

Failure to Replicate Electronic Voice Phenomenon

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Abstract—Electronic voice phenomenon (EVP) refers to the purported manifestation of voices of the dead and other discarnate entities through electronic means. This has typically involved tuning radios between stations and recording the output on audiotape, although more recently anomalous voices, visual images and text have purportedly been found using telephones, television sets and computers in a phenomenon known as instrumental transcommunication. Given the lack of documentation of EVP in mainstream scientific journals, a review of its history is given based on English language information found in psychical research and parapsychology periodicals and various trade publications and newsletters. An effort was made to replicate EVP by having research assistants simulate interaction with discarnate entities while taping the output from two radios tuned between stations onto audio cassettes. There were 81 sessions with an average of approximately 45 minutes per session for a total of about 60 hours and 11 minutes of recording. While there are some apparent voices and interesting noises upon playback, none of these is sufficiently distinctive to merit being considered anomalous. Some speculative reasons are given for the negative result although the possibility that there are no anomalous phenomena associated with EVP is offered as an explanation for consideration alongside the hypothesis that experimenters create EVP effects through anomalous human—machine interactions and an exosomatic theory of actual influence of electronic equipment by discarnate entities.

Keywords: electronic voice phenomenon — instrumental transcommunication — life after death — survival research

Introduction

Electronic voice phenomenon, frequently abbreviated as EVP, refers to the manifestation of anomalous voices, presumed to be those of the dead or of other discarnate entities, on a magnetic tape. The purpose of this study was to seek to replicate the phenomenon. While some of the characteristic features of EVP are found in this study, they can not be attributed to discarnate beings. Despite the negative result, this paper has been submitted for publication so as to avoid the file-drawer problem (Rosenthal, 1979; Scargle, 2000).

Notwithstanding repeated searches over a number of years, no scientific lit-

erature could be found concerning EVP in mainstream English-language scientific journals, although some information concerning EVP was found in psychological research and parapsychology periodicals and various trade publications and newsletters. This previous lack of involvement on the part of the scientific community has created problems for research in this subject area.

As EVP is widely ignored by the scientific community, the exploration is left to amateur researchers who lack the expert qualifications (not to mention funds and facilities) to resolve the enigma. In addition, their field research is often hampered by a remarkable lack of critical judgement, amplified by the various subjective notions that motivate amateurs experimenting with unknown phenomena. (Heinzerling, 1997, p. 28)

“The ‘field’ seemed to proceed in the most unscientific manner, nothing was ever measured, although the words ‘research’ and ‘expert’ were bandied around like tokens in a game of ‘let’s play scientists’” (MacRae, 1984, p. 36). The net result is that there is no reliable history of research protocols and results upon which the current study could be based. The following summary of the history of EVP has been taken from some of the English-language sources that I was able to obtain. No effort has been made to review information in languages other than English or to review information available on the Internet. For an alternate historical overview see Uphoff et al. (1988).

History of Electronic Voice Phenomenon

The origins of EVP have usually been attributed to two independent sources although Kubis and Macy (1995) have traced the phenomenon back to 1901. The earliest of the popular sources is a study by Raymond Bayless and Attila von Sealay. They had soundproofed a clothes closet in which they had suspended an aluminum trumpet from the ceiling “and inside the large end of this trumpet [they had] placed a microphone” (Bayless, 1959, p. 36). A cable led from the microphone to a tape recorder situated in the room that contained the closet. In addition, at times there was a loudspeaker in the room that allowed anyone in the room to hear what was happening in the closet. On December 5, 1956, von Sealay sat in the closet for 15 minutes during which time nothing appeared to have happened. Upon playing back the tape, however, Bayless and von Sealay heard a distinct voice that said “‘This is G,’” (p. 36) even though Bayless, who had been sitting in the room, had heard nothing through the loudspeaker. There were numerous other examples of recorded voices coming from the closet, in some cases, when there was no one in it (Bayless, 1959).

More frequently there have been references to unusual voice phenomena taped by “Swedish painter and film-producer, Friedrich Jürgenson” (Bender, 1972, p. 65) in the summer of 1959. Apparently upon

playing back tape-recordings of bird voices in the country, he could also hear a quiet

male voice discussing 'nocturnal bird voices' in Norwegian, followed by a series of 'cackling, whistling and splashing sounds' among which he thought he recognized the voice of a bitterne. (p. 65)

Furthermore, during the following months, Jürgenson received personal messages that "were inaudible on recording and could only be discovered during play-back" (Bender, 1972, p. 65). He found that he "had to train his ear to appreciate such 'linguistic information'" (pp. 65–66) but developed the theme that these were the voices of the dead (Bayless, 1976; Raudive, 1971).

The name that has perhaps been most closely associated with EVP has been that of Konstantin Raudive, who has usually been identified as a Latvian psychologist (e.g., by Kubis & Macy, 1995, p. 105). He became interested in Jürgenson's voices and met with Jürgenson in the spring of 1965 for a demonstration (Raudive, 1971). Subsequently, in June 1965, Raudive began his own experiments using various taping procedures, including the recording of output from a radio tuned between stations, which he called the "radio-microphone recording" method (p. 25). At the time of publication of the English edition of his book *Breakthrough* in 1971, Raudive claimed to have had over 72,000 "voice-texts" (p. 29) and claimed that he had "analysed roughly 25,000 voices according to speech content, language and rhythm" (p. 22). As with Jürgenson, Raudive found it difficult to identify the voices and understand what was being said. "One may, whilst listening-in, discern the resonance and frequency of voices—one hears the sounds, but the sense of hearing has the utmost difficulty in recognising them as words; only after intensive and concentrated listening does a tangible word emerge" (p. 28). According to Raudive, these voices have unique characteristics that identify them as paranormal. These characteristics include the presence of a mixture of languages with "sometimes as many as five or six in one sentence" (p. 31); a rapid, rhythmic pace; short, "telegram-style" (p. 31) phrasing; and numerous grammatical irregularities and neologisms. According to Raudive, "it takes at least *three months* for the ear to adjust itself" (p. 20, emphasis in original). Among many examples in his book, Raudive has given the following: "I–I te pastenda" (p. 274). The "I" is English, "te" means "here" in Latvian and the language and meaning of "pastenda" are unknown. Others of Raudive's examples can be read in his book (1971) and heard on compact disk (Chatburn & Harding, 1999).

There has been some critical commentary concerning the "Raudive voices." Smith (1974) has argued there is too much scope for the imagination in the interpretation of the voices and, while Smith could replicate the voice phenomenon with some of the methods used by Raudive, including the radio-microphone method, he could not rule out the intrusion of foreign language stations and was "reasonably certain that the words [he] eventually fitted to the sounds were not recognized but imagined" (p. 99). Ellis (1975) carried out a study in which he used voice samples, some of which had been obtained by Raudive himself and others of which had been obtained in Raudive's presence, and, in

Test 1, asked eight people to interpret 36 samples without being provided with any additional information and then, in Test 2, asked 16 people to interpret 15 samples after having been provided with information about the recording and “5–10 seconds of context for each sample” (p. 33). In some cases, all of the interpretations were different from one another and none was the same as the interpretation given by Raudive. Keil (1980) has argued that Raudive had a tendency to hear messages that he expected to hear in the sounds that he had taped. To demonstrate his contention, Keil listened to an original tape made by Raudive and found a German passage of about 37 words whose likely source was an Easter Sunday radio broadcast. This German passage was identified as such by eight native German speakers, whereas Raudive, who had rated this passage as among his best and clearest but who was not a native German speaker, had used five languages to interpret the passage to mean something that had no resemblance to the original. In other words, those who have investigated the Raudive voices have found the probable influence of the imagination on the interpretation of unrecognized and ambiguous sounds that were being identified as messages from the dead.

There is a body of research in psychology unrelated to EVP that nonetheless has relevance for the interpretation of Raudive voices. When B. F. Skinner (1936) played repeated nonsense sequences of vowels to subjects after instructing them to “[listen] with care” and to report at once as soon as “anything with meaning flashes through your mind” (p. 79) he found that “the distortion proved to be very great and in many cases a point-to-point comparison of the vowels in sample and response impossible” (p. 83). Furthermore, subjects were usually convinced of the correctness of their responses including, in some cases, the identification of specific consonants that were, of course, not present in the recorded sequences of vowels (pp. 79–80). More recently, psychologists have studied the verbal transformation effect whereby subjects tend to give a number of different meanings to the same repeated auditory stimulus when asked to report whenever “the voice seemed to change what it was saying” (Warren, 1968, p. 262). For example, in one study involving 18 subjects, the loud and clear repetition 429 times during three minutes of the word “tress” resulted in an average of 7.2 different forms per subject being identified. Listening to the repetition of the word “tress,” one subject reported the sequence “stress, dress, stress, dress, Jewish, Joyce, dress, Jewess, Jewish, dress, florist, florist, Joyce, dress, stress, dress, purse” (p. 262). Given that EVP researchers may play a “recording through about fifty times” (Smith, 1974, p. 97) and that “[it] is necessary to stress that the verification of the voices depends on repetition” (Raudive, 1971, p. 18), EVP researchers may be prone to the verbal transformation effect and, more generally, meanings attributed to the brief sounds heard on audiotapes by EVP researchers could be artifacts of auditory perception.

Have there been any acoustically less ambiguous phenomena than the Raudive voices? The American industrialist George Meek’s collaboration, begin-

ning in 1973 with alleged psychic medium and electronics tinkerer William O'Neil, has sometimes been cited as a decisive step forward in electronic communication with the dead (e.g., Kubis & Macy, 1995, p. 109). One evening in July 1977, O'Neil apparently "felt a hand on his shoulder" and turned to see a "tall and distinguished" man wearing a business suit (Fuller, 1985, p. 140). The man identified himself as George J. Mueller, a former "Physics Instructor and Research Fellow while at Cornell" (p. 141) who had developed "miscellaneous electronic equipment . . . and a lot of specialized medical electronics for hospital use" (p. 142) and who had died on May 31, 1967 (p. 146). Mary Alice, O'Neil's wife, presumably could also see Mueller but could not hear him. According to Fuller, when Meek checked, all of the information provided by the apparitional Mueller turned out to be correct. O'Neil continued periodically to see and hear Mueller, who purportedly gave him instructions for making a device called "Spiricom" that consisted of an "audio signal from a total of 13 oscillators set to different frequencies from 131 Hz to 701 Hz" fed into "a low power transmitter" located in the same room as a radio tuned to receive the 29.57 MHz signal from the transmitter (Heinzerling, 1997, p. 29). On the night of September 22, 1980, O'Neil presumably had the first of over 30 hours of two-way conversations with Mueller using the Spiricom setup (Fuller, 1985, pp. 173–180). At one point, in response to O'Neil's comment that he, O'Neil, was not getting any younger, Mueller purportedly replied:

I know. I understand, William. Well, in my case—well, I was fortunate. It was sudden. However, *you* know in advance. The important thing . . . the one benefit that you will find as a result of our contacts—*you are aware!* I was not aware of this side. I didn't know the potential over here before. So when I got over here, it was like waking up in the morning, and not knowing where you are at. Like having a bad dream . . . (quoted in Fuller, 1985, p. 177; emphases and ellipses in original)

A purported example of the conversations between O'Neil and Mueller is available on cassette tape (Macy, 1996b). These alleged conversations were not just snippets of voices but longer, clearer, apparent two-way conversations. After listening to the tapes, Meek, whose integrity by all accounts was impeccable, became convinced that they represented communication with the dead and, following more formal analyses of the tapes and consultation with EVP researchers, held a news conference on April 6, 1982, in Washington to announce the results of his investigations with O'Neil (Fuller, 1985).

Subsequently, presumably some EVP researchers have not only been able to get voices played back from an audiotape or coming from speakers but have also experienced voices, text and images by telephone, television and computer, phenomena collectively known as instrumental transcommunication (ITC). For example, during the time of his burial service, at 1:22 p.m. on October 21, 1987, Friedrich Jürgenson's image purportedly appeared on the blank screen of the television set deliberately tuned to a vacant channel in the home of Claude Thorlin, with whom Jürgenson had previously worked on EVP (Meek,

1988, pp. 8–9). Perhaps the most spectacular purported demonstrations of ITC have occurred around Maggy Harsch-Fischbach in Luxembourg. After five days of taping using a microphone in June 1985, Harsch-Fischbach “received the first responses, faint and in different languages” (Locher & Harsch-Fischbach, 1997, p. 49). Over time she has purportedly received messages via radio, telephone, answering machine, fax, television and computer as well as experiencing the manifestation of apports. This has resulted in a wealth of textual material and images attributed to various non-human and deceased human beings. For example, a being who has identified itself as Technician has presumably said that “A new electronic system will function when a unity of thought has been reached among experimenters on your side” (Locher & Harsch-Fischbach, 1997, p. 65). Mark Macy in Boulder, Colorado has sought to emulate the work done in Luxembourg and has produced some audio and visual examples on audio cassette and videotape of the kinds of phenomena associated with ITC (1996b, 1997). Details of the material produced by ITC, claims of other researchers who have obtained results similar to those of the research cited above and testimonials from those who have witnessed EVP and ITC can be found, for example, in Locher and Harsch-Fischbach (1997), Kubis and Macy (1995), Randles and Hough (1994), and Heinzerling (1997) as well as in previous issues of the periodicals *Unlimited Horizons: Newsletter of Metascience Foundation, Inc.*, *Cercle d’Etudes sur la Transcommunication—Luxembourg INFOnews*, and *Contact! A Triannual Report of Technical Spirit Communication Research*. I could find no published comprehensive critical evaluation of ITC phenomena although there have been some doubts cast on its legitimacy (e.g., Heinzerling, 1997).

Research Design

Is there anything anomalous about EVP or ITC? I wrote to Maggy Harsch-Fischbach saying that I would like to come to witness the phenomena in Luxembourg while I was on sabbatical in England during May and June of 1994. She told me not to come, but directed me to Mark Macy in Boulder, Colorado.

I contacted Macy and indicated my interest in spending a number of weeks with his equipment in order to experience ITC phenomena for myself. As a result of my requests, Macy met with me at his home in Boulder, Colorado for a couple of hours on June 2, 1997. While there, he demonstrated his equipment, a variation of the radio-microphone configuration, and suggested that I undertake my own efforts at ITC. He emphasized two things: the more successful experiments have been the result of spiritual purpose so that spiritual integrity is necessary on the part of ITC researchers, and the ability to obtain anomalous voices and images is dependent upon the establishment of a contact field through regular and persistent effort. Due to the difficulty of finding opportunities to examine the efforts of others, I decided to seek to replicate ITC phenomena for myself.

To begin with, I told no one of my intentions to conduct such a study except

the Academic Dean, whose permission I needed to redirect research funds, and two research assistants, who were to act as operators of the equipment and who were asked to be discrete about whom they informed of their participation in the study. By not drawing attention to myself, I was hoping to minimize the possibility of a hoax perpetrated by transcommunication enthusiasts or others.

Macy's recommendations were met in an operational manner, first, by the fact that the purpose of the study was to determine the truth of ITC phenomena and by choosing operators whom I judged to have a sense of personal integrity. Furthermore, in the course of the study itself, our explicit effort was to contact benign beings or to make no contact at all. There have presumably been cases, such as that of Manfred Boden, in which malicious entities appear to have been attracted (Locher & Harsch-Fischbach, 1997, pp. 34–36). Second, we would seek to obtain contact with discarnate entities on a regular basis until my research funds were exhausted.

The radio-microphone method was to be used to emulate the GA-II ITC equipment configuration (Macy, 1994, p. 24; 1996a, p. 9) so that the study would, in effect, be an effort to replicate EVP rather than the broad range of phenomena associated with ITC. The radio-microphone method was suggested by Macy as a starting point and has been recommended by others (e.g., Heinzerling, 1997, p. 28).

Replication would be said to have occurred if there were to be replication in the strong sense, that is to say, if the voices were to be sufficiently clear and the information sufficiently distinctive to characterize them as anomalous. Given the criticisms reviewed above, replication in the weak sense of finding ambiguous phrases upon playback of the audiotapes would not be considered sufficient to reject the null hypothesis that there are no anomalous effects.

Procedure

The following equipment was obtained from audio-visual services at King's College: Realistic AM/FM Stereo Radio Cassette Recorder, General Electric Cassette Recorder (Model No. 3-50150), Sony microphone with illegible model number, and Dataware Powerbar 3 surge protector. At the ninth session on September 26, 1997, a Lloyd's FM/AM/AIR-POLICE-WEATHER radio (Model No. N720), donated by a friend of one of the operators, was added to the configuration and used for the remainder of the sessions.

The two radios were placed at right angles on a table in a room at King's College with the microphone in front of the speakers and connected to the General Electric Cassette Recorder. Extraneous noises were minimized by closing the window and both doors leading from the room to the hallway. Two research assistants, called operators in this study, were hired to alternate coming into the laboratory for two-hour sessions per working day from September 15, 1997, to January 22, 1998. A research protocol was developed and a handwritten record of events was to be kept in a log book. The operators were to turn on the two radios, tuning them between stations, behave as though they were speaking to

unseen beings, make an audio recording and then listen to the recording for anomalous voices. Any unusual phenomena were to be noted in the log book and, if warranted, the audiotape saved for subsequent inspection.

The details of the research protocol to be used by the operators was as follows:

1. Use the protocol with the most recent date.
2. Make certain that the “Research in Progress/Do Not Disturb” sign is posted on the inner door.
3. Close all doors and windows to exclude extraneous sounds.
4. All records are to be handwritten on consecutive pages of the laboratory log book.
5. Write down the date, time and operator’s name.
6. Write down the names of any individuals other than the operator who may be present.
7. Write down any changes to the equipment configuration initially and during a session.
8. Write down any changes to experimental conditions initially and during a session.
9. Write down observations of any significant events during a session.
10. Make certain that a cassette tape has been inserted in the cassette recorder.
11. Turn on the power and recording devices.
12. Make a statement out loud to the effect that you will participate only in ethical phenomena that are of benefit to humanity.
13. Turn on the noise sources.
14. Make any adjustments to the equipment that seem appropriate, both initially and during a session.
15. Address out loud those you wish to contact who are dead or who are purported to work with ITC from other dimensions.
16. Ask any questions that come to your mind in a conversational manner allowing sufficient time for possible responses.
17. After a period of about 45 minutes turn off the noise sources and then the recording devices.
18. Play back the recording, noting any anomalies.
19. Shut down the power.

20. Write down any additional comments concerning the session.
21. Write down the time at which the session ends.

Results

The equipment was used for a total of 81 sessions, 41 by Gail and 40 by Ian, each about 45 minutes in length for a total recording time of approximately 60 hours and 11 minutes. The settings on the radios were changed occasionally but were usually left in the low 90s MHz range on the FM bands of the two radios. In addition to static and apparent radio stations breaking through from time to time there was also a buzzing noise, probably caused by interference from the overhead fluorescent lights. There were occasional dramatic fluctuations of the background noise that were similar to fluctuations that I heard during Macy's demonstration on his equipment that he attributed to an effort on the part of those in spirit to control the radio output. Specific events that were noted include a squawking noise on September 26, 1997, that occurred 13 seconds after Ian had finished asking if any spirits were present and that, with a little imagination, could be identified as "Hello"; a truncated sound on November 10, 1997, at the end of a passage of voices that were fading in and out that Gail interpreted as her name, "Gail"; a low- to high-pitched whistle on November 13, 1997, that was repeated five seconds after Gail had said "I sort of like that whistle sound"; and the sound of a kiss on January 5, 1998, after Gail had said "Hello." The last of these appears not to have been present at the time of recording since Gail does not remember hearing it at the time and did not react to the kiss as evidenced by her asking seven seconds after its occurrence whether anyone was there. The event that most resembles some of the voices found by EVP researchers is the phrase "Tell Peter" that occurred on October 17, 1997, independently identified as "Tell Peter" by both Gail and myself but not by Ian, apparently spoken by a woman's voice at a regular speed juxtaposed at one point on a cacophony of voices that had faded in and that subsequently faded out again. Gail thought that she could identify the voice as that of a woman she had known who was now deceased and whose husband's name had been Peter.

Discussion

Raudive has indicated one of the ways in which he could distinguish paranormal voices from those being picked up from radio stations:

With me the voices use mostly Latvian and as the Latvian language is very rarely heard on radio, one may safely regard messages spoken in Latvian as being of the same paranormal origin as those spoken in various languages. (1971, p. 26)

As I am also a native speaker of Latvian, had clear and meaningful phrases in Latvian showed up on the tapes, if indeed phrases in Latvian spoken by Rau-

dive had showed up on the tapes, given that Raudive has purportedly addressed others in English since his death in 1974 (e.g., Locher & Harsch-Fischbach, 1997; Macy, 1997), that would have been an argument in favor of a paranormal origin for the voices. Alternatively, a case could have been made that something unusual was happening if one of the operators had been clearly addressed by name and given information that was unlikely to have been known by anyone else, as has been reported by some EVP researchers (Macy, 1993). However, while we have replicated EVP in the weak sense of finding voices on audiotapes, none of the phenomena found in our study was clearly anomalous, let alone attributable to discarnate beings. Hence we have failed to replicate EVP in the strong sense.

If spirituality is important for success in EVP experiments, perhaps we were not spiritual enough. However, spirituality has not been operationally defined by previous researchers nor have the relative amounts of spirituality of individual investigators been measured. Such measurement could be included in future studies using, for example, a comprehensive self-report instrument such as that developed by MacDonald (1997).

Given the emphasis on the importance of a contact field, it is possible that such a field was never properly established, although the parameters for the development of such a field, other than, presumably, the prerequisite of spirituality and the need for persistence, are unknown. Meek has made the following observation: "Of the many successful researchers we have known over the years in many countries, we know of NO SUCCESSFUL SYSTEMS which do not have one or more psychically-endowed persons involved" (Meek, 1988, p. 11). In the case of Meek's studies, certainly O'Neil has been identified as a psychic medium. This raises the question of the relative importance of spirituality and psychism as necessary characteristics of EVP researchers given that spirituality and psychism are separable, if usually ill-defined, constructs (Barušs, 1996). However, according to Maggy Harsch-Fischbach "[in] January 1988 . . . we [were] informed that the human psyche was not needed anymore for future experiments" (Locher & Harsch-Fischbach, 1997, p. 57) so that, presumably, psychic ability and perhaps spiritual stature were no longer prerequisites for success at the time of the study. It is not clear, if human psyches are no longer required, of what the contact field consists. It is also possible that the study was not carried out over a sufficiently long period of time so that the contact field, whatever it may be, was unable to develop. However, the clearest example of an unexpected voice occurred in the 23rd of 81 sessions and not toward the end of the series. We didn't seem to be any closer to finding anomalous voices toward the end of the series than we were toward the beginning.

It is possible that our equipment was of too inferior quality or that the equipment configuration was not optimal. Purportedly successful researchers have used different types of equipment and equipment configurations, so this, in itself, should not have been a problem. For example, Hans-Otto König has used a complex system that has included the use of infrared light and VHF

radio waves as well as electronic oscillators that have produced sounds inaudible to humans in the 20- to 40-kHz range (Heinzerling, 1997, p. 26). On the other hand, Maggy Harsch-Fischbach purportedly used a “demonstrably defective and non-functioning TV set” as part of her complex of equipment (Locher & Harsch-Fischbach, 1997, p. 75). Such a variety of equipment has been used, including radios, television sets, telephones and computers, that it is not clear what directions one would need to take with regard to equipment configuration in order to improve the possibility of obtaining anomalous voices, images or text.

Often we got a loud buzzing sound that could be attributed to the overhead fluorescent lights in the room. Rather than lamenting the presence of this noise I view it as an ingredient in the necessary conditions for EVP since my understanding is that we were simply trying to generate continuous noise by whatever means possible. In fact, commenting on the radio-microphone method of recording, Raudive has apparently indicated that “[what] we want is a true ‘inter-frequency’ where nothing but a general atmospheric static noise would be audible; this can be generated by a great number of factors, for example a light which is switched on . . .” (David Stanley quoted in Peter Bander’s “Preface” to Raudive’s book *Breakthrough*, 1971, p. xvii). However, there may be more effective noise sources than fluorescent lights or, better yet, “noiseless” noise sources such as the ultrasonic frequencies used by König.

Another improvement that turned out to be unnecessary in this study could have been the use of throat microphones and taping of the vocalizations of each of the participants during the EVP sessions on separate tracks in order to rule out inadvertent vocalization on the part of experimenters themselves as sources of any voices found on the tapes (suggested, for example, by Ellis, 1975, p. 35).

Given that we were unable to replicate EVP there are no data that need to be explained although I have made some speculations about the absence of data based on the material available from previous informal studies by others. However, having a few competing coherent theories would be helpful for directing an investigator’s efforts in the future. One possibility is that previous researchers have been misled by known natural and psychological events and that there are no unusual phenomena to be considered. The possibility of being misled has been raised with the Raudive voices and could pertain also to the poltergeist-like events associated with ITC (e.g., Houran & Lange, 1996a, 1996b; Lange & Houran, 1997; Lange et al., 1996). A second hypothesis is that electronic equipment is being anomalously influenced by the researchers, given that such influencing has been demonstrated in other contexts (Jahn & Dunne, 1987). A third alternative is that discarnate entities are influencing the minds or equipment of the investigators, in which case an exosomatic theory such as theosophy might be useful (Barušs, 1996). Future studies could seek to discriminate between these three alternatives.

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