

## Secondary Analysis of Sitter Group Data: Testing Hypotheses from the PK Literature<sup>1</sup>

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**Abstract.** Psychological researchers offer a schema for investigating group psychokinesis (PK). Sitter groups put their hands on a table and, after socialization, report PK experiences. Batcheldor, Lucadou, Richards, and McClenon devised theories regarding this process. This endeavor resulted in hypothesis testing and theory revision. Although theories diverge, observations support two basic arguments: (1) Most people inhibit PK, while a minority facilitate it (facilitation-suppression theory), (2) group participation involving artifacts, shared ideology, quantum processes, and rapport facilitates PK (interaction theory). The Society for Research on Rapport and Telekinesis (SORRAT), founded by the author/poet John G. Neihardt in 1961, kept experimental notes evaluating *levitation success* for over four decades. Available notes allowed testing four formal hypotheses and various exploratory hypotheses derived from the two theories. Although evaluations supported the formal hypotheses, exploratory findings: (1) supported the facilitation-suppression theory, (2) failed to support the interaction hypothesis, (3) supported elements within the original theories. A revised theory offers testable hypotheses and suggestions for future research.

**Keywords:** psychokinesis, sitter groups, artifact induction, ritual healing theory, pragmatic information model

Some psychological researchers have devised a schema for investigating group psychokinesis (PK). Sitter groups put their hands on a table and, after socialization, perceive that it moves through psychokinesis (PK). Batcheldor (1966, 1979, 1994) offered psychological explanations for this effect. Lucadou (1995, 2015) provided a quantum/information systems model explaining stages within group PK. Owen and Sparrow (1976) described an experiment supporting an alternative to Spiritualist explanations. The Society for Research on Rapport and Telekinesis (SORRAT) advocated rapport (close, harmonious relations among participants) as a means for inducing PK (Richards, 1982). McClenon (2018) discussed SORRAT as a form of shamanism and provided an evolutionary theory. Gimeno (2015) described a PK-gifted participant whose phenomena were affected by observers. These researchers shared assumptions derived from common empirical observations. Some people appeared more PK-conducive than others and special forms of socialization seemed to facilitate PK.

The present study tests hypotheses, derived from the psychological research literature, using SORRAT experimental records. John G. Neihardt, who founded SORRAT in 1961, assigned his graduate student, John Thomas Richards (Tom), the task of keeping experimental notes. The group reported anomalous

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rapping sounds, table movements, levitations, anomalous sensations, poltergeist phenomena, earthquake effects, and movement of objects in sealed containers. Following Neihardt's directives, Richards documented more than 850 SORRAT sessions over four decades. This data allowed testing four formal hypotheses and various exploratory hypotheses derived from two basic theories.

## Theory

Psychical research theories regarding group PK share an experimental paradigm (Batcheldor, 1966, 1979, 1984; Lucadou, 1995, 2015, McClenon, 1997, 2002, 2012, 2013, 2018; Owen & Sparrow, 1976; Richards, 1982). Researchers found that table-tipping groups, following similar procedures, reported equivalent PK experiences. Patterns associated with success resulted in theory revision.

Batcheldor's (1966, 1979, 1984) *artifact induction theory* established the secular sitter-group paradigm. Batcheldor hypothesized that people do not wish to acknowledge their role in producing PK (ownership resistance) and, as a result, their fear prevents its incidence (witness inhibition). He proposed that participants who push the table through unconscious muscular movements tend to attribute these movements to PK. As they grow used to this unexplained result, their fear of PK declines, allowing authentic PK to occur. This strategy was labeled *artifact induction*.

When Batcheldor found that his group's PK declined and could not be fully verified, he sought advice from Lucadou, whose quantum theory explained psi's limitations. Lucadou suggested relaxing experimental scrutiny, dimming the lights, and reducing photographic documentation (Lucadou & Wald, 2014). Batcheldor found this advice useful and recommended these suggestions to others. Brookes-Smith (1973) theorized that fraud, when undetected, stimulated belief, allowing authentic PK. Although he did not fully verify his group's PK as paranormal, his results supported the argument that fraud, an artifact, also facilitated PK experience.

Batcheldor's theory coincided with clinical observations. When phobic clients are exposed to small doses of fear-inducing stimuli, their fears tend to decline. Similarly, sitter-group participants exposed to artifacts/fraud reduce their fear of PK, allowing it to occur. Batcheldor (1994) later modified his theory to explain psi's limitations. He proposed that a *universal creative principle*, acting through the human mind, creates psi. Psi is defined as a rearrangement of normal reality, possible when ambiguous conditions allow *pockets of indeterminacy*. Sitter groups create these environments by achieving special forms of belief under circumstances that thwart full verification of the phenomena. Although these ideas are difficult to evaluate, Batcheldor's revised theory fits the idea that psi is prevented by cognitive mechanisms creating a consensual reality; in some situations, these mechanisms are disrupted.

Lucadou's (1995, 2015) Model of Pragmatic Information argues that quantum *entanglements* facilitate psi. *Entanglement*, an empirically verified phenomenon, occurs when pairs or groups of particles are created together, causing them to remain correlated, even when separated by large distances. Lucadou argued that quantum correlations facilitate psi, causing psi to have quantum characteristics such as the Zeno effect (observing a system prevents it from changing). In parallel fashion, psychical researchers find that poltergeist activity, PK group phenomena, and experimental psi decline when exposed to

observers, cameras, and security devices (Lucadou and Wald, 2014). Lucadou's arguments are a form of *observational theory* because PK/quantum effects are thwarted by scrutiny (Miller, 1978).

Owen and Sparrow (1976) devised a study implying that *secular* rather than *spiritual* mechanisms generate PK. Their PK group created a fictitious entity they named Philip, a mid-1600s English aristocrat who committed suicide after failing to intervene when his mistress was burned at the stake. After meditating together for a year, the group sought advice from Batcheldor, who suggested they lower the lights, sing together, and adopt a more playful attitude. After following this advice, the group began hearing raps from the table, seemingly from Philip. Information derived from the raps did not exceed Philip's fictional biography, suggesting that Philip's consciousness was limited to that of the group. Over time, the phenomena came to include anomalous table movements, levitations, dimming or brightening lights on command, and cool breezes across the table when requested. Although Philip's performances were documented on camera during two television programs, conditions were insufficient to fully verify the phenomena as paranormal (Laursen, 2016). After Philip's activity declined in 1977, other groups generated similar experiences using fabricated narratives. As with the Philip experiment, these groups did not fully verify their anomalous perceptions as paranormal (Owen & Sparrow, 1976; Sinn, 2012).

John G. Neihardt, SORRAT's founder, hypothesized that *rapport* facilitated sitter group phenomena. Neihardt concurred with J. B. Rhine's paradigm that scientific methods should be applied to psychical research. He assigned his graduate student, J. T. Richards, the task of note-taker. After Neihardt's death in 1973, Richards continued conducting SORRAT experimental sessions for over four decades. SORRAT differed from Batcheldor/Philip groups in that participants varied from week to week and included some with Spiritualist beliefs. Richards (1982, 1984) accepted Neihardt's scientific orientation and Batcheldor's artifact induction theory.

McClenon's (1997, 2002, 2018) *ritual healing theory* explained anomalous experiences and the origin of religion within an evolutionary model. The theory argued that random genetic mutations, coupled with stress/trauma, could result in sporadic disruptions of normal consciousness (Keller & Miller, 2006). These interruptions generate intermittent psychotic, schizotypal, unusual, anomalous, mystical, and shamanic perceptions, most of which are non-pathological. Unusual/anomalous experiences (apparitions, paranormal dreams, waking ESP, PK, out-of-body and near-death experiences, synchronicity, spiritual healing) generated powerful beliefs in spirits, souls, life after death, and magical abilities, the ideological foundations of shamanism (McClenon, 2002; Winkelman, 2010). People prone to these experiences, present in every society, were potential shamans, whose rituals provided hypnotic/placebo benefits to audiences. Because shamanic propensities are correlated with the variables selected by ritual healing (absorption, dissociation, hypnotic suggestibility, propensity for anomalous experience), shamanism generated an evolutionary cycle, selecting "shamanic" genes shaping the human capacity for religion. This theory is supported by studies finding that anomalous experiences are correlated with absorption, dissociation, and hypnotic suggestibility (Cardeña, Lynn, & Krippner, 2017; Cardeña & Tehune, 2014; McClenon, 2002) and location of genotypes influencing absorption (Ott, Reiter, Henning, & Vaitl, 2005). Elements within this theory have been evaluated through questionnaire surveys, genetics research, content analysis of interview data, field studies, and participant observation (Cooper & Thalbourne, 2005; McClenon, 2000a,b, 2002, 2005, 2012, 2013, 2018).

The ritual healing theory provides hypotheses pertaining to sitter groups: (1) Some participants have greater propensity for PK experience than others. Those scoring higher on measures of absorption, dissociation, transliminality, and history of anomalous experience are more likely to become core members and to experience group PK. (2) PK group phenomena tend to support shamanic beliefs and spiritual healing. (3) Some people benefit more from spiritual healing than others. Those benefiting are predicted to score higher on measures of absorption, dissociation, transliminality, and history of anomalous experience.

Core elements within psychical research theories support two basic arguments amenable to testing using the SORRAT data: (1) The *facilitation-suppression theory* argues that a minority of people facilitate PK while most suppress it. (2) The *interaction theory* hypothesizes that special forms of socialization facilitate PK (artifact induction, fraud, ambiguity, rapport, and tolerance of dissociation/absorption). These hypotheses coincide with Gimeno's (2015) observation that PK associated with a specific individual was affected by observers. Although not fully articulated, these theories imply that consciousness affects (possibly constructs) reality and that anomalous perceptions (psi) constitute deviations from normal reality that, over time, are rectified (Batcheldor/Lucadou theories).

## Hypotheses

Three formal hypotheses regarding group PK were established before evaluating the data:

Hypothesis 1, derived from the *facilitation-suppression theory*, predicted that SORRAT group size would be significantly and inversely correlated with levitation success since larger groups are more likely to contain people thwarting PK (Pearson correlation,  $p < .01$ ). Exploratory analysis would investigate factors thought to affect the hypothesized correlation ( $p < .05$ ). A table categorizing group size and levitation success revealed optimum group size.

Hypotheses 2a and 2b, derived from the *facilitation-suppression theory*, predicted that individual levitation success scores of the 10 SORRATs attending the most sessions would have greater variance than expected by chance ( $p < .01$ ) with distribution skewed toward levitation failure (cumulative binomial distribution,  $p < .01$ ).

Hypothesis 3, derived from the *interaction theory*, argued that participation (number of sessions attended) would be positively correlated with individual rate of levitation success since attendance was hypothesized to facilitate success ( $p < .01$ ).

Two planned exploratory analyses would investigate relations between location, time period, and levitation success ( $p < .05$ ). Further exploratory analyses ( $p < .05$ ) included: (1) determining which combinations of SORRATs had the highest probabilities of success, (2) testing *facilitation-suppression* hypotheses regarding successful combinations of participants, and (3) evaluating an *interaction hypothesis* that predicts that participants attending 12 or more sessions would have lower first-half success rates than second-half rates due to the PK-conductive effects of interaction ( $t$ -test,  $p < 0.05$ , one tail).

These hypotheses do not preclude skeptical arguments. Skeptics suggest that non-believers, more

likely in larger groups, reduce fraud (hypothesis 1). If some participants cheated, their levitation success rates would be greater than those of non-cheaters (hypothesis 2a,b). These arguments do not replace the study hypotheses since: (1) Fraud is predicted to contribute to authentic, but unverified, anomalous experiences. (2) Within the context of sociological analysis, PK is regarded as an experience rather than a verified paranormal phenomenon. PK is *sociologically* real in that it has real effects on those who experience it.

Although the analysis cannot resolve believer/skeptics issues, ethnographic evidence pertains to this controversy. Participant observation uncovered about 10 accusations of fraud (McClenon, 2018). All allegations were related to ambiguous, silly, clumsy, or absurd behaviors rather than robust paranormal claims. For example, participants reported seeing Richards make raps with his knuckles or attempt to simulate a poltergeist event. Although he denied these actions, table-tipping seems to reward dissociative people who “prime-the-pump” through artifact induction (SORRAT Table-Tipping 1, 2, 3, Appendix A, shows participants probably pushing the table). SORRATs took few precautions regarding typical methods for fabricating sitter group PK (Mulholland, 1938).

SORRAT experiences included *trickster phenomena*, personifications of an archetype, found all over the world, involving boundary crossing, irrationality, fakery, and instability (Hansen, 2001). Such events are not unusual in the psychical research and Spiritualist literature (Batchelder, 1994; Haraldsson and Gissurarson, 2015). For example, a 1907 attempt to photograph a spirit associated with the Icelandic medium Indridi Indridason (the first experiment of its kind) resulted in an image that implied fraud (a bed sheet draped over a pole). Nevertheless, this careful investigation concluded that much of Indridason’s phenomena were paranormal (Haraldsson & Gissurarson, 2015).

The present research strategy cannot determine the degree that SORRAT phenomena involved authentic PK, trickster effects, or fraud. Study methods combined sociological and psychical research paradigms resulting in findings that pertain to both psychical research and the sociology of religion.

## Methods - SORRAT Experiment Records

As part of a sociological study, McClenon (2018) attended SORRAT sessions in 1981, 1982, 1983 (SORRAT Experiments, 1983, Appendix A), 1986, 1988, 1992, 1996 (Talking to the Spirits: A Pilgrimage, Appendix A), 2001 (How Shamanism Began, Appendix A), 2002, and 2004. In 2017, he assembled available SORRAT experiment notes, written by J. T. Richards, with permission of his widow, Elaine Richards. These documents describe over 850 experiments spanning 1966-2007, with notes missing from some periods. Available notes were categorized into four time-periods: (1) Nov. 27, 1966 - Sept. 10, 1972, (2) Nov. 3, 1974 - June 3, 1977, (3) June 6, 1977 - Oct. 23, 1983, and (4) Aug. 22, 1999 - Aug. 22, 2007. These dates demarcate changes in Richards’ residence, gaps in the notes, and the date William Edward Cox (the researcher sent by J. B. Rhine) began his full-time investigation of SORRAT (June 6, 1977).

## Methodological Weaknesses

Although Richards listed experimental objectives before each session, he lacked clear criteria for evaluating rapping sounds, PK in sealed containers, entity and trance message ESP, and poltergeist events. As a result, the present study restricted its focus to the 729 sessions involving levitation. Richards’ criteria for evaluating levitation outcome were: (1) Failure: The table did not come off the floor. (2)



Partial success: The table came off the floor, but not all hands were removed, or the height and time of levitation were insufficient to establish the event as paranormal. (3) Success: The table rose sufficiently, for enough time, with hands off, so that Richards believed it levitated paranormally.

Richards did not consistently document visibility during experiment sessions. Light conditions varied since participants found that reducing visibility tended to enhance the phenomena. During periods when the group experienced few levitations, experiments were conducted in complete darkness. Richards lacked criteria for evaluating levitation success during these sessions and his belief in PK probably caused him to evaluate ambiguous cases as successes (some SORRATs suggested that his success rates should be reduced by as much as 30%). His notes included phrases (the table moved) in situations that skeptics would interpret differently (people pushed the table unconsciously). Although not fully reliable, his system distinguished sessions having low emotional impact from those with high impact, making it suitable for sociological analysis.

Richards' notes indicate that he went into "trance" during 68 of the 708 levitation sessions he attended (10%). Trance is defined here as a sleeplike altered state of consciousness, with partly suspended animation, diminished sensory and motor activity, and subsequent lack of recall. On these occasions, Richards based his notes on interviews and session audiotapes. Although we cannot determine how often he went into trance without realizing it, SORRATs stated that his trances were rare (see John Hunt's comments, Appendix B). The notes indicated that his last trance during an experiment was in 1981.

### **Methodological Strengths**

SORRATs stated that their memories corresponded with events described in Richards' notes (see Appendix B). Elements within Richards' personality support belief in the usefulness of his notes. He was perceived as methodical, stable, and persistent and his notes reflected these qualities (consistent, complete, with illustrative diagrams). Because of his deep respect for J. G. Neihardt, he was highly motivated to keep accurate records; he used the same format for over four decades.

Robust SORRAT phenomena were witnessed by hundreds of participants. Many believed they experienced authentic PK. Although his evaluations do not establish the paranormal quality of levitations, his records seem suitable for sociological analysis. Richards' accounts allow insights into the ways ancient peoples came to believe in spiritual forces (McClenon, 2018).

### **Data entry**

Data regarding the 729 sessions with levitation evaluations were entered on a spreadsheet. These sessions involved 315 people in groups varying between 1 to 25 participants. Coded variables included experiment date, location, names of participants, number of participants, evaluation of levitation outcome, evaluations of non-levitation outcomes (sealed box experiments, rap communications, other poltergeist phenomena, trance speaking), "attempt to photograph levitating object," and "individuals in trance during the session."

### **Statistical Analysis**

Chi square tests ( $\chi^2$ ) are commonly used for testing relations between nominal and ordinal (categorical) variables; these tests were appropriate for hypotheses 2 and 3. Hypothesis 1 involved hierarchi-

Table 1  
*Location and Levitation Outcome*

<i>Location</i>	<i>Failure</i>	<i>Partial Success</i>	<i>Success</i>	<i>Total</i>
Columbia (John Neihardt)	39 (37%)	15 (14%)	52 (49%)	106 (100%)
Columbia (Tom Richards)	13 (25%)	15 (29%)	23 (45%)	51 (100%)
Cape Girardeau (Tom Richards)	40 (37%)	11 (10%)	58 (53%)	109 (100%)
Centralia (Tom Richards)	5 (25%)	5 (25%)	10 (50%)	20 (100%)
Rolla (Tom Richards)	101 (32%)	35 (11%)	177 (56%)	313 (100%)
Rolla (Harold)	10 (59%)	3 (18%)	4 (23%)	17 (100%)
Other people's homes	42 (37%)	22 (19%)	49 (43%)	113 (100%)
Totals	250 (34%)	106 (14%)	373 (51%)	729 (100%)

Note. Name in parenthesis indicates residence where experiment occurred

cal nesting of data (the same individuals took part in groups of varying sizes). Because nesting violates chi square assumptions, evaluation of hypothesis 1 required a Pearson correlation ( $r$ ).

Chi square tests are sensitive to sample size and can achieve significance even through relations are weak (statistically significant but not socially significant). In response to this possibility, Cramer's  $V$  values, measuring relation strength, were calculated for each  $\chi^2$ . Although guidelines regarding relation strength vary among studies, Cohen (1988) offers the following criteria (for 3 column data used in the present study): .07-.20 (weak); .21-.35 (moderate); > .35 (strong). Interpretation, or adjustment, of these values varies with theoretical context. Since the study hypotheses do not predict strong relations, Cohen's criteria could be relaxed. Exploratory analyses using Pearson  $r$  and t-tests avoid problems associated with chi square and large sample size. Although the author strongly believes in psi, SORRAT phenomena tend to be highly ambiguous, making individual observations uncertain (McClenon, 2018).

## Results

A planned preliminary analysis compared levitation outcomes at six locations (see Table 1). The notes revealed levitation success rates of 49% at Skyrim (Neihardt's home), 45% at Richards' Columbia home, 53% at his Cape Girardeau home, 50% at his Centralia home, 56.5% at his Rolla home, 23.5% at Harold's home in Rolla, and 43% at other people's homes,  $\chi^2(12, n = 729) = 27.1, p < .0076, V = .14$ .

Table 2  
*Time-Period and Levitation Outcome*

<i>Time-period</i>	<i>Failure</i>	<i>Partial Success</i>	<i>Success</i>	<i>Total</i>
1966-1972	87 (32%)	48 (17%)	140 (51%)	275 (100%)
1974-1977	32 (36%)	17 (19%)	40 (45%)	89 (100%)
1977-1984	58 (59%)	13 (13%)	28 (28%)	99 (100%)
1999-2007	73 (27%)	28 (10%)	165 (62%)	266 (100%)
Totals	250 (34%)	106 (14%)	373 (51%)	729 (100%)

Table 2 indicates that SORRATs experienced a 51% success rate in 1966-1972, 45% in 1974-1977, 28% in 1977-1984, and 62% in 1999-2007,  $\chi^2(6, n = 729) = 44.2, p < .00001, V = .17$ .

## Discussion

SORRAT history allows insights regarding relations between location, period, and levitation success. SORRAT experienced two preparatory phases (Sept.-Dec. 1961 and Sept.-Dec. 1965), parallel to those of the Batcheldor/Philip groups. At first, originating groups experienced no phenomena, but, after meeting weekly for three months, they perceived rapping sounds, table movements, and eventually levitations. Although Richards' book (1982) described these events, the original notes were not available.

The earliest existing notes (Nov. 27, 1977) illustrate the types of information Richards recorded (place, participants, date, time of start and finish, phenomena experienced, entities present, photographs attempted, reactions to photographs, people in trance, diagram of anomalous movements). He and his wife, Elaine, began the experiment at 7:05 PM in their Columbia, MO, apartment by placing their hands on a table. After half an hour, raps, claiming to be Elaine's grandfather, began sounding from front room, kitchen, and bathroom floors. The table began vibrating, coldness filled the room, and the table "walked" to the center of the room. When the table smoothly rose above their heads, they removed their hands, and it hovered, about two feet from the ceiling, obviously levitating. Richards photographed it and it descended gently to the floor. He went into an altered state and did not speak coherently. The experiment ended at 9:50 PM. His notes included a schematic drawing showing locations of participants, rapping sounds, table movements, furniture, and flight path. Although not present in this narrative, Richards often noted psychological factors, such as rapport, that he thought influenced experimental outcomes.

Exploratory analyses suggested that psychological factors were more predictive of success than location or period. From Nov. 27, 1966 to Aug. 8, 1967, success rates were higher at Skyrim (61%) than other places (42%). This was expected since Neihardt, the founder, was central to the group. Between Sept. 12, 1967 and Oct. 30, 1968, while Richards was in Cape Girardeau, his groups attained levitation success rates (62%), and other robust phenomena, equivalent to those at Skyrim. When he invited



skeptical professors to participate (Nov. 4, 1968 – March 30, 1969), the success rate fell to 29%. The spirits referred to this dearth of levitation success as “the gap” and attributed the consistent failures to electromagnetic forces. On Easter Sunday, April 6, 1969, powerful poltergeist events foretold of a change in fortune. Afterward, SORRATs experienced a 61% success rate (April 9, 1969 – July 1, 1971). This development might be attributed to unknown factors, to fraud, to regression to the mean [although improbable considering the comparison of before/after Easter,  $\chi^2(2, n = 105) = 11.7, p = .003, V = .24$ ], or to Marge (thought to be PK-conductive), who joined the group on April 9, 1969.

In late 1966, Skyrim participants experienced a marked change in success rates. Between Dec. 2, 1966 - Oct. 29, 1976, the rate was 62.5%; afterward (Nov. 5, 1976-Dec. 20, 2005), the rate declined to 26%. Explanations included Neihardt's death in 1973, W. E. Cox's (1969-1994) focus on controlled experiments, decreased rapport at Skyrim after visitors were restricted, and occult or unknown variables.

Batcheldor/Lucadou theories would predict that reduced scientific scrutiny should facilitate PK. Skyrim history failed to support this hypothesis. After June 24, 1977, Cox was prohibited from attending Skyrim sessions, but Skyrim's success rate remained low (36%). Harold's participation also had an unexpected consequence. SORRAT conducted 17 sessions at Harold's home in Rolla in 1979. Low success rates (23.5%) could be attributed to Harold's mixed attitudes toward SORRAT. Harold had hoped that SORRAT might help him deal with his poltergeist, but, instead, SORRATs sought to elicit it. These events imply that psychological explanations for levitation success were generally, but not always, in harmony with actual outcomes.

It is difficult to quantify the degree that rapport contributed to levitation success. Most SORRATs perceived that Cox's presence reduced both rapport and subsequent phenomena. Although Cox believed in the authenticity of the phenomena, he felt that investigating séance-room claims were fruitless due to uncontrolled conditions. Richards encouraged Cox to attend sessions since he believed that scientific investigation was central to SORRAT's purpose and that no one should be denied permission to attend SORRAT sessions.

Beginning in 1978, Cox constructed locked and sealed glass boxes with micro-switches in their floors. These devices became known as *mini-labs*. The micro-switches, activated by movement inside the box, triggered a film camera aimed at the box. Between 1979 and 1982, Cox's mini-lab filmed about 15 rolls of 8 mm films, most of which were filmed in Richards' basement. About 5% of the frames showed ostensible PK (Cox, 2004; Richards, 1982, p. 179; *SORRAT Mini-lab experiments*, Appendix A). Films showed objects moving about inside the box and exiting through the glass face, papers spontaneously bursting into flames, and balloons inflating and deflating while their necks are tied. Cox's films had trickster qualities since objects sometimes flashed from one place to another without a transition phase, suggesting stop-action photography.

Cox's experimental efforts were severely criticized at a meeting of the Parapsychological Association in August 1981. An experiment conducted by the Foundation for Research on the Nature of Man generated evidence suggesting fraud (crude tampering associated with spirit handwriting; Hansen & Broughton, 1983). The McDonnell Laboratory for Psychical Research constructed a more sophisticat-

ed mini-lab but this device failed to replicate Cox's films (Phillips & McBeath, 1983). On October 23, 1983, some amateur psychical researchers participated in a Skyrim experiment and one later circulated ambiguous photographs that implied unconscious fraud (two participants were pushing on the table so that together they held it up). Although Richards appeared to be in "trance" (not mentioned in his notes), SORRATs were shocked by the implications of these events.

In 1981, McClenon began his sociological study of SORRAT. Participants showed him many photographs of levitating tables. All expressed certainty that the phenomena were authentic. A questionnaire survey generated 23 responses describing unexplained raps, levitations, poltergeist phenomena, and earthquake effects (McClenon, 2018). His impression was that the 1981-1983 experimental failures affected SORRAT morale, reducing anomalous phenomena. Richards, who considered himself a researcher, was distressed that the parapsychologists treated him like a laboratory guinea pig rather than a colleague. Formal mini-lab experiments ended.

SORRAT notes from 1984-1999 are not available. During this period, McClenon visited SORRAT in 1986, 1988, 1992, and 1996. He offered the entities opportunities to write messages under uncontrolled conditions. As a result, the entities corresponded with dozens of SORRATs. Although rapping sounds and levitations were less frequent, the group continued meeting. Spirit letter writing became robust. In 1996, Richards' son Ivan invited his college friends to participate and some, such as Sean, conducted successful sealed container experiments (*Talking to the Spirits: A Pilgrimage*, Appendix A). In 1999, SORRAT groups experienced high success rates. The 1999-2007 period (success rate: 62%) was characterized by fewer new people (9.5% attended only one session compared to 49% overall), reduced scientific scrutiny (no professional parapsychologists), stable groups (only 30 people attended, compared to 315 overall), successful larger groups (Ivan and his friends), and higher rates of success among groups consisting only of Tom/Elaine and Tom/Elaine/Ivan.

SORRATs perceived the phenomena as sporadically waxing and waning. Exploratory analyses revealed 2 strings of 6 consecutive successes, 5 strings of 7 successes, and single strings of 10, 11, and 15 successes. There were 2 strings of 6 failures and 1 string of 7 failures. Assuming a 50% success rate, the probability of SORRAT experiencing these results by chance was less than .001.

In summary, exploratory analyses implied that: (1) Time period and location were only slightly predictive of levitation success. (2) Time period had nonsignificant greater influence on levitation success than did geographical location. (3) Time period and location effects could be explained by psychological variables. (4) Levitation successes were associated with stable groups, fewer new members, and reduced scientific scrutiny (except for Skyrim's experience).

### **Hypothesis 1- Facilitation-suppression hypothesis**

Hypothesis 1 predicted that large groups had lower success rates due to a tendency for some participants to thwart PK. The correlation between group size and levitation success was significant, supporting the hypothesis,  $r = -.11$ ,  $n = 729$ ,  $p = 0.0009$ , one tailed.

Table 3 indicates that two-person groups had the highest success rate (57%). Three-person groups' success rate was 56%. Success rates tended to decline as group size increased except for the 6-person

Table 3  
*Group Size and Levitation Outcome*

<i>Group Size</i>	<i>Failure</i>	<i>Partial success</i>	<i>Success</i>	<i>Total</i>
2	37 (24%)	29 (19%)	87 (57%)	153 (100%)
3	70 (31%)	27 (12%)	125 (56%)	222 (100%)
4	42 (42%)	13 (13%)	44 (44%)	99 (100%)
5	27 (41%)	8 (12%)	31 (47%)	66 (100%)
6	22 (35%)	9 (14%)	32 (51%)	63 (100%)
7	14 (34%)	9 (22%)	18 (44%)	41 (100%)
8	7 (24%)	7 (24%)	15 (52%)	29 (100%)
9	11 (61%)	1 (5%)	6 (33%)	18 (100%)
10-11	6 (35%)	3 (18%)	8 (47%)	17 (100%)
12-15	15 (75%)	0 (0%)	5 (25%)	20 (100%)
Total	251 (34%)	106 (15%)	371 (51%)	728 (100%)

rate of 51% and the 8-person rate of 52%. Ten-eleven-person groups achieved a success rate of 47%, while 12-15-person groups achieved a rate of 25%.

Exploratory analyses found that particular people affected group size-levitation outcome correlations. Two-person groups consisting of Tom/Elaine (59%) were far more successful than other 2-person groups (25%). Three-person groups with Tom/Elaine/Ivan were more successful (61%) than other 3-per-

son groups (49%). The success rates of 6 to 8-person groups with Ivan and his friends (82%) were greater than groups lacking these participants (44%). These findings imply that group membership, rather than size, determined outcome.

Group size/success correlations varied across time periods. During the 1966-72 period, small groups out-performed larger groups. The strength of this correlation declined during later eras and, between 1999-2007, larger groups (Ivan's friends) were more successful than smaller groups. Group size/success correlation varied among locations. Skyrim's large groups were particularly unsuccessful during the final era, a time when the 6-8-person Rolla groups (Ivan's friends) were successful.

Richards' notes attributed levitation outcomes to rapport, which varied among locations, periods, and group sizes (see *How Shamanism Began*, Appendix B for discussion of rapport among the original SORRATs). Rapport was thought to be lower in later Skyrim groups (often 10-25 participants) but higher in Ivan's successful groups, which never exceeded 8. Richards' notes imply close linkage between levitation outcome and rapport; SORRAT's longevity was thought to verify the rapport hypothesis. This hypothesis was not appraised in the present study since *rapport* was not consistently or quantitatively evaluated. Psychological research literature reports many levitations before large audiences without mentioning rapport (St. Joseph of Cupertino, Jonathan Koons, and Indridi Indridason; Grosso, 2016; Haraldsson and Gissurarson, 2015).

### **Hypothesis 2 (a, b) – Facilitation-Suppression Hypothesis**

Table 4 lists levitation evaluations of the 10 SORRATs attending the most sessions. Hypothesis 2a predicted that levitation outcomes would have a non-normal distribution. Ivan achieved the highest rate (64%) while Ed Cox had the lowest (12%), supporting this hypothesis,  $\chi^2(18, n = 728) = 64.0$ ,  $p < .000001$ ,  $V = .13$ . Hypothesis 2b predicted that the distribution would be skewed toward levitation failure. Of the 315 participants, only 119 (38%) scored above average (cumulative binomial probability  $p < 0.00001$ ), supporting hypothesis 2b. These findings fit *facilitation-suppression* predictions.

An exploratory analysis investigating levitation outcomes for the next 10 SORRATs based on sessions attended showed wide variations in success rates (Steve: 26%; Sean: 79%). Chi square cell values were insufficient to calculate statistical probability. Sean's success rate might be compared to the 87.5% "positive results" attributed to one of Batchelder's participants (Wehrstein, 2018). Nine participants were identified as PK-conducive based attitudes and early psi experiences (McClenon, 2018; Richards, 1982: pp. 77-102). These individuals' success rates were significantly greater than rates of other participants (experiencers: 53%; others: 45.2%;  $\chi^2(2, N = 315) = 20.73$ ,  $p = .00062$ ,  $V = .18$ ). This exploratory result supported the facilitation-suppression hypothesis.

Among the 36 participants, attending 12 or more sessions, there were two married couples with one spouse considered more of a believer than the other (believers: Joe, Ann; others: Edda, Roger). Varying attendance rates resulted in different outcome rates. Believers' average success rate was significantly greater than others' rate (believers: 51%; others: 39.6%;  $\chi^2(2, n = 184) = 8.47$ ,  $p = .014$ ,  $V = .15$ ).

Richards' notes described a few occasions when the table moved robustly when a new person

Table 4  
*Individual Levitation Outcomes*

<i>SORRAT member (years of participation)</i>	<i>Failure</i>	<i>Partial success</i>	<i>Success</i>	<i>Total</i>
Tom Richards (1966-2007)	236 (33%)	103 (14%)	369 (52%)	708 (100%)
Elaine Richards (1966-2007)	222 (34%)	93 (14%)	341 (52%)	656 (100%)
Ivan Richards (1999-2007)	55 (25.)	23 (11%)	139 (64%)	217 (100%)
Joe M. (husband of Edda) (1966-1983)	30 (30%)	16 (16%)	54 (54%)	100 (100%)
Alice T. (1967-2005)	38 (40%)	15 (16%)	42 (44%)	95 (100%)
Ann H. (wife of Roger) (1969-1977)	19 (34%)	6 (11%)	30 (54%)	55 (100%)
Vern M. (1970-1978)	16 (33%)	9 (19%)	23 (48%)	48 (100%)
Maria H. (1976-1981)	22 (50%)	7 (16%)	15 (34%)	44 (100%)
Ed Cox (1969-1983)	32 (76%)	5 (12%)	5 (12%)	42 (100%)
Dick C. (1975-1979)	21 (51%)	3 (7%)	17 (41%)	41 (100%)
Totals	691 (33%)	280 (15%)	1035 (52%)	2006 (100%)

first touched it. These participants later achieved high success rates. In other cases, the table stopped moving when someone arrived or became more active when they departed, implying PK-suppression.

In sum, an exploratory analysis suggested variables predictive of levitation success: previous history of spontaneous anomalous experience coupled with positive attitude, belief in PK, and reactions of the table during the person's first session.

### **Hypothesis #3 - Interaction Hypothesis**

Hypothesis 3, the *interaction hypothesis*, predicted that people who attended more sessions would experience higher levitation success rates due to exposure to processes facilitating PK. Table 5 reveals that the three participants attending the most sessions (Tom, Elaine, and Ivan) achieved levitation success rates varying from 64% to 52%. Those attending 48-100 sessions achieved a rate of 50%. Rates of success declined as attendance declined. Those attending a single session had an average levitation success rate of 36%,  $\chi^2(16, n = 3231) = 96.2, p < 0.00001; V = .12$ .

Although these results support the *interaction hypothesis*, an alternative explanation for the weak correlation was that PK-suppressive people tended to drop out while PK-facilitative people remained. Evidence supporting this argument includes: (1) Among all participants, 76% dropped out after 4 sessions. These people had only a 36% success rate. (2) Ethnographic evidence implied that SORRAT participation did not reduce ownership resistance. Videotapes portray Batcheldor and Philip groups with all fingers fixed on the table surface while many SORRATs allowed the table to slide under their fingers (*SORRAT Table Tipping 1, 2, 3; Appendix A*). SORRATs did not equally share responsibility for moving the table. Interviews indicated that many attributed the phenomena to core members. (3) Core members attributed the phenomena to spirits and/or magical forces. Their experiences differed from those reported by peripheral members. Core members tended to describe induction through profound early experience. Black Elk induced Neihardt, who induced Tom Richards, who induced Elaine, Leroy, and Ivan, who induced Sean. All felt compelled to believe by early mentor/group experiences, then witnessed group PK without the mentor, and, also witnessed PK while alone. None described a process of artifact induction requiring increasingly robust phenomena. Their final success rates were governed by the degree they shared sessions with average people. Those with lower exposure (John Neihardt, Leroy, Ivan, Sean) had a 66% average success rate; those with higher exposure (Tom, Elaine, and Joe) averaged 52% ( $\chi^2(2, n = 1560) = 17.1, p = .0002, V = .07$ ). This exploratory evidence supports the facilitation-suppression hypothesis.

### **Exploratory hypotheses**

An exploratory investigation focused on high levitation success rates of specific individuals and groups. Tom and Elaine, without others, achieved a 59% success rate, but, when joined by others, this rate declined to 50%,  $\chi^2(2, n = 649) = 9.6, p = .008, V = .09$ . Tom without Elaine had a success rate of 53% but Elaine's rate, without Tom, was only 22%. This evidence coincides with the speculation that Tom Richards facilitated PK, a small percentage of people (such as Elaine) enhanced his capacity, and many people suppressed his PK.



Table 5  
*Levitation Outcome by Number of Sessions Attended*

<i># of sessions</i>	<i>Failure</i>	<i>Partial success</i>	<i>Success</i>	<i>Total</i>	<i># of people (names)</i>
708	236 (33%)	103 (14%)	369 (52%)	708 (100%)	1 (Tom Richards)
657	222 (34%)	93 (14%)	341 (52%)	656 (100%)	1 (Elaine Richards)
217	55 (25%)	23 (11%)	139 (64%)	217 (100%)	1 (Ivan Richards)
48-100	103 (35%)	46 (15%)	149 (50%)	298 (100%)	4 (Joe, Alice, Ann,,Vern)
28-47	162 (44%)	48 (13%)	158 (43%)	368 (100%)	10
12-27	139 (40%)	58 (14%)	147 (43%)	344 (100%)	20
5-11	116 (46%)	38 (15%)	98 (39%)	252 (100%)	38
2-4	126 (54%)	23 (10%)	85 (36%)	234 (100%)	86
1	83 (54%)	16 (10%)	55 (36%)	154 (100%)	154
Totals	1242 (38%)	448 (14%)	1541 (48%)	3231 (100%)	315

Exploratory analyses identified psi-conductive individuals. Sean (79%), Ivan (64%), John Neihardt (65%), Leroy (74%), Marge (63%), Jose (56%), Ann (54.5%), Joe (54%) had higher success rates than did Tom and Elaine (52%). Groups containing Tom, Elaine, and Marge achieved a rate of 60%. Groups with Tom, Elaine, and Leroy had a rate of 73%. Groups lacking Marge or Leroy achieved a success rate of 47%. Tom/Elaine/Ivan, without others, had a success rate of 61%; this rate increased to 85% when they were joined by Ivan's friends, which included Sean and Jose ,  $\chi^2 (2, n = 191) = 7.3, p = .03, V = .14$ . Certain combinations of people experienced particularly high rates of success. Groups containing Tom, Elaine, Marge, Ann, but not Ann's husband Roger (considered inhibitory), achieved a success rate of 73%.

Groups containing Tom, Elaine, Ivan, and Sean achieved a 90% success rate. The Tom/Elaine/Ivan/Sean group, on the five occasions without others present, achieved a 100% success rate.

Specific four-person groups seemingly facilitated success among those with moderate PK-capacity. For example, Vern (overall success rate: 48%) experienced levitation success more frequently with Tom/Elaine/Marge/Ann (86%) than among other groups (41.5%). He also experienced a high success rate with Tom/Elaine/Leroy (60%). Exploratory analyses suggested that (1) certain combinations of people are particularly PK-conducive, (2) being among these groups increases the probability of success for those with average rates.

The notes allowed examination of all sessions attended by Marge and Leroy. Analysis of their experiences provided insights regarding PK-conducive people. The interaction theory predicted increasing success rates over time since fear of psi should decline with participation. Marge witnessed four levitations during her first session, all of which were photographed with full illumination; once the table rose above everyone's head. Marge saw an apparition of an elderly Native American woman. During Leroy's first session, participants communicated with raps, saw a mist, and felt chill air close to the table. His next six sessions were levitation successes, some of which (like Marge's first session) were extremely robust. Leroy acquired a reputation for producing PK without Tom being present (see Vern's comments, Appendix B). Marge's and Leroy's histories did not include a gradual induction phase but suggest they were PK-conducive before joining SORRAT.

### Evaluation of Planned Exploratory Hypotheses

An exploratory hypothesis compared 37 first half success rate to second half rate (all those attending 12 or more sessions). The *interaction hypothesis* predicted that second half rates should be greater since socialization was thought to bring success. Lucadou's theory would predict the opposite result; second half rates should be lower due to quantum processes. In harmony with the quantum prediction, success rates *declined* 7%, on average, between first and second half of individual participation, a statistically significant difference,  $T = 2.226$ ,  $df = 35$ ,  $p = .03$ .

The correlation between first half rates and second half rates was also significant,  $r = 0.45$ ;  $n = 37$ ,  $p = .005$ . Further analyses revealed that, among this group, success rates during the first four sessions were correlated with rates for all later sessions,  $r = .58$ ,  $n = 37$ ,  $p = .0002$ . These results supported the facilitation-suppression hypothesis.

Exploratory analyses of extreme cases provide tentative insights. Rate improvements, experienced by Lorna (12.5% to 57%), Max (10% to 40%), Judy (25% to 46%), and Ann (48% - 61%) could be attributed to: (1) regression towards the mean, (2) interaction with the group, (3) other psychological processes, (4) unknown processes. Max and his wife Lorna witnessed many anomalous events during their early SORRAT participation, followed by failures during "the gap" (when Judy joined the group), and then a further series of successful experiments. These patterns do not support any specific explanation. Ann's success rate increased when her husband, known for his negative attitude, reduced his attendance. With her husband, her rate was 37.5%; without him, it was 67%. This pattern supported the facilitation-suppression hypothesis.

Table 6  
*Levitation Outcomes and Combinations of Participants*

<i>Participants</i>	<i>Failure</i>	<i>Partial success</i>	<i>Success</i>	<i>Total</i>
(1)Tom, Elaine (no one else present)	33 (23%)	26 (18%)	85 (59%)	144 (100%)
(2)Tom, Elaine, others	184 (36%)	67 (13%)	254 (50%)	505 (100%)
(3)Tom without Eline (with others)	18 (31%)	9 (15%)	31 (53%)	58 (100%)
(4)Elaine without Tom (with others)	6 (67%)	1 (11%)	2 (22%)	9 (100%)
(5)Tom, Elaine, others (excluding: Tom/Elaine/Marge and Tom/Elaine/Leroy combinations)	174 (39%)	62 (14%)	210 (47%)	447 (100%)
(6)Tom, Elaine, Marge, others	12 (30%)	4 (10%)	24 (60%)	40 (100%)
(7)Tom, Elaine, Leroy, others	2 (13%)	2 (13%)	11 (73%)	15 (100%)
(8)Tom, Elaine, Ivan, no others	44 (28%)	17 (11%)	96 (61%)	157 (100%)
(9)Tom, Elaine, Ivan, others	4 (12%)	1 (3%)	29 (85%)	34 (100%)

### Trickster Characteristics

SORRAT phenomena revealed capricious, actively-evasive, trickster qualities (Hansen, 2001; McClenon, 2018). Although the spirits claimed to be discarnate entities, they did not fully authenticate themselves. Phenomena were most frequent in conditions involving darkness, ambiguity, and lack of scrutiny. Photographic attempts were often thwarted in strange ways, as if the phenomena could calculate camera angles so that resulting images had reduced evidential quality; poltergeist investigators report similar observations (e.g., Healy & Cropper, 2014). Batchelder (1994) attributed these patterns to a *Universal Creative Principle* that reacts hypnotically to observers' belief or skepticism. As a result, PK is shaped by its witnesses, a characteristic that may result in entranced participants engaging in fraud.

Kennedy (2003) notes trickster elements within all psi research. Parapsychologists report not only decline effects, but unpredictable, significant reversals of direction of psi, with unintended secondary or internal effects. Psi sometimes seems replicable but then becomes actively evasive. He offers four general theories: (1) The extreme polarization of attitudes toward psi results in phenomena mirroring both

sides (parallel to Batcheldor's argument). (2) Psi's possible function is to induce a sense of mystery and wonder (parallel to the ritual healing theory). (3) Psi's possible role is to influence random processes to enhance diversity (random genetic mutations in the ritual healing theory). (4) Psi reflects a higher consciousness, beyond human understanding (Batcheldor's *Universal Creative Principle*). Although difficult to evaluate, these ideas are not mutually exclusive; they encourage speculative thinking and further theory development.

## General Discussion

A synthesis of theories suggests that group PK functions like a collective dream, facilitated or thwarted by observers (PK-dream theory). The PK-dream assembles a scenario projected into waking consciousness – sometimes pertaining to past, present, and future events, such as a death. This argument is derived from parallel elements within dreams and group PK. The characteristics of dreams (intense emotions, disorganized and illogical perceptions, content accepted without question, bizarre sensations, and difficult to remember; Hobson, 1994) coincide with those of group PK (intense emotions, chaotic and bizarre perceptions, impressions (accepted as real) violating physical laws, unexplained sensations, and trickster effects that hide from waking scrutiny; McClenon, 2018). The PK-dream theory coincides with the capacity for paranormal dreams to convey more information (bits/second) than waking ESP, OBEs, and apparitions (McClenon, 2000b). It also coincides with the ganzfeld experimental model, and Hindu/Buddhist traditions, which portray normal consciousness as obstructing psi (Bem & Honorton, 1994).

The PK-dream theory can be framed in ways that allow testable hypotheses: (1) Because shamanic and ritual healing shaped human evolution, incidence of apparitions, paranormal dreams, PK, waking ESP, OBE, NDEs, synchronicity, and spiritual healing are correlated with each other and with absorption, dissociation, transliminality, and disruption of normal sleep-wake functions (Cardeña, Lynn, & Krippner, 2017; Cardeña & Tehune, 2014; Lange, Thalbourne, Houran, & Storm, 2001; McClenon, 1994, 2002, 2012, 2013). (2) The theory specifies that these processes have genetic basis (McClenon, 2002, 2018). (3) Propensities for unusual experience involve lability within the sleep-wake cycle, resulting in dissociation. Dissociation allows dreamlike mentation that invades the waking state (der Kloet, Merckelbach, Giesbrecht, & Lynn 2012; Lynn, Lilienfeld, Merckelbach, Giesbrecht, & der Kloet, 2012). Under special conditions, explored through psychical research, this lability results in anomalous experience. Although researchers may find it difficult to verify psi's authenticity, they can uncover the psychological and physiological variables associated with anomalous experience.

## Conclusion

Planned analyses supported four hypotheses, derived from *facilitation/suppression* and *interaction* theories. Exploratory analysis revealed that levitation success rates tended to decline over time, reducing faith in the interaction theory. Correlation between participation and levitation success may result from greater attendance by PK-conductive participants rather than increases in PK-propensity among average people. Exploratory quantitative analyses and qualitative investigations supported facilitation-suppression hypotheses. Factors related to levitation success include: (1) participation, (2) history

of spontaneous anomalous experience coupled with non-skeptical, positive attitude, (3) reduced-exposure to average participants, (4) participating with PK-conductive individuals/groups and avoiding PK-thwarting individuals, (5) experiencing high rates of levitation success during the first four sessions of one's participation. Specific groups of people appeared particularly PK-conductive; researchers might focus on factors contributing to rapport among these individuals.

Weak relations among study variables suggest theory revision. The distribution of psi-propensity, and collective processes contributing to group PK, remain unclear. SORRAT experimental notes and sociological observations portray anomalous phenomena as having trickster qualities. A revised theory explains these characteristics by hypothesizing that group PK involves functions associated with REM dreams. This theory can be evaluated and modified within the fields of psychical research, consciousness studies, clinical psychology, and quantum mechanics.

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## Appendix A YouTube Videos

To locate video on YouTube Search, type: "SORRAT James McClenon."

### **SORRAT Experiments**

- 1.SORRAT: Society for Research on Rapport and Telekinesis, 1961-1981 (2:03:01)  
[www.youtube.com/watch?v=1UiTLkDA7A4&feature=youtu.be](http://www.youtube.com/watch?v=1UiTLkDA7A4&feature=youtu.be)
- 2.SORRAT Mini-lab experiments, 2004 (1:00:30)  
[www.youtube.com/watch?v=WIQZYNMzJBg&t=1234s](http://www.youtube.com/watch?v=WIQZYNMzJBg&t=1234s)
- 3.SORRAT Experiments, 1983  
[www.youtube.com/watch?v=44lwwznq09o](http://www.youtube.com/watch?v=44lwwznq09o)
- 4.Talking to the Spirits: A Pilgrimage. (1998) Produced by Dr. Emily Edwards (30:57)  
[www.youtube.com/watch?v=taGeXOO\\_s9Q&t=1161s](http://www.youtube.com/watch?v=taGeXOO_s9Q&t=1161s)
- 5.Wondrous Events in a Small Group: A Field Study (1992) Co-produced with Dr. Emily Edwards (12:26),  
[www.youtube.com/watch?v=0NXyn6eoUEg](http://www.youtube.com/watch?v=0NXyn6eoUEg)
- 6.How Shamanism Began (2002) (18:40 min) co-produced with Amanda Mosher  
[youtu.be/AlFCEaGCdJ4](http://youtu.be/AlFCEaGCdJ4)
- 7.SORRAT Table-Tipping
- Sorrat 1 (2001) Table-Tipping (9:05)  
[www.youtube.com/watch?v=RJHq04o6fig&t=203s](http://www.youtube.com/watch?v=RJHq04o6fig&t=203s)
- Sorrat 2 (2001) Table Tipping (32:34)  
[www.youtube.com/watch?v=iYOHTOfgJD8&t=1128s](http://www.youtube.com/watch?v=iYOHTOfgJD8&t=1128s)
- Sorrat 3 (2001) Table Tipping (17:28)  
[www.youtube.com/watch?v=Fz8mb7OHm28&t=183s](http://www.youtube.com/watch?v=Fz8mb7OHm28&t=183s)

## Appendix B

### Three Ethnographic Interviews

#### John Hunt Interview (2017)

“I was very skeptical in those early days,” John Hunt told me. “Steve Calvin invited me to attend a SORRAT session and I encountered the same rapping personality involved in my previous poltergeist experiences. It was hard for me to believe it was happening, but it was like a game for me. I was trying to figure out what was going on. I decided to test the SORRAT raps. I asked them to tell me what I was thinking at that moment and I focused on the Rolling Stones’ album, Goat’s Head Soup. The raps spelled out ‘goat.’ How can you explain that?” They seemed able to read my mind.”

“Do you think Tom did things in trance, pushed the table around or things like that?” I asked John.

“He probably found that pushing the table stimulated belief and that led to authentic PK,” John replied. “But that does not explain all my SORRAT experiences. He went into trance sometimes. I saw him go into trance and the entities may have caused him to do unusual things. I did not see him cheat and I watched him very closely for many years. The entities may have caused him to do unusual things, but in normal life he did not have the skills required to fabricate the mini-lab films or do many of the things people suggest he did. He did not have any special equipment or knowledge in those areas.”

#### Vern Mottert Interview (2017)

The first time I went to a SORRAT session was interesting. I had just learned that my Aunt Lena had died, and I had not told anyone about it. They put their hands on the table and the raps came out of the floor. Later the table pressed against me and the raps spelled out ‘L-E-N-A’ so that I would know it was her. She rapped out a message saying that she was fine. It’s hard to explain that as coincidence. Later I saw some impressive levitations and took photographs of them. It isn’t fake; there were no threads involved. It didn’t happen just once or twice. It happened many times, over a decade, and at a lot of different places. I saw Leroy lightly touch the center of a table with no one near him. His fingers were just lightly touching the table and it started vibrating vigorously. I made some plastic boxes to test the phenomena. The boxes had an aluminum foil sheet inside and I sealed them with epoxy. The entities, or whatever you want to call them, inscribed three scratches on the foil during a session. I inspected the seals afterward and I know that no one tampered with the box. Those were the types of things that happened – table movements, spirit communication, levitation, effects within sealed boxes – everyone saw it. It is unmistakable. That would be the word I would use to describe it – unmistakable.

#### Elaine Richards Interview (2017)

I seem to be different from everyone else. My belief is stronger than their belief. Grandfather Skivinski used to come to me after he died. He told me that I would marry Tom and he said I had been in contact with the *other side* before I was born. When Tom and I moved to the apartment in Columbia, Tom was doubtful that we could get results. He was always more skeptical than I was. I knew we could have a levitation. We put our hands on the table – just the two of us—and it started vibrating. We heard Black Elk rapping—rap, rap... rap, rap, rap. That was Black Elk’s beat. Then, the table came up with our

hands on it and it moved around in the air, but it kept going up to the ceiling. It got so high that we couldn't reach it. It was bumping against the lamp in the ceiling, making a clinking sound. It was Black Elk's beat, 'Clink, clink...clink, clink, clink.' Black Elk was doing it. The table was bumping against the lamp to make the sound. I felt like it was still with me when I went to work the next day. The people around me seemed to feel it. There was a congenial atmosphere that wasn't normally there, and they wanted to be around me just to feel it. I guess it made them feel good. That kind of thing happened a lot in those days.

### **Analyse Secondaire de Données d'un Sitter Group: Test des Hypothèses Issues de la Littérature sur la PK**

Résumé. Les psychistes ont proposé un schéma pour investiguer des groupes produisant de la psychokinèse (PK). Les sitter groups placent leurs mains sur une table et, après une période de socialisation, ils relatent des expériences de PK. Batcheldor, Lucadou, Richards, et McClenon ont décrit des théories relatives à ce processus. Cela nécessite un thèse d'hypothèse et leur révision. Bien que les théories divergent, les observations confirment deux aspects basiques : (1) La plupart des personnes inhibent la PK, tandis qu'une minorité la facilite (théorie de la facilitation-suppression), (2) la participation au groupe implique des artefacts, une idéologie partagée, des processus quantiques, et des rapports qui facilitent la PK (théorie de l'interaction). La Society for Research on Rapport and Telekinesis (SORRAT), fondée par l'auteur et poète John G. Neihardt en 1961, a conservé des rapports d'expérimentations évaluant les succès de *lévitation* sur plus de quatre décades. Les rapports disponibles permettent de tester quatre hypothèses formelles et plusieurs hypothèses exploratoires dérivées des deux théories. Bien que ces évaluations confirment les hypothèses formelles, les résultats exploratoires : (1) soutiennent la théorie de la facilitation-suppression, (2) échouent à confirmer l'hypothèse de l'interaction, (3) soutiennent des éléments au sein des théories originelles. A partir d'une théorie révisée, nous élaborons plusieurs hypothèses testables et faisons des suggestions pour de futures recherches.

### **Sekundäranalyse von Daten aus Gruppensitzungen: Zur Überprüfung von Hypothesen aus der PK-Literatur**

Zusammenfassung. Parapsychologische Forscher haben einen Plan zur Untersuchung der Gruppenpsychokinese (PK) vorgelegt. Bei Gruppensitzungen werden die Hände auf einen Tisch gelegt und, nach einer Eingewöhnung, über PK-Erfahrungen berichtet. Batcheldor, Lucadou, Richards und McClenon entwickelten Theorien über den daran beteiligten Prozess. Die daraus folgenden Hypothesen wurden überprüft und die Theorien überarbeitet. Obwohl die Theorien auseinandergehen, stützen Beobachtungen zwei grundlegende Argumente: (1) Die meisten Menschen hemmen PK, während eine Minderheit sie erleichtert (Unterstützungs-Unterdrückungstheorie), (2) Gruppenbeteiligung mit Artefakten, gemeinsame Ideologie, Quantenprozesse und eine enge Beziehung erleichtern PK (Interaktionstheorie). Die Society for Research on Rapport and Telekinesis (SORRAT), 1961 vom Autor/Dichter John G. Neihardt gegründet, bewahrte über vier Jahrzehnte experimentelle Aufzeichnungen über *Levitationserfolg* auf. Die verfügbaren Notizen erlaubten es, vier formale Hypothesen und verschiedene explorative Hypothesen, die aus den beiden Theorien abgeleitet wurden, zu testen. Wenngleich die Auswertungen die formalen Hypoth-

esen stützten, unterstützten die explorativen Ergebnisse (1) die Unterstützungs-Unterdrückungstheorie, (2) nicht die Interaktionshypothese, (3) hingegen aber Elemente aus den ursprünglichen Theorien. Eine überarbeitete Theorie bietet überprüfbare Hypothesen und Vorschläge für zukünftige Forschung.

### **Análisis Secundario de Datos de un Grupo alrededor de una Mesa: Evaluación de hipótesis de la literatura PK**

Resumen. Los investigadores psíquicos ofrecen un esquema para investigar la psicoquinesis grupal (PK). Grupos de participantes ponen sus manos sobre una mesa y, después de socializar, reportaron sus experiencias de PK. Batchelder, Lucadou, Richards, y McClenon Han desarrollado teorías sobre este proceso. Este esfuerzo resultó en pruebas de hipótesis y revisión de la teoría. Aunque las teorías divergen, las observaciones apoyan dos argumentos básicos: (1) La mayoría de las personas inhiben a la PK, mientras que una minoría la facilita (teoría de la supresión de la facilitación), (2) la participación grupal que involucra artefactos, ideología compartida, procesos cuánticos, y buena relación facilitan a la PK (teoría de interacción). La Society for Research on Rapport and Telekinesis (SORRAT), fundada por el autor/poeta John G. Neihardt en 1961, mantuvo notas experimentales que evaluaban el éxito de la levitación durante más de cuatro décadas. Las notas disponibles permitieron evaluar cuatro hipótesis formales y varias hipótesis exploratorias derivadas de las dos teorías. Si bien las evaluaciones respaldaron las hipótesis formales, los hallazgos exploratorios: (1) respaldaron la teoría de la supresión de la facilitación, (2) no respaldaron la hipótesis de interacción, (3) apoyaron elementos dentro de las teorías originales. Una teoría revisada ofrece hipótesis comprobables y sugerencias para futuras investigaciones.