (2019b) found that the phenomenology of 'spontaneous' accounts (i. e., 'ostensibly sincere and unprimed') differed significantly from control narratives

from 'primed conditions, fantasy scenarios, or deliberate fabrication.' That is, spontaneous ghostly episodes have a specific sequence (or Rasch model) of *S/O* anomalies that is distinct from the details of narratives associated with other contexts.

2. *HP-S Recognition Patterns Checklist.* This study-specific template was used to guide the raters' content analyses of the contextual aspects of the Thurston's (1935) haunt account. It outlines the five recognition patterns of HP-S via seven specific questions that are rated on four-point Likert scales anchored by "Strongly Disagree" (scored '0') to "Strongly Agree" (scored '3'). Raw ordinal scores range from '0' to '21,' with higher scores indicating a greater likelihood of the respective HP-S recognition patterns being present. The Appendix gives the full template so that readers can understand the exact wordings of the items. Note that this coding sheet also refers to the Revised Transliminality Scale (RTS: Lange, Thalbourne et al., 2000) and the Rasch version (Lange, Irwin & Houran, 2000) of Tobacyk's (1988, 2004) Revised Paranormal Belief Scale (RPBS). Thus, we also provided copies of these two instruments to the coders as critical supplementary information. The Recognition Pattern Checklist is only a tactical worksheet, so no psychometric properties are reported here.

Procedure

This study constituted a review of published, historic material only. The two coders, each blinded to our hypotheses, were given copies of the (a) Thurston (1935) essay, (b) Price and Kohn's (1930a, 1930b, 1930c) case reports; (c) SSE measure, (d) HP-S Recognition Patterns Checklist, and (e) the RTS and Rasch-RPBS questionnaires. They worked independently to code the phenomenology of the case by documenting the presence of specific *S/O* anomalies via SSE ratings, as well as any obvious contextual variables associated with the onset or report of those anomalies via the HP-S Recognition Patterns Checklist (supported by the two belief-boundary measures noted above). Thus, each rater returned two completed forms (cf. Tables 1 and 2).

Understand that we did not instruct the raters to fill out the RTS and Rasch-RPBS measures on behalf of the ostensible focus person or other experients in this case. Rather, their task only involved looking at this case for suggestive signs of Transliminality or PB using the standardized questionnaires above as guides to help recognize relevant types of cognitions or perceptions referenced in the accounts. We also set no minimum criteria for the raters to use when assessing for Transliminality or PB. That is, raters could "Agree or Strongly Agree" that either perceptual-personality variable was present irrespective of how many items on the RTS or Rasch-RPBS they thought applied to the focus person or other experients. This relaxed approach was deemed best overall for our purposes, although it is a limitation and future work might strive for greater structure or precision. For instance, the simplest solution would be for the focus person or experient(s) to complete appropriate psychometric measures for themselves and then use standardized cut-off scores to estimate the influences of Transliminality or PB (see e.g., Houran & Laythe, 2022). We were, however, unable to use this tactic here for obvious reasons.

Finally, we should note another important nuance in the protocol. Our study began simply with a content analysis of Thurston's (1935) essay, but a helpful peer reviewer recognized the case and directed us to the Price and Kohn (1930a, 1930b, 1930c) material. Gerhard Mayer subsequently provided copies of these case reports, which provided an invaluable richness of contextual details. Also included was Ms. Kohn's 'event diary' that chronicled the temporal patterns of the *S/O* anomalies. The raters, each blinded to the other's work, carefully reviewed this additional material, as well as reassessed their original ratings from the earlier content analysis of Thurston (1935). We used a single-blind approach because this exercise neither aimed to explore the retest reliability of the SSE or HP-S tools, nor could we ensure that the raters did not keep copies of their prior work or not recognize the new material as relating to Thurston's summary. Therefore, we treated the raters' analysis of the essay as a pilot exercise, whereas their analysis of Price and Kohn's detailed case reports constituted the main study. This approach seemed more like an actual field investigation in which researchers might collect or discover new information over time. The two raters then delivered their final ratings for our processing and analysis.

Results

Preliminaries

The Cohen's (1960) kappa (κ) measure of inter-rater reliability for the SSE's categorical items was 0.61 (p < .001). A similar estimate is unavailable for the ratings on the HP-S Recognition Patterns Checklist due to a constant, i. e., the citizen scientist rated all HP-S patterns as '3' (see Table 2). Thus, we can only report a simple 71% congruence between the raters on these latter variables (cf. Hallgren, 2012). The results nonetheless suggest substantial agreement between the raters on the available details of the present case in terms of its *micro-phenomenology* (i. e., conditions associated with the onset of the anomalous experiences) (Laythe et al., 2021a, p. 198). Moreover, these outcomes likewise indicate that citizen scientists can be helpful contributors to data collection or evaluation in some types of anomalistics research.

Micro-Phenomenology of the S/O Anomalies

Table 1 documents the anomalous phenomena in Price and Kohn's (1930a, 1930b, 1930c) case reports per the averaged SSE ratings of the two independent coders who collectively functioned as an expert panel (Bertens et al., 2013). Both raters gave the case the same raw score of '19' (meaning each found evidence for 19 distinct types of *S*/*O* anomalies), which translates to an SSE scaled score of '59.6' (*standard error of estimate* = 2.8). Though the raters agreed on the overall 'haunt intensity', we should note that they disagreed on the occurrence of six anomalies (SSE items #1, 5, 9, 13, 19, and 29). Specifically, each rater indicated the presence of three *S*/*O* anomalies that the other rater did not. Omitting these disputed events from the present inventory (i. e., re-scoring the case with a raw score of '13' vs. '19') gives a revised 'conservative' SSE score of 59.6 (*standard error of estimate* = 2.6). Either outcome gives a haunt intensity for this case that is above-average per the published norm for 'Spontaneous' episodes (i. e., ostensibly sincere and unprimed, *M* = 51.7) and places it closer to the average SSE score indicative of narratives told under a 'Primed' condition (i. e., settings with strong expectancy-suggestion effects, *M* = 52.3) (Houran et al., 2019b, p. 176).

The potential nature of this case can further be inferred or cross-checked by evaluating its broad structure of *S/O* anomalies via a Decision-Tree Process in Houran et al. (2019b, p. 180). Based on current benchmarks, this classification heuristic indicated that these features predict with 87% accuracy an 'Illicit' or intentionally deceitful narrative. This outcome implies that the Poona Poltergeist should be interpreted with great caution, as the case (a) showed an overall 'perceptual intensity' that was considerably stronger than the norms for a genuinely spontaneous episode, and (b) profiled as likely 'at-risk' for containing some deliberately falsified anomalies or witness accounts. However, our results do not clarify any source(s) for these presumed aberrations and so we cast no aspersions here.

	Survey of Strange Events (SSE)	Parapsy- chologist Ratings	Citizen Scientist Ratings	Averaged Ratings*
1.	I saw with my naked eye a non-descript visual image, like fog, shadow or unusual light	0	1	0.5
2.	I saw with my naked eye an "obvious" ghost or apparition – a misty or translucent image with a human form	1	1	1
3.	I saw with my naked eye an "un-obvious" ghost or appari- tion – a human form that looked like a living person	1	1	1
4.	I smelled a mysterious odor that was <i>pleasant</i>	1	1	1
5.	I smelled a mysterious odor that was unpleasant	0	1	0.5

6.	I heard mysterious sounds that could be recognized or identified, such as ghostly voices or music (with or without singing)	1	1	1
7.	I heard on an audio recorder mysterious sounds that could be recognized or identified, such as ghostly voices or music (with or without singing)	0	0	0
8.	I heard on an audio recorder mysterious "mechanical" or non-descript noises, such as tapping, knocking, rattling, banging, crashing, footsteps or the sound of opening/clos- ing doors or drawers	0	0	0
9.	I had a <i>positive</i> feeling for no obvious reason, like happiness, love, joy, or peace	1	0	0.5
10.	I had a <i>negative</i> feeling for no obvious reason, like anger, sadness, panic, or danger	1	1	1
11.	I felt odd sensations in my body, such as dizziness, tingling, electrical shock, or nausea (sick in my stomach)	1	1	1
12.	I had a mysterious taste in my mouth	0	0	0
13.	I felt guided, controlled or possessed by an outside force	1	0	0.5
14.	I saw beings of divine or evil origin, such as angels or demons	0	0	0
15.	I saw folklore-type beings that were not human, such as elves, fairies, or other types of "little people"	0	0	0
16.	I communicated with the dead or other outside force	1	1	1
17.	I had the mysterious feeling of being watched, or in the pres- ence of an invisible being or force	1	1	1
18.	I had a sense of déjà vu, like something was strangely famil- iar to me about my thoughts, feelings or surroundings	0	0	0
19.	I felt a mysterious area of <i>cold</i>	1	0	0.5
20.	I felt a mysterious area of <i>heat</i>	0	0	0
21.	I experienced objects disappear or reappear around me	1	1	1
22.	I saw objects moving on their own across a surface or falling	1	1	1
23.	I saw objects flying or floating in midair	1	1	1
24.	Electrical or mechanical appliances or equipment func- tioned improperly or not at all, including flickering lights, power surges or batteries "going dead" in electronic devices (e.g., camera, phone, etc.)	1	1	1
25.	Pictures from my camera or mobile device captured unu- sual images, shapes, distortions or effects	0	0	0

26. Plumbing equipment or systems (faucets, disposal, toilet) functioned improperly or not at all	0	0	0
27. I saw objects breaking (or discovered them broken), like shattered or cracked glass, mirrors or housewares	1	1	1
28. I heard mysterious "mechanical" or non-descript noises, such as tapping, knocking, rattling, banging, crashing, foot- steps or the sound of opening/closing doors or drawers	1	1	1
29. I felt a breeze or a rush of wind or air, like something invisible was moving near me	0	1	0.5
30. Fires have started mysteriously	0	0	0
31. I was mysteriously touched in a <i>non-threatening</i> manner, like a tap, touch or light pressure on my body	1	1	1
32. I was mysteriously touched in a <i>threatening</i> manner, such as a cut, bite, scratch, shove, burn or strong pressure on my body	1	1	1

*Note: True = 1, False = 0

Table 1. Summary Ratings on the Micro-Phenomenology (SSE Patterns) of the Poona Poltergeist.

Macro-Phenomenology of the S/O Anomalies

Table 2 compares the contextual details of the case against the features of HP-S via the averaged raters' scores on the HP-S Recognition Patterns Checklist. The raters found reasonable evidence for all seven aspects of the five general themes but with some caveats. The raters "strongly agreed" that five (or 60%) of seven aspects of the HP-S recognition patterns were present, whereas they simply "agreed" about the remaining two (or 40%) HP-S components. The highest-rated aspects of the model involved (a) the report of diverse *S/O* anomalies that was consistent with a 'Haunt Hierarchy' of events, (b) percipients' anxiety levels aligned to principles of conventional threat (and agency) detection, and (c) the presence of dis-ease associated with the onset of *S/O* anomalies. However, Transliminality and PB were rated relatively lower with respect to the onset or interpretation of the events. The lack of germane information about these perceptual-personality variables in the case reports (Price & Kohn, 1930a, 1930b, 1930c) is not wholly surprising and speaks to the need for researchers to routinely assess and document the psychometric profiles of 'focus persons' or 'key witnesses' as part of investigations. On the other hand, this latter outcome might suggest that the relaxed protocol used here to assess Transliminality or PB did *not* elicit overinflated scores.

Average Ratings*	2.5 2.5	m	<i>ლ</i> ლ	3	<i>6</i>
Citizen Scientist Ratings	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	m	ς η η	3	ŝ
Parapsy- chologist Ratings	5 7	m	m m	3	3
Corresponding Attitudes or Behaviors	Does the witness/ focus person report experiences consistent with items from the Revised Transliminality Scale? Does the witness/ focus person report attitudes or beliefs consist- ent with items from the Rasch-Revised Paranormal Belief Scale?	Does the witness/ focus person report circumstances of notable distress (negative stress) or eustress (positive stress) immediately prior to the onset of the anomalous experiences? This includes personality traits or individual differences linked to 'dis-ease,' such as Imagination/ Magical Thinking/ Fanta- sy-Proneness, Rebellious Attitude/ Impulsivity/ Aggression/ Hos- tility, Somatic Complaints/ Anxiety/ Irritability, Low Self-Esteen/ Self-Concept or Ego-weakness/ Insecurity, Unhappiness/ Shame/ Jealousy, Dissociative Tendencies/ Temporal Lobe Lability, and Introversion.	Does the witness/ focus person report an ongoing array of diverse S/O anomalies per the Survey of Strange Events? Does the perception of S/O anomalies clearly occur in "flurries," especially when a group of percipients is involved?	Does the witness/ focus person interpret the <i>S</i> /O anomalies in a way that is consistent with his/her religious or cultural belief system(s)?	Does the witness/ focus person report greater intensity of fear or anxiety when the <i>S/O</i> anomalies occur (a) suddenly or without warning, (b) within the person's personal space, and/or (c) involve more tangible or physical anomalies?
	5 1	ર્ભ		s 6.	s
HP-S Recognition Pattern	<i>Transliminality</i> (i.e., permeable mental boundaries) is the foundation for percipients' anomalous experiences, rein- forced by Paranormal Belief.	<i>Dis-ease</i> (or psychological dissonance) as a catalyst for the onset of anomalous experiences.	Recurrent anomalous experiences that exhibit temporal patterns suggestive of perceptual or social contagion.	Attributions for the anomalous experiences align to the percipi- ent's biopsychosocial context.	Anxiety levels of the percipients relate to the nature, proximity, and spontaneity of the anoma- lous experiences.

 Table 2. Summary Ratings on the Macro-Phenomenology (HP-S Recognition Patterns)

 of the Poona Poltergeist.

*Note: Strongly Disagree = 0; Disagree = 1; Agree = 2; Strongly Agree = 3

IF.

Supplemental Time Series Analysis of the S/O Anomalies

To corroborate the raters' endorsement of HP-S Recognition Pattern #3 ('Perceptual Contagion') in this spontaneous case, we asked the Ph. D.-level rater to prepare a spreadsheet that documented the chronology (i. e., dates and times) of the *S/O* anomalies reported in Price and Kohn (1930a, 1930b, 1930c). This raw dataset⁵ was used for a time series analysis of the events in line with past efforts (Houran & Lange, 1996; Lange & Houran, 2001a, 2001b; Romer, 2013) that include a more recent study whereby this same rater performed a similar task (Houran et al., 2022).

By way of explanation, some evidence suggests that the temporal patterns of anomalous events in ghostly episodes are predictably structured rather than randomly distributed (for a discussion see Houran et al., 2019a). The HP-S model largely explains these findings in terms of self-sustaining perceptual or attentional biases. Specifically, we hypothesize that expectancy-suggestion effects - bolstered by principles of threat-agency detection - stoke 'waves or flurries' of successive S/O perceptions much like the spread of an infectious disease (Houran & Lange, 1996) or a meme that goes 'viral' across social media (cf. Hill et al., 2018). This contagion hypothesis can be empirically tested to an extent by examining whether the inter-event times (IETs) between successive S/O anomalies exhibit a snowballing-type effect in which an initial state of small significance builds upon itself to become larger. Testing for wave-like or curvature patterns, however, requires that anomalous events are recoded and modified in two ways. First, we organized the anomalous events within each month into five temporally-sequential time periods in order to create a constant by which multiple months of data could be examined. Second, due to the highly varying nature of the frequency of anomalous reports, the data were further converted by subtracting the initial number of anomalous accounts (i.e., period '0') from the remainder of each monthly five period data set (i. e., periods '1,2,3, and 4'). This procedure creates a constant across months where each subsequent period represents only the increase or decrease of reported anomalous accounts across time periods within each month, and further, level-sets all monthly data at a constant of '0' for analysis.

In essence, we converted the time series data in Price and Kohn (1930a, 1930b, 1930c) to a format that assessed only increases or decreases of S/O anomalies reported across each time period, for all monthly accounts, allowing us to collapse month and aggregate the data overall across our analyzed time periods. Figure 1 shows an initial mapping of the resulting data. The correlation between time periods and S/O phenomena was not significant (r = -03, n. s.). Subsequently, a linear regression between time periods and anomalous event frequency was conducted, which

⁵ The raw dataset is provided as Supplemental Material to our report: https://www.anomalistik.de/Images/pdf/zfa/supp_mat/PoonaCaseTimeIntervalData.xlsx https://www.anomalistik.de/Images/pdf/zfa/supp_mat/SSE-ANALYSIS-2.csv

also non-significant was $(\beta = -.03 = p = .86 \text{ explained})$ $R^2 = .001$). This base linear regression was then applied as a testing model for nonlinear relationships, conducted by both squaring and cubing the adjusted anomalous phenomena accounts and comparing both separately against the linear model. Results of comparing a linear prediction against a curve prediction for sequential time periods and anomalous phenomena did not produce significant change in the variance explained from a linear model ($\beta = -.21$ $p = .38; R^2 = -.02, F$ change from linear model =.76,



Figure 1. Nonlinear Plot of Standardized Time Periods and Variation of *S/O* Anomalies.

p=.38). Further comparison of the linear model against a nonlinear wave model was also not significant (β =-.14, p=.60, R^2 =-.04, F change from linear model = .268 p = .60). Thus, in the Poona Poltergeist case, increases and decreases in anomalous phenomena across standardized time periods, while approaching a wave-like curvature, does not significantly depict either a linear, curved, or wave relationship in time, when being examined within a month-to-month period of time.

We must interpret these outcomes with caution and nuance. Particularly, the lack of pronounced curvature in Figure 1 might merely reflect a small sample of quite noisy data. It could also be that multiple forces controlled the timing of the different periods of *S/O* anomalies. For instance, the onset of some occurrences could have derived from mechanisms underpinning genuinely 'spontaneous' ghostly episodes, whereas other incidents might have been spurred by 'constructed' variables, such as fraud by person or persons unknown (Roll, 1977) or the degree of social or behavioral 'structure' attending certain anomalies (Lange & Houran, 2001b). These or other possibilities are not mutually exclusive, so all we can say is that the quantitative results are non-conclusive for the hypothesis of perceptual contagion in this case.

Implications for Planned Studies of Ghostly Episodes

The current exercise offers professional researchers and citizen scientists alike a primer for using both the SSE and HP-S model to guide preliminary case studies or fieldwork investigations in this domain. Environmental meters are certainly synonymous with ghost-hunting in the popular culture (Hill et al., 2019), but psychometric instruments and inventories of contextual data are equally important given that ghostly episodes presumably involve *environment-person* bidirectional influences or processes (Ironside & Wooffitt, 2022; Laythe et al., 2021a, 2022). What the general public thus regards as haunt investigations can mean various things and comprise distinct but connected tasks requiring different skills. This circumstance affords great opportunities for productive partnerships between professional researchers and citizen scientists. For instance, Laythe et al. (2022, pp. 154–155) outlined three basic types of investigations: (a) *Case documentations*, i. e., benchmarking the physical attributes of locations, psychological backgrounds of experients, and the *S/O* anomalies reported at a target location; (b) *Exploratory inspections*, i. e., a planned or systematic site survey in an attempt to document S/O anomalies in real-time at the target location; and (c) *Hypothesis-testing*, i. e., an empirical examination or test of one or more suspected causes or correlates of the *S/O* events reported at the target location.

Step 1.

Task – Complete personal introductions and research explanations with percipients (Baker & O' Keeffe, 2007) *Goal* – To build rapport and normalize the percipients' anomalous experiences.

Step 2.

Task – Obtain informed consent from all percipients willing to share information (Little, 2021).

Goal – To establish expectations for realistic outcomes and use of their collected information.

Step 3.

Task – Administer percipients the measures of key psychological and contextual variables (Laythe et al., 2021a). *Goal* – To document the S/O anomalies reported in the case along with their associated context (HP-S Recognition Patterns Checklist).

Step 4.

Task – Score the SSE at the case-level to determine if the intensity is average or above-average, and then use the Decision-Tree process to estimate the likelihood of the case being deceitful (Houran et al., 2019b).

Goal – To vet percipients' reports for consistency and/or overt signs of deliberate deceit prior to expending resources on further study.

Step 5. *Professionally-trained scientists ideally become involved at this point

Task – Conduct an 'Exploratory Inspection' or 'Hypothesis-Testing' – especially if the case has average or above-average intensity and an apparently low risk of deliberate deceit (Laythe et al., 2022).

Goal – To explore the nature or source(s) of the S/O anomalies under more controlled conditions.

Table 3. Recommended steps for basic and 'citizen scientist' investigations of ghostly episodes.

Table 3 shows how these investigation types (or tasks) can work together as five integrated steps of a holistic process to purposefully study the range of potential variables and influences in specific ghostly episodes. Fortunately, 'citizen scientists' can be equipped and trained to conduct Case Documentations and Exploratory Inspections using, in part, the questionnaire tools described here. This term refers to non-professional researchers who actively participate in academic studies to help generate new knowledge and information (Ceccaroni & Piera, 2017). Crowdsourcing preliminary or benchmark data via the dedication of amateur 'ghost-hunting' groups can help us to clarify, refine, or extend the HP-S model over time (for a discussion, see Laythe et al., 2022). Indeed, our study illustrates that the SSE is suitably readable and diverse to accurately code the micro-phenomenology of haunt-related accounts. But the macro-phenomenology of cases is considerably more difficult to map in the absence of detailed and targeted information about the circumstances attending the onset or cessation of a ghostly episode.

This is where the HP-S model and Recognition Patterns Checklist (cf. Table 3) can guide all researchers. Thus, citizen scientists can effectively conduct preliminary research to identify cases that seemingly (a) are legitimately spontaneous or unprimed, (b) have higher SSE scores (i. e., ideally above the mean of 50) indicating a greater variety and intensity of *S/O* anomalies, and (c) involve percipients and target locations that are amenable to more a thorough, fieldwork investigation. These vetted cases would arguably have stronger evidential value for professional scientists who could subsequently conduct Hypothesis-Testing at the target location or setting (see e.g., Houran & Laythe, 2022; Laythe & Houran, 2019; Wiseman et al., 2003). In this way, we should eventually determine to what extent the HP-S model generalizes across different ghostly episodes, as well as discern better the extent to which conventional psychological or physical principles mesh with putative psi-related mechanisms (cf. Dixon et al., 2018; Huesmann & Schriever, 2022; Ventola et al., 2019).

It is reasonable to ask whether the proposed vetting system in Table 3 would have recommended a thorough field investigation of the anomalies reported in the Poona Poltergeist (Price & Kohn, 1930a, 1930b, 1930c). 'Case documentation' procedures on the available details clearly indicate that this episode would have been a high priority candidate for more or better data collection via an 'Exploratory Inspection,' and, if feasible, 'Hypothesis Testing' by professional scientists. But our results from Houran et al.'s (2019b) Decision-Tree process also underscore the need for extreme caution and skepticism in approaching a case with the characteristics shown here. To be sure, the suspicion is that the source(s) of some or all the reported *S/O* anomalies might not align to a parapsychological perspective—a concern that extends across many poltergeist-like accounts (Roll, 1977). Detailed and informed scrutiny at the time by a cross-disciplinary team might have offered the best opportunity for firmer conclusions in this respect.

General Discussion

Thurston's original essay—which sparked the present study—underscores that academics have historically been intrigued by ghostly episodes and sometimes express their curiosity outside the circles of frontier science. Of course, the same can be said for many other examples of 'high strangeness' (Houran & Bauer, 2022). The three reports on this case (Price & Kohn, 1930a, 1930b, 1930c) afforded a reasonably detailed content analysis and interpretation, but it is doubt-ful that we know all the relevant facts or information. Thurston (1935) indeed indicated that Ms. Kohn's event diary was not the only one kept. Specifically, a person named 'J. D. Jenkins' was apparently a medical professional who was invited to give his expert opinion of the case. He had personally witnessed remarkable phenomena during his evaluation and indicated that "...many thousands of other instances are recorded in a day-to-day diary of events which I kept from June 1928 to January 1930. Most of them were published in *The Times of India* and in *The Statesman*" (pp. 86–87). Likewise, our Decision-Tree assessment of the case's broad pattern suggested that there was probably more to the nature of these disturbances than we currently understand.

The present results and conclusions could therefore change slightly or substantially with the availability of new insights or data. Of course, the results of any and all case analyses, percipient surveys, or fieldwork studies might vary somewhat with the method used to map details of the episodes or percipient accounts (see e.g., Gauld & Cornell, 1979; Houran et al., 2019b; Huesmann & Schriever, 2022; Neppe, 2011). We note here that the SSE measure closely parallels Huesmann and Schriever's (2022) efforts at classifying the contents and phenomenology of 'poltergeist' outbreaks, i.e., presumed manifestations of recurrent spontaneous psychokinesis (RSPK) (Roll, 1977). But future research should aim to bridge these two inventories as their psychometric foundations differ along with some of their associated findings, such as a divergence on the factor structure of *S/O* haunt-type anomalies.

Nonetheless, the main question remains as to whether the Poona Poltergeist was a historic example of putative HP-S. Our content and quantitative analyses certainly found evidence for most aspects of this model. That is, the case details consistently affirmed predictions by Laythe et al. (2021a, 2022) about the phenomenology of ghostly episodes that recurrently manifest to certain people. This analysis therefore joins other case studies that ostensibly support an interactionist view of these altered-anomalous experiences but also underline the need for more research to corroborate or refine the apparent components of HP-S (Houran & Laythe, 2022; Houran et al., 2022; Ironside & Wooffit, 2022; Lange et al., 2020; O'Keeffe et al., 2019). It is important for additional studies to include quali-quantitative analyses of entire spontaneous case *collections* to avoid the criticism of potential publication bias involving only single case reports favorable to HP-S (i. e., the file drawer problem, see Fanelli, 2012). But taken altogether,

increasing evidence suggests that principles of conventional psychophysiology and environmental psychology fundamentally influence some of the features and dynamics of ghostly episodes, irrespective of the potential roles of putative psi or discarnate agency. These occurrences can therefore be described, at the very least, as exceptional human experiences at the intersection of belief- and boundary-functioning (Lange & Houran, 2001a; Laythe et al., 2018, 2021a).

However, we stress that the current iteration of the HP-S concept neither negates nor requires the ontological reality of parapsychological mechanisms. In fact, there is intriguing evidence that the model's central variable of Transliminality facilitates putative psi in addition to standard processes related to imagination or somatization (Ventola et al., 2019, pp. 157–160). We thus contend that dogmatic dichotomies of 'paranormal vs skeptical' approaches to case studies or fieldwork investigations are counterproductive and misguided. Rather, our interactionist model implies that ghostly episodes are a tangled ball of metaphorical yarn that require cross-disciplinary and participatory team science to effectively tease apart. This approach can, and frankly should, include adversarial collaborations between researchers with different ideologies and complementary methods. The psi literature includes several such partnerships that can serve as inspiration and templates for new studies (e.g., Kekecs et al., 2023; Laythe & Houran, 2022; LeBel et al., 2022; Parnia et al., 2022; Schlitz et al., 2006). There are also many readily available sources on tactics and user-friendly technologies for fieldwork in this domain (e.g., Auerbach, 2003; Laythe et al., 2021b; Parsons, 2018, 2021).

But hi-tech equipment or sophisticated research designs are not required for citizen scientists or professional researchers to contribute meaningful information to growing databases of big data on these occurrences. To be sure, almost anyone can use the four primary and no-cost tools outlined in this paper to help document or vet spontaneous cases for further and more detailed study, i. e., (a) the SSE, (b) HP-S Recognition Checklist, (c) RTS, and (d) Rasch-RPBS. The Institute for the Study of Religious and Anomalous Experience (I.S.R.A.E.) is also developing a mobile application to easily collect this information as a complement to environmental measurements in fieldwork studies (cf. Laythe et al., 2021b). Irrespective of their potential parapsychological nature, the *S/O* anomalies considered here almost certainly involve "the right people in the right settings" (Laythe et al., 2018, p. 210). Accordingly, we advise all fieldwork researchers to be aware of the interactionist HP-S model and focus their efforts on collecting fundamental data that will better elucidate the contents, context, and catalysts of ghostly episodes from this and other important perspectives (e. g., Houran & Lange, 2001; Maher, 2015; McCue, 2002).

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Überdenken einer geisterhaften Episode aus der älteren Literatur

Erweiterte Zusammenfassung

Hintergrund: Laythe et al.'s (2021a, 2022) Grounded Theory des Haunted-People-Syndroms (HP-S) geht davon aus, dass spontane "geisterhafte Episoden", die von bestimmten Menschen immer wieder erlebt werden, ein interaktionistisches Phänomen darstellen, das erhöhte somatisch-sensorische Empfindlichkeiten beinhaltet, die durch Krankheitszustände ausgelöst werden und zu außergewöhnlichen Erfahrungen führen, die mit paranormalen Überzeugungen kontextualisiert und durch perzeptuelle Ansteckung und das Verspüren einer Bedrohung verstärkt werden. Mit anderen Worten, es wird angenommen, dass Ausbrüche von "Erscheinungen, Spuk oder Poltergeistern" durch dieselben grundlegenden Mechanismen begünstigt werden, die auch autohypnotischen Phänomenen und (ansteckenden) psychogenen Massenerkrankungen zugrunde liegen.

Fragestellung: Die Anwendbarkeit dieses psychologischen Modells wurde anhand eines historischen Berichts über einen poltergeistähnlichen Ausbruch geprüft, der in einer nichtparapsychologischen Zeitschrift veröffentlicht wurde.

Methode: Unsere Studie umfasste in erster Linie eine inhaltliche Analyse der ursprünglichen Fallberichte (Price & Kohn, 1930a, 1930b, 1930c), die jedoch durch eine quantitative Zeitreihenanalyse der in den Aufzeichnungen festgehaltenen anomalen Ereignisse ergänzt wurde. Zunächst verwendeten ein experimentell verblindeter Parapsychologe und ein Laienwissenschaftler unabhängig voneinander den *Survey of Strange Events* (SSE: Houran et al., 2019b), um die anomalen Phänomene in dem Fall zu kartieren (d. h. seine Mikro-Phänomenologie), sowie eine *Recognition Pattern Checklist*, um kontextuelle Variablen zu bewerten, die das HP-S-Modell mit den Merkmalen und der Dynamik anhaltender spuktypischer Anomalien verbindet (d. h. seine Makro-Phänomenologie). Die Zeitreihe war dann eine separate Gegenprüfung für die vermutete Rolle der psychischen Ansteckung, eines von fünf Erkennungsmustern von HP-S. *Ergebnisse*: Die hohe Übereinstimmung zwischen den Ratern bei der Inhaltsanalyse deutet darauf hin, dass die verfügbaren Details dieses Falles (a) einem Ereignis mit überdurchschnittlicher "Spukintensität" im Vergleich zu den veröffentlichten Normwerten und (b) einer 100%igen "Übereinstimmung" bezüglich des offensichtlichen Vorhandenseins aller fünf vorgeschlagenen Erkennungsmuster von HP-S entsprechen. Eine Überprüfung der allgemeinen Struktur dieser Episode mit Hilfe eines auf der SSE basierenden Entscheidungsbaumverfahrens sprach jedoch gegen die Interpretation, dass einige oder alle gemeldeten Anomalien rein "spontan" auftraten, d. h. aufrichtig und unvorbereitet bzw. nicht präpariert waren. Die Zeitreihenanalyse deutete ebenfalls darauf hin, dass das Auftreten der anomalen Ereignisse eine leichte Krümmung aufwies, aber dieser augenscheinliche Schneeballeffekt war statistisch nicht signifikant und daher als zusätzlicher Beweis für eine psychologische Ansteckung unzureichend.

Schlussfolgerungen: Die veröffentlichten Details dieses Falles wurden als in hohem Maße übereinstimmend mit den Grundsätzen von HP-S beurteilt, was zur wachsenden Evidenz für das Modell von Laythe et al. beiträgt. Mehrere kontroverse Aspekte der anomalen Störungen verhinderten jedoch eindeutige Schlussfolgerungen über ihre letztendliche Natur. Wir erörtern diese Studie im Sinne einer praktischen Anleitung für die Verwendung des SSE-Tools und des HP-S-Modells anhand eines fünfstufigen Prozesses, um künftige Untersuchungen von Geistererscheinungen durch professionelle Parapsycholog:innen und Laienwissenschaftler:innen gleichermaßen anzuleiten.