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Editorial Office: *Journal of Scientific Exploration*, Society for Scientific Exploration, Kathleen E. Erickson, *JSE* Managing Editor, 151 Petaluma Blvd. So., #301, Petaluma, CA 94952 USA EricksonEditorial@gmail.com, 1-415-435-1604, (*fax* 1-707-559-5030)

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EDITORIAL

My reflections last issue on experimental replicability prompted some further thoughts on the subject. In particular, I wondered to what extent we should consider scientific expertise to be an art, or something more like a gift than a skill. In that previous Editorial I criticized a familiar view expressed as follows by Karl Popper: "Any empirical scientific statement can be presented (by describing experimental arrangement, etc.) in such a way that *anyone who has learned the relevant techniques* can test it" (Popper 1959:99, emphasis added). I noted that given the inevitable differences between original experiments and replication attempts—magnified in the behavioral sciences by many additional kinds of potentially relevant variables (such as well-documented experimenter effects), it may be unreasonable to expect success when replication attempts are conducted by someone other than the original experimenter. What I want to consider more closely now are the related questions: What are the relevant techniques? Can they be captured and conveyed by a mere list of procedures, like a recipe for baking bread? To what extent can these techniques even be learned?

When we consider what makes a good physician, psychiatrist, or clinical psychologist, we recognize that a key requirement is something that no mere recipe can capture adequately and that can't easily be taught (if it can be taught at all)—namely, having a "nose" so to speak for what matters—e.g., diagnostically relevant clues. Granted, education can help point one in the right direction, but it can't turn just anyone into a great diagnostician, or a great detective, any more than it can turn just anyone into a great human being. Indeed, one would think that another key requirement of these professions is the ability to relate successfully to others—that is, to have the kind and degree of sensitivity, empathy, or whatever exactly is needed, to understand what others are saying (e.g., to know what's *behind* their words), to know when they're dissembling or withholding information, to make them feel comfortable, supported, etc. And that, too, is something that's very difficult to teach (if it can be taught at all). Very likely, it requires native aptitudes that people simply either have or lack—the qualities in virtue of which some are especially good in relating to other people. To think that these qualities can be acquired merely through education is as foolish as thinking that through formal education alone one can learn to be compassionate, courageous, or witty—or more generally, that one can change deep features of one's character. Similarly, it would be astonishing (if not miraculous) if scientific expertise generally

and experimental expertise specifically (perhaps especially in the biological and behavioral sciences) didn't likewise require certain aptitudes or native capacities with which only some are fortunately endowed. And that may also include having a nose for what matters.

Although this bit of commonsense wisdom may frequently be overlooked, it's hardly a new observation. Perhaps the origins trace back as far as Plato's *Republic*. Plato was concerned with (among other things) what human excellence amounted to, and he noted that this must be answered relative to the different roles that a person can fulfill—for example, that of a teacher, parent, musician, military commander, boxer. A person isn't simply excellent *simpliciter*. That's why we can say that someone (for example) is a good teacher but a lousy parent. Plato also noted that we can evaluate someone qua (i.e. in the capacity of a) person—along some kind of moral dimension. Indeed, we can say that someone is a good person but a terrible teacher (an all too common phenomenon, in fact), or a good military commander but a lousy human being.

Now Plato had his own philosophical and political agenda in writing *The Republic* and so he didn't extend his observations in the direction that concern me here. But we can note that excellence in a person's various capacities might be related in intimate (perhaps even lawlike) ways to excellence in some other capacities. For example, it's likely that a scientist's personal qualities (e.g., character traits) could be a deciding factor in determining whether experiments succeed or fail, or whether theory-building and data-gathering are productive. And I don't have in mind only such relatively coarse measures as (say) whether a parapsychologist is a sheep (believer) or goat (non-believer or skeptic) (see, e.g., Wiseman & Schlitz 1997). Some examples will illustrate what I have in mind. (I'll confine my comments to work in parapsychology, but I encourage readers to find analogues in other areas of science.)

When I began my serious study of parapsychological research back in the 1970s, I was struck by the following episode at a conference of the Parapsychological Association. One of the presenters was Helmut Schmidt, an exceptionally creative and successful theoretician and experimenter. Helmut gave a talk in which he described his latest success in testing subjects' ability to influence the output of random number generators. Helmut's talk was given with his usual (and considerable) energy and enthusiasm. For example, he described in a very animated way how he encouraged his subjects to imagine themselves psychically *pushing* the RNG. And the word "pushing" he expressed with great emphasis and dramatic gestures. Following this presentation was a talk given by a young woman who had tried unsuccessfully to replicate one of Schmidt's earlier

experiments. I know from having talked to her that she was a very nice person. But her personality was so different from that of Schmidt, one could be forgiven for thinking that the two experimenters were members of different species. Helmut was charismatic, extroverted, enthusiastic, and dynamic. It was easy to see how he could have effectively encouraged his subjects to succeed. By contrast, this young woman was relatively lifeless, monotonous, and insipid. Her talk was given with an almost total lack of affect, and that wasn't just a matter of stage-fright; that was her manner of talking. So it was equally easy to see how she might have failed to inspire or excite her subjects. Similarly, perhaps the late John Beloff's notoriously poor track record in conducting or supervising successful psi experiments connects with his mild and quite understated personality, despite the fact that he clearly qualified as a sheep—that is, despite his demonstrated sympathy for psi research and his obvious conviction about the positive merits of the best cases.

Along the same lines, in both psi research and the behavioral sciences generally, experimental success might require, in addition to (or instead of) charisma, a supportive experimental personality that can make subjects feel safe or comfortable about participating in the experiment, and which can help them trust the experimenter. Many believe (as I do) that this is why Russell Targ (another low-key personality) has been so consistently successful in conducting remote viewing experiments. And clearly, only some people have that kind of character trait. Moreover, it may also be a matter of the way personality styles *fit* with one another. Even a generally supportive or encouraging person may rub some people the wrong way, if their personalities are broadly incompatible. That's one reason we can feel comfortable in life with certain people but not others.

Now you might think that psychologists especially should be keenly aware of these sorts of interactions and potential personality conflicts. I used to think so—at least I did early in my academic career, before I began to meet more and more psychologists and started attending their parties. At that point, however, I realized that my hosts often had almost no idea which people should be invited together to the same affair, and which people would almost certainly create friction when placed in a common environment. I could only wonder, then, how that ironic blindness might also affect their professional work—for example, their ability to relate to their subjects, or to select appropriate graduate assistants to interact with their subjects.

Not surprisingly, there has been some mainstream research on the personality correlates to successful experimentation in psychology. But those I've seen have been rather superficial, focused on such relatively rudimentary measures as, for example, experimenter need for social

influence, experimenter desire for control, subject need for social approval (see, e.g., Hazelrigg, Cooper, & Strathman 1991), and seldom rising above commonsense, very general conjectures and observations that probably never needed to be confirmed with the aid of precious research funds. Moreover, as far as the study cited above is concerned, given the authors' own experimental procedures, one can only wonder how they evaluated the relevance of their own personality traits in leading to their results. That is, one can only wonder about the wisdom of experimentally investigating experimental biasing—at least, in the absence of detailed and reliable information about the experimenters' own personalities. Personally, I suspect that experimentation is simply not the way to proceed here. Probably, there's much more to learn from keen and sensitive observers' careful and penetrating examination of both successful experimenters and also subjects who do well under a wide range of experimental conditions.

I mentioned earlier that scientists might need a "nose" (or perhaps "eye") for relevant data, and that in the absence of this ability their work might exhibit systematic deficiencies. This is a criticism I've lodged many times against the postmortem survival research of Ian Stevenson. Don't get me wrong; I believe Stevenson's work is monumentally important and valuable. However, as I've argued in detail (see, e.g., Braude 2003), Stevenson repeatedly treated the subjects of his case investigations as if they were psychological stick figures, with no depth or breadth of personality, and with no deep issues guiding their lives in the subtle ways most of us know from our usual life blunders and successes—for example, the cunning and often indirect or elusive ways we might repeatedly entangle ourselves in lethal relationships, or undermine our attempts to succeed professionally (for an exemplar of a more penetrating way to consider the behavior of both experimenters and subjects, see Eisenbud 1992). Consider, for example, the blatant clues about motivations and subject psychopathology Stevenson missed in the well-known case of Sharada (Braude 2003, Chapter 4). For all his many virtues, I'd say Ian was blind to much of what really deserved his attention. And as a result, he repeatedly underestimated the power of sophisticated and reasonable alternatives to the hypotheses of reincarnation specifically and survival generally.

Now if it's true that scientific success or failure sometimes hinges on the presence or absence of certain personality traits of the scientist and (in the case of experiments) is not simply a matter of following a recipe of procedures, what can be done about this? It seems unlikely that graduate programs in the sciences will suddenly—or ever—award advanced degrees only to students passing a battery of relevant psychological tests. And it seems equally unlikely that scientists will volunteer themselves for

psychological profiling, the results of which can be published alongside their research (for example, there's been very little enthusiasm for such a proposal offered in a parapsychological insiders' listserve to which I subscribe). In fact, I suspect that many (most?) scientists like to perpetuate the myth that they're especially objective observers and agents, and not the steaming, stinky cauldrons of fears, insecurities, flaws, and issues that afflict everyone else. Perhaps the most we can hope for is a rejection of Popper's simplistic statement about scientific expertise, a correspondingly more sophisticated assessment of experimental results, and a willingness to consider seriously the full range of variables (including character traits) that can affect experimental outcome. And more generally, we can perhaps hope for a greater appreciation of the fact that scientists, like other human beings, have both personalities and feelings, and that they're subject to the same grubby concerns and life issues that influence even the most mundane actions. Perhaps then we'll see a wider acknowledgment that scientific success and character traits are not neatly separable. And who knows, perhaps then we'll see a more sensible appraisal of replication attempts in areas of frontier science.

Stephen E. Braude

References

Braude, S. E. (2003). *Immortal Remains: The Evidence for Life after Death.* Lanham, MD: Rowman & Littlefield.

Eisenbud, J. (1992). *Parapsychology and the Unconscious.* Berkeley, CA: North Atlantic Books.

Hazelrigg, P. J., Cooper, H., & Strathman, A. J. (1991). Personality moderators of the experimenter expectancy effect: A reexamination of five hypotheses. *Personality and Social Psychology Bulletin, 17*(5), 569–579.

Popper, K. R. (1959). *The Logic of Scientific Discovery.* New York: Harper.

Wiseman, R., & Schlitz, M. (1997). Experimenter effects and the remote detection of staring. *Journal of Parapsychology, 61*(3), 197–207.

unscientific? In *Proceedings of the XXIII International Congress of the History of Medicine, Vol. 2.*, London: Wellcome Institute of the History of Medicine, pp. 1303–1304.
Foll, C. V. (1959). An account of some of the beliefs and superstitions about pregnancy, parturition, and infant health in Burma. *Journal of Tropical Pediatrics, 5,* 51–59.
Glover, V. (1997). Maternal stress or anxiety in pregnancy and emotional development of the child. *British Journal of Psychiatry, 171,* 105–106.
Harris, W. S., Gowda, M., Kolb, J. W., Strychacz, C. P., Vacek, J. L., Jones, P. G., Forker, A., O'Keefe, J. H., & McCallister, B. D. (1999). A randomized, controlled trial of the effects of remote, intercessory prayer on outcomes in patients admitted to the coronary care unit. *Archives of Internal Medicine, 159,* 2273–2278.
Jacobs, A. H., & Walton, R. G. (1976). The incidence of birthmarks in the neonate. *Journal of Pediatrics, 58,* 218–222.
Keil, J. (1996). Cases of the reincarnation type: An evaluation of some indirect evidence with examples of "silent" cases. *Journal of Scientific Exploration, 10,* 467–485.
Khaing, M. M. (1962). *Burmese Family.* Bloomington: Indiana University Press.
Lou, H. C., Hansen D., Nordentoft, M., Pryds, O., Jensen, F., Nim, J., & Hemmingsen, R. (1994). Prenatal stressors of human life affect fetal brain development. *Developmental Medicine and Child Neurology, 36,* 826–832.
Pack, G. T., & Davis, J. (1956). Moles. *New York State Journal of Medicine, 56,* 3498–3506.
Pack, G. T., Lenson, N., & Gerber, D. M. (1952). Regional distribution of moles and melanomas. *Archives of Surgery, 65,* 862–870.
Pratt, A. G. (1953). Birthmarks in infants. *AMA Archives of Dermatology and Syphilology, 67,* 302–305.
Radin, D. I., & Nelson, R. D. (1989). Evidence for consciousness-related anomalies in random physical systems. *Foundations of Physics, 19,* 1499–1514.
Sicher, F., Targ, E., Moore, D., & Smith, H. S. (1998). A randomized double-blind study of the effect of distant healing in a population with advanced AIDS. Report of a small scale study. *Western Journal of Medicine, 169,* 356–363.
Stevenson, I. (1977). *Cases of the Reincarnation Type: Vol. 2. Ten Cases in Sri Lanka.* Charlottesville: University Press of Virginia.
Stevenson, I. (1983). *Cases of the Reincarnation Type: Vol. 4. Twelve Cases in Thailand and Burma.* Charlottesville: University Press of Virginia.
Stevenson, I. (1992). A new look at maternal impressions: An analysis of 50 published cases and reports of two recent examples. *Journal of Scientific Exploration, 6,* 353–373.
Stevenson, I. (1997). *Reincarnation and Biology: A Contribution to the Etiology of Birthmarks and Birth Defects.* Westport, CT: Praeger.
Stevenson, I. (2001). *Children Who Remember Previous Lives: A Question of Reincarnation* (revised edition). Jefferson, NC: McFarland.
Tucker, J. B. (2005). *Life before Life: A Scientific Investigation of Children's Memories of Previous Lives.* New York: St. Martin's.
Warkany, J. (1959). Congenital malformations in the past. *Journal of Chronic Disease, 10,* 84–96.
Williams, H. C., & Pembroke, A. C. (1988). Naevus of Jamaica. *Lancet, 2*(8616), 915.

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COMMENTARY

A Critical Response to David Lund's Argument for Postmortem Survival

Michael Sudduth

Philosophy Department, San Francisco State University, 1600 Holloway Avenue, San Francisco, CA 94132
michaelsudduth@comcast.net

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Abstract—In *Persons, Souls and Death,* David Lund (2009) presents a cumulative case argument for postmortem survival based on the ostensible explanatory power of survival in relation to data drawn from psychical research. In this paper I argue that the survival hypothesis does not satisfy at least two necessary explanatory criteria accepted and deployed by Lund. First, the data that the survival hypothesis ostensibly explains are not otherwise improbable, as much if not all of the data may be adequately accounted for in terms of psychic functioning among living agents—the LAP hypothesis. Here I argue in considerable detail that Lund's criticisms of the LAP hypothesis, like those leveled by many other survivalists, are significantly defective. Second, the survival hypothesis does not lead us to expect the data Lund outlines, so it fails with respect to predictive power. Since the "best explanation" is one that leads us to expect what is otherwise improbable, the survival hypothesis is not the best explanation of the data that Lund considers.

Introduction

In *Persons, Souls and Death: A Philosophical Investigation of an Afterlife* (Lund 2009), philosopher David Lund presents an argument for postmortem survival informed by reflections in the philosophy of mind and the data of psychical research. Like many recent treatments of the survival question among philosophers (Almeder 1992, Braude 2003, Griffin 1997, Paterson 1995), Lund assesses the case for survival as a cumulative case argument based on several different strands of observational evidence collected from the domain of psychical research: data from near-death experiences, apparitional experiences, cases of the reincarnation type, and mediumship. He also provides substantial engagement with a range of questions in the philosophy of mind as a prelude to his evaluation of the evidential force of data collected from psychical research.

In the course of his exploration Lund argues four main points concerning the survival hypothesis:

(I) the antecedent probability of the survival hypothesis is not too low.
(II) the survival hypothesis is the best explanation for the range of empirical data drawn from near-death experiences, apparitional experiences, cases of the reincarnation type, and mediumship.
(III) the survival hypothesis is more probable than not.
(IV) belief in the survival hypothesis is a rational belief.

Like many other defenders of the survival hypothesis, Lund makes his case for the rationality of belief in survival by assigning this belief a certain evidential or conditional epistemic probability[1] on the basis of its possessing certain explanatory virtues and its not being an antecedently unlikely hypothesis. In essence Lund argues for (IV) on the basis of (III), and he argues for (III) on the basis of (I) and (II).

The focus of this paper will be Lund's argument for (II), though at points I will touch on the logical connection between (II) and (III). Since Lund's argument for (II) depends on arguments that attribute explanatory merit to the survival hypothesis and the alleged failure of competing explanations to achieve the same level of explanatory efficacy, I will critically discuss not only what Lund says on behalf of the alleged explanatory power of the survival hypothesis but also his criticisms of what he regards as the strongest explanatory competitor to survival, the appeal to psychic functioning among living persons. My exploration of the survival hypothesis and the logic of inference to best explanation will show that Lund underestimates the difficulty of attributing superior explanatory power to the survival hypothesis over the living-agent psi alternative. Consequently, Lund does not give us a very good reason to believe that (II) is true. In fact, I will also argue that Lund's own criticism of the appeal to living-agent psi contributes to a case for supposing that (II) is false. I hope these criticisms will bring clarity to the points at which survival arguments in general are most vulnerable to defeat and therefore attention to the liabilities that future survival arguments must overcome if they are to succeed.

The General Structure of Lund's Argument

Lund makes it clear at the outset of his book that we cannot have, nor should we expect to have, epistemic certainty about survival, nor are the arguments for survival conclusive or compelling (Lund 2009:7, 217–218). In this respect his position exhibits a modesty not displayed by some prominent writers on postmortem survival who maintain that the evidence for survival is so strong that not believing in survival is irrational (Almeder 1992:62, 1996:507–509). Lund takes the position that there can nonetheless be grounds for rational belief in survival. These grounds amount to a cumulative case probabilistic argument for survival (Lund 2009:127, 212, 217). The case is *cumulative* because the conclusion that some people survive biological death is inferred from several different and independent lines of evidence that individually add weight to the survival hypothesis: data from near-death experiences (Lund 2009:114–128), apparitional experiences (Lund 2009:129–152), cases suggestive of reincarnation (Lund 2009:153–180), and mediumship (Lund 2009:181–203). It is a *probabilistic* argument because Lund does not claim that the data logically entail survival, but rather the data collectively confer likelihood or probability that survival is true, specifically that the balance of probability favors the survival of human consciousness beyond death. Relative to the evidence Lund outlines, the survival hypothesis is more probable than not (Lund 2009:215–218).

According to Lund, the survival hypothesis acquires a probability or likelihood of being true based on its ostensible explanatory power and its not being an antecedently unlikely hypothesis.[2] What is required here is the widespread, though arguably problematic, principle that propositions may acquire degrees of probability based on their explanatory efficacy, and by virtue of their level of probability they acquire epistemic credentials of various sorts (e.g., rational, justified). Survival allegedly "accounts for" or "explains" the data Lund presents in much the same way food poisoning might explain Jack's symptoms of illness that developed a few hours after eating a bacon cheeseburger because food poisoning can plausibly be construed as the *cause* of his symptoms (Lund 2009:125, 142–144, 149–152, 211–218). The survival hypothesis postulates the postmortem continuation of the individual person as a distinct center of consciousness as the cause of the data Lund presents.

The survival hypothesis not only explains the data in Lund's view, but it provides the *best* or *most plausible* explanation from a narrow range of explanatory competitors that postulate something other than a postmortem self as the cause of the data (Lund 2009:137, 213–217). Hence, the survival hypothesis allegedly has explanatory virtues not shared by alternative hypotheses or has such virtues to a greater degree than its competitors. These fall into two classes. "Naturalistic explanations" postulate purely natural laws that describe the physical and mental activity of human beings (Lund 2009:112, 120, 135–136, 167–170). These include the general appeal to coincidence or fraud (in mediumship), hallucinations (in apparitional experiences), cryptomnesia and paramnesia (in cases of the reincarnation type), and various psychological and physiological processes or mechanisms (in near-death experiences). "Paranormal explanations" postulate psychic functioning in living agents in the form of extra-sensory perception (ESP),

psychokinesis (PK), or some combination of the two (Lund 2009:156, 163, 170–171, 184).

Whether survival is the best explanation of the data depends of course on the application of criteria of explanatory efficacy. Lund does not provide a detailed or systematic account of explanatory virtues, but we can partly infer his position here from how non-survival explanations allegedly fail to be plausible or good explanations. With reference to both the naturalistic and paranormal hypotheses, one of Lund's frequent criticisms is that these hypotheses do not *fit* the observational data. By this he means that these hypotheses either do not lead us to expect the data or they lead us to expect something that is actually incompatible with the data. For example, Lund argues that while some naturalistic explanations of NDEs postulate causes that would lead us to expect some of the phenomenal features of NDEs, some of the postulated causes lead us to expect experiential features that are incompatible with their actual phenomenology, and none of the natural causes leads us to expect veridical experiences of the sort reported in NDE cases (Lund 2009:112–116). In the case of paranormal explanations of NDEs, Lund argues that, while paranormal explanations might lead us to expect some of the veridical features of NDEs, nothing we know about living-agent psi leads us to expect the vivid, rich, and detailed phenomenology associated with such experiences (Lund 2009:121–126). This strategy is repeated for each strand of ostensible survival evidence.

So following typical accounts of inference to best explanation, Lund sees what is often called *predictive power*[3] as at least a necessary component of explanation. A good hypothesis leads us to expect our observational data, and it does not lead us to expect anything incompatible with our observational data. Second, though, Lund contends that non-survival explanations must in some sense be ruled out prior to accepting survival as the best explanation (Lund 2009:177). This is why Lund devotes considerable space to criticisms of alternate hypotheses. It would seem that Lund is committed to the explanatory power of a hypothesis being partly a function of its leading us to expect phenomena that are otherwise not to be expected. This would not be the case if there were nearby explanatory competitors with high predictive power in relation to the same data. Technically stated, the *prior probability of the data* must be fairly low. Finally, Lund frequently invokes *simplicity* as a virtue of the survival hypothesis (Lund 2009:215). Even where other hypotheses account for the data, they do so as more complex hypotheses, and this counts against their plausibility. So (II)—Lund's central claim—amounts to the more specific claim that the survival hypothesis is a relatively simple hypothesis that leads us to expect a suitably robust range of observational data that are otherwise quite unlikely.

The Living-Agent Psi Hypothesis

Lund recognizes, rightly in my view, that the nearest explanatory competitor to the survival hypothesis is the appeal to psychic functioning among living persons (hereafter, LAP for "living-agent psi"). Lund provides a fairly detailed examination of this exotic hypothesis throughout his book and attempts to show that it is explanatorily inferior to the survival hypothesis (Lund 2009:118–128, 142–151, 171–173, 203–204, 212–215). Like many other survivalists, Lund explicitly accepts the reality of LAP (Lund 2009:207, 213–214). However, he maintains that, as an explanation of the data drawn from psychical research, it is in crucial respects inferior to the survival hypothesis.

Lund identifies three defects in the LAP hypothesis.

> (a) LAP as currently understood and ostensibly established in parapsychology from an analysis of phenomena outside the context of cases suggestive of survival does not account for the full range of survival data (Lund 2009:120–123, 125–127, 171–177).
>
> (b) The only version of the LAP hypothesis that properly accounts for the full range of data requires adopting what is often called the "super-psi hypothesis," but this hypothesis lacks independent support since it involves postulating psi of a considerably greater degree and refinement than ordinary psi (Lund 2009:149–150, 212–214).
>
> (c) The super-psi hypothesis is a highly complex hypothesis compared to the survival alternative, and simplicity is preferred to complexity in choosing among hypotheses (Lund, 2009, pp. 142, 152, 215).

So Lund presents a kind of dilemma for advocates of the LAP hypothesis. LAP is either a hypothesis for which there is independent support but which cannot account for the data or it is a hypothesis that can account for the data but at the cost of being an overly complex hypothesis for which we have no independent support. On the first horn of the dilemma, the LAP hypothesis may be antecedently plausible or probable but lacks explanatory merit. On the second horn of the dilemma, the LAP hypothesis has explanatory merit but its antecedent plausibility or probability is significantly lowered. Hence, the LAP hypothesis fails as an explanatory competitor to the survival hypothesis. In this section and the next I want to focus on (a) and (b) to dissolve this dilemma and undercut Lund's argument for supposing that survival is the best explanation of the data. In the section **The Predictive Power of the Survival Hypothesis** I will build on considerations explored here to rebut Lund's contention that survival is the best explanation of the data.[4]

Essential to Lund's overall argument is a notion of "ordinary" LAP. This is a concept of LAP informed by experimental research and the analysis of spontaneous phenomena outside the laboratory. Based on paradigmatic cases of LAP drawn from these sources, ordinary LAP involves some fairly clear characteristics that function as constraints on the explanatory efficacy of the LAP hypothesis. The argument is an old one urged by survivalists against appeals to LAP (Dodds 1934:160). However, before critically examining Lund's reasons for believing that ordinary LAP does not do the necessary explanatory work, we should first explain the idea of ordinary LAP and why some parapsychologists have maintained that it poses a challenge to the survival hypothesis.

The Conception of Ordinary LAP

The conception of so-called ordinary LAP depends largely on data associated with qualitative and quantitative experimental research typically conducted in laboratory settings, as represented for example in ganzfeld, remote viewing, and random number generator experiments which have tested for telepathy, clairvoyance, precognition, and PK. Some of the results from this experimental history are worth noting since they inform us about the characteristics of ordinary LAP.

The data collected from forced-choice tests[5] (e.g., card-guessing and random number generator experiments) indicate a statistically significant above-chance selection of fixed and limited targets by experimental subjects, as well as positive correlations between the intentions of experimental subjects to alter various kinds of output from random number generators (RNGs) in particular ways and actual changes in their output (Braude 2002:64–101). If such data are evidence for LAP, they at least provide evidence that some people are capable of acquiring knowledge of simple images on cards (through telepathy and/or clairvoyance) and causally influencing presumably otherwise random physical systems. While these may seem like fairly weak effects, the data from some RNG experiments are compatible with interpretations that involve more radical manifestations of psi, ranging from living agents having direct causal influence over the past (retroactive PK) to their successfully using multiple psi processes that combine PK and highly refined precognition (Braude 2002:68–78). Since precognition itself raises the specter of the future affecting the past (to account for some person at present time knowing what will happen at some future), it may be necessary to postulate a very powerful clockwise ESP and PK, one that involves psychic access to highly detailed information and influences on large-scale events (Braude 1997:233–253). Moreover, the experimental data also provide good evidence that PK success is independent

of task complexity. PK appears capable of influencing target systems of varying types and complexities (where this includes the complexity of the experimental design), and it is efficacious even when subjects are blind to the target and details of the RNG mechanism, as well as when subjects do not even know that they are involved in a PK experiment (Kennedy 1978, Stanford 1977:338–342, 370–374).

Free response experiments seem to provide more direct evidence for LAP of broader scope, potency, and refinement. In the dream laboratory at Maimonides Medical Center, a decade-long run of experiments tested subjects for telepathy and clairvoyance during their dream states (Ullman & Krippner 2002, Sherwood & Roe 2003). In these experiments many subjects scored significant "hits" by providing descriptions of their dream content that corresponded thematically and often in specific details to randomly selected pictorial targets, typically in the form of paintings or art-prints. Telepathy-specific experiments involved agents, sometimes at a great distance from the subject, who focused on the target and attempted to "send" the image to the subject during their REM state. The results suggest that in altered states of consciousness detailed imagery in a narrative format mediates telepathic or clairvoyant interactions. In ganzfeld experiments subjects have achieved significant hits with static and dynamic targets (ranging from pictures to movies) during a waking but sensory-restricted state (Honorton 1985, Bem & Honorton 1994). In the STARGATE remote viewing program, subjects in normal states of consciousness have produced accurate and sometimes detailed verbal descriptions and drawings of large outdoor targets at a great distance (including large and small buildings, underground facilities, and natural settings), with and without any ostensible sender (May 1996, Targ 1996, Puthoff 1996). Where our ordinary conception of LAP draws on data from free-response experiments, ordinary LAP entails the telepathic, clairvoyant, and perhaps even precognitive acquisition of information about complex and dynamic targets, and it is often mediated by detailed mental imagery.

While many parapsychologists wish to limit claims about LAP to what has been ostensibly established in the above kinds of experimental contexts, Braude (1997) has provided what I regard as a compelling case for including spontaneous case data.[6] These are significant in that they both reinforce the general conclusions drawn from experimental research and further extend our conception of the potency and refinement of LAP. Many such cases provide ostensible demonstrations of a wide range of large-scale PK effects, including knocks and raps, apports, levitations, and materializations. We find these not only in the older physical mediumship of D. D. Home and Eusapia Palladino (Braude 1997), but also similar phenomena in modern

RSPK cases (Roll 2004) and modern controlled sitter-group situations, such as those conducted by Kenneth Batcheldor (Batcheldor 1966, 1984) and Alan Robert George Owen (Owen & Sparrow 1977).[7]

Similarly, documented cases of veridical apparitions of the living provide evidence that living persons are capable of impressive psychic accomplishments. Some living persons have reported the perceptual experience of some other living person at a location where the apparent's body was not located (Hart 1956, Broad 1962:147–152, 167–189). In some of these cases, the apparent has formed an intention to appear to a particular person, while in other cases the apparent has an out-of-body experience in which she experiences herself traveling to particular places and acquiring knowledge of the happenings at the location where she is perceived. As Lund notes (Lund 2009:134), it is hard to avoid the conclusion that these are instances of LAP. If they are, though, we have living agents who are capable of experiencing themselves moving through regions of physical space to specific locations where they acquire information that would be possessed by people at those locations using their senses. These would be cases of clairvoyance involving the subjective sense of being outside one's body and knowledge derived from detailed imagery of physical environments at locations remote from one's physical body. In cases where other people perceive the apparent, the apparition must either be a quasi-physical entity, the knowledge of which arises by the use of the ordinary senses of the perceivers, or it must be a mental image. On the former interpretation, the apparent must have the capacity to produce a temporary physical or quasi-physical substance, which sufficiently resembles herself, in some region of space away from her physical body. This is a clear example of a large-scale PK effect produced at a specific location, combined with clairvoyantly acquired information about the location where the effect is produced. On the latter interpretation, the apparent must have the capacity to causally influence the minds of some other person at a great distance, resulting in a temporary, interactive mental image of sufficient resemblance to herself, and to telepathically or clairvoyantly acquire information about the environment at the location where she is experienced by the perceivers.

The Prima Facie Explanatory Relevance of the Ordinary LAP Hypothesis

On the basis of the above experimental, semi-experimental, and spontaneous case data, we can begin to see why some parapsychologists have maintained the explanatory relevance of ordinary LAP to data allegedly suggestive of survival. Some comparison and contrasts with the survival hypothesis will be necessary to develop this.

(1) There is independent evidence for LAP that is broad in magnitude and very potent (including both small-scale and large-scale phenomena), as well as refined in its operation (often combining multiple psi processes and resistant to task complexity).

As E. R. Dodds pointed out in the early twentieth century, the LAP hypothesis appeals to a kind of causal agency and cognitive functioning for which we have independent evidence and agents (embodied ones, as opposed to discarnate ones) whose existence is not antecedently in question, even if it requires an expansion of the antecedently known boundaries of the causal and cognitive powers of human agents (Dodds 1934:156). In this way advocates of the LAP hypothesis emphasize epistemic conservatism: Adopt hypotheses that fit with background knowledge in the precise sense of involving agents and causal processes for which we have independent support. It is better (from the epistemic point of view) to postulate entities and processes whose existence is independently known than appeal to novel ones, since—all other things being equal—the antecedent probability of the former is higher.

(2) LAP provides an explanation of the veridical features of the data.

To see why (2) is true, consider why the veridical features of the data are suggestive of survival. In cases of mediumship and ostensible reincarnation, some living agent has knowledge that—due to its highly specific, systematic, and private nature—a particular formerly living person was uniquely situated to possess. To be "uniquely situated" with respect to some body of knowledge is to be in a position with respect to this knowledge that no one else is in, or at least to be better situated with respect to the knowledge than any other person would be. This is obviously not the case for individual bits of knowledge about the deceased, as many other people will have that kind of knowledge. The knowledge in view here is a body of knowledge that forms a coherent narrative of significant aspects of the deceased person's life and personality. Call this knowledge K. Since psychological continuity—continuity of a person's various mental states (intentions, thoughts, memories)—is an important indicator of personal identity, the continuation of K is evidence that the person, with whom K was originally associated, has continued to exist, either as a re-embodied living person or a discarnate entity utilizing a medium to communicate with living persons. The same principle seems operative when considering the *prima facie* force of the veridical features of apparitional experiences and NDEs as evidence for survival.

So survival inferences from veridical features of the data depend on the following sort of premise:

(SV) There is some living agent, A, who has knowledge K, where K is such that some deceased person D is uniquely situated to be the source of K.

(SV) makes it clear why the survival hypothesis has apparent explanatory power over data associated with cases of mediumship and cases of the reincarnation type. If the veridical features of such data are linked to the deceased in the way indicated by (SV), then these features of the data are not very likely to occur unless survival is true. In other words, (SV) entails that the prior probability of the veridical features of the data is low. Since the explanatory power of a hypothesis is a function of high predictive power and the low prior probability of the data, (SV) boosts the explanatory power of the survival hypothesis. Now the prima facie appeal of the LAP hypothesis is that it tells an alternate story about how K *could* have been acquired solely as the result of paranormal cognitive processes in embodied, living agents. This story seems to erode the otherwise maximally tight connection between the deceased and the stock of accurate and detailed information about the deceased that is communicated in the better survival cases. In essence the LAP hypothesis rebuts the contention that some deceased person or the temporarily disembodied consciousness of a living agent is *uniquely* situated to be the source of K. By rebutting (SV) in this way, the LAP hypothesis is a kind of defeater or doubt-maker for the inference for survival, inasmuch as that inference depends on the truth of (SV).[8]

We can illustrate this by considering how the LAP hypothesis operates to defeat the inference for survival from the data of mediumship. The medium is a living agent who possesses K, but we can know this fact only because someone other than the medium has verified the medium's claims about the deceased. But this process of verification requires that facts about the life of the deceased be known or knowable by people independently of the medium's testimony. This in turn requires an accessible source of the relevant information, e.g., other living agents having the information or the information being available in documents. But in that case the medium might have acquired K by telepathically or clairvoyantly accessing these sources. In other words, the deceased person D is not so uniquely situated with respect to K if living agents have psychic functioning and the information that constitutes K is psi-accessible. Moreover, there is no compelling reason to suppose that the information that constitutes K is not psi-accessible once we postulate even ordinary LAP and observe that we simply are not warranted in stipulating any clear-cut boundaries for its magnitude or efficacy, a point to which I will return below in the section ***Response to Lund's Criticisms of the Ordinary LAP Hypothesis***.

(3) There is prima facie evidence that in some instances mediumistic claims, ostensibly originating from the deceased, are actually the product of telepathic interaction with the minds of sitters.

There are at least two kinds of considerations in support of (3). First, there are cases where the medium's highly specific claims about the deceased are actually false, but where these incorrect claims correspond to incorrect beliefs held by the sitters (Myers 1889–1890:568–571, 581–583, Podmore 1910/1975:165–166). Since the claims in question concern highly specific matters about which the deceased is unlikely to have been mistaken, and it is not surprising that agents other than the deceased would have been mistaken, we have evidence that the correspondence between the medium's false claims and the sitter's false beliefs is the product of telepathic interaction between their minds. Moreover, it seems implausible to suppose that the medium's telepathic acquisition of information from the minds of the sitters would take place only on occasions where the sitters entertained false beliefs about the deceased. So it seems reasonable to infer that at least some of the medium's veridical claims about the deceased should also be the product of telepathy with the sitters.

Second, there are cases where the content of mediumistic communications seems to correspond in a striking way to matters recently and randomly experienced or mentally entertained by the sitters. For example, in some sittings the medium spontaneously introduces the name and other identifying details of a deceased person but the person happens to be related to a living person whom the sitter has only recently randomly encountered or who may have through chance coincidence been on the mind of the sitter (Salter 1926:69–72). When the claims of mediums relate to fortuitous aspects of the sitter's very recent experiences, it seems that the medium is simply tapping into the sitter's recent memory to guide the narrative of the sitting, rather than this being evidence that a deceased person has highly impeccable timing for showing up at a sitting with precisely this sort of information. More persuasive along these lines are cases where obviously fictitious communicators or controls appear at séances, but their identities happen to correspond in some way to what sitters were thinking about prior to the séance (Sidgwick 1915:85, 297ff, 437–448). Because of their highly specific or idiosyncratic nature, it seems implausible to suppose that these latter kinds of correlations would be merely fortuitous. In that case, though, we have prima facie evidence that the medium not only has telepathic interaction with sitters, but she sometimes presents or constructs (ostensibly deceased) personalities from telepathically derived information from the minds of the sitters. It seems unlikely that telepathy with sitters would only

operate when the personalities entertained by sitters were fictitious. So it is plausible that on different occasions the names and characteristics of deceased family members and friends would also enter into the medium's mind through telepathic interaction.

(4) Contextual features of paradigmatic cases of LAP have characteristics that significantly resemble other important features of the data.

If the conception of the LAP hypothesis includes contextual features of paradigmatic cases of LAP, then the LAP hypothesis does not merely cover the acquisition of accurate and detailed information about the deceased but also the manner in which this knowledge is often acquired or conveyed. As explained above, we have evidence that living agents sometimes exercise clairvoyance during dynamic out-of-body experiences, and this parallels both the phenomenal and veridical features of NDEs. Moreover, data from cases of apparitions of the living (and dying) provide evidence that living agents can produce full-blown apparitions of themselves to other living agents (through PK or telepathy), sometimes with clairvoyantly acquired information about the environment in locations where their apparitions are perceived. While such apparitions are of the living and not the dead, once we grant that living agents can psychically produce accurate, lifelike, and seemingly localized representations of themselves that are experienced by other living persons, LAP can account for most of what stands in need of explanation in cases of apparitions of the dead. The remaining question as to why some apparitions are of the deceased will be addressed below in the section ***Response to Lund's Criticisms of the Ordinary LAP Hypothesis***.

From the point of view of explanatory efficacy, it is highly relevant that (3) and (4) show us that LAP can *mimic* important strands of survival evidence. So we can say that while (2) informs us that LAP provides an explanation of the veridical features of the data, (3) and (4) each leads us to expect the presentation of such veridical features through an *appearance* of survival. The appearance of survival is generated by structural similarities between survival data and the data that informs our ordinary conception of LAP, at least where the latter draws on data from spontaneous cases. The gap between ordinary LAP and what would be true if the data were the product of discarnate persons seems to converge at crucial points. This further reinforces the point raised above (in connection with (2)) that ordinary LAP boosts the prior probability of the veridical and some of the phenomenal features of the data, as well as their joint occurrence. In this way, the ordinary LAP hypothesis reduces the explanatory force of the survival hypothesis. Important strands of the data do not seem surprising or unlikely if the survival hypothesis is false.

Lund's Criticisms of the Explanatory Force of the Ordinary LAP Hypothesis

We are now in a position to assess Lund's criticisms of the ordinary LAP hypothesis, an essential part of his contention that the survival hypothesis is the best explanation of the data. Recall that Lund maintains that (a) ordinary LAP is explanatorily defective since it does not explain important features of the data, and (b) this can be remedied only by adopting a super-LAP hypothesis that requires postulating a degree or magnitude of psi for which we have no independent evidence. In this section I will argue that (a) and (b) are both false.

Three Explanatory Defects in Ordinary LAP

As Lund sees it, the data in need of explanation include features that are not found in paradigmatic cases that inform our conception of ordinary LAP. As noted earlier, survivalists have long opted for this strategy in arguing against the explanatory efficacy of appeals to LAP (Ducasse 1961, Dodds 1934). Lund assumes that if the data have qualities that ordinary LAP does not, an appeal to the latter does not serve to explain the former. Lund identifies at least three aspects of survival cases that manifest this incongruity: veridical features, phenomenal features, and skill-set features.

First, Lund argues that while it is true that ordinary LAP might explain how a living person acquires intimate and detailed knowledge about the life of a formerly living person, there are more fine-grained features of the veridical aspects of the data that ordinary LAP cannot explain because ordinary LAP does not have these features. His main illustration of this concerns the quantity and diffusiveness of detailed information presented in data drawn from mediumship and ostensible reincarnation cases. If such information were acquired through LAP, living agents would have to tap into multiple sources and integrate the information from these sources into a coherent narrative. But there are no paradigmatic cases of ordinary LAP in which the information possessed by one mind has been drawn from multiple other minds or remote locations and synthesized into a single seamless narrative (Lund 2009:184–186, 188, 191, 193–194, 197–198).

Second, there are phenomenal features of the data that are not present in cases of ordinary LAP. In near-death experiences, subjects have a distinct sense of being outside their bodies (Lund 2009:121, 125), and they typically perceive the physical environment from a particular position in space above their body (p. 123). Ordinary telepathy and clairvoyance, though they involve the acquisition of knowledge about states of affairs external to the subject, are not accompanied by this kind of perceptual imagery. Moreover,

Lund contends that the clarity and accuracy of perceptions during out-of-body experiences exceeds the degree of clarity and accuracy in ordinary cases of clairvoyance (Lund 2009:121). Mediums acquire their information about the deceased in a way that seems to them like it is originating from the deceased with whom they are interacting. In data suggestive of reincarnation, subjects not only have knowledge of some formerly living person, but they have this knowledge in the form of memorial experiences. Paradigmatic cases of telepathy and clairvoyance do not involve this (Lund 2009:172–173). With respect to apparitional experiences, ordinary LAP does not involve the creation (through ESP or PK) of apparitions of a third person who appears to a particular perceiver, so ordinary LAP cannot explain communicating apparitional experiences of the deceased, whether these are experienced in deathbed scenarios or elsewhere (Lund 2009:25).

Finally, data drawn from both reincarnation cases and mediumship involve a variety of skills (e.g., linguistic, musical, literary) associated with a formerly living person, but ordinary LAP involves the transfer of information not the transfer of skills (Lund 2009:176–177, 193). It can explain knowledge *that* something is true, but not knowledge *how* to do something that requires learning and practice. Children who remember past lives, for example, do not simply have knowledge of the lives of formerly living persons, but they sometimes display many of their musical, artistic, or linguistic skills. Similarly, mediumistic data often include the medium's exhibiting detailed information about the deceased through facial expressions, tone, and vocabulary and sentence structure characteristic of the deceased person, as well as other personality features. We have no parallel to this in paradigmatic cases of ordinary LAP.

Response to Lund's Criticisms of the Ordinary LAP Hypothesis

One of the difficulties with Lund's procedure for ruling out explanations in terms of ordinary LAP is that the boundaries of ordinary LAP are not as clear as Lund suggests. For example, if we turn to random number generator experiments, the way in which some of these experiments provide evidence for LAP is compatible with different stories about what specific psi processes are being utilized and the requisite degree or magnitude of psi. As indicated earlier, the statistical data can be interpreted in ways that permit, and may even demand, a fairly powerful and refined sort of LAP whose success is resistant to the typical limitations of task complexity.

Drawing conclusions about the boundaries or limits of LAP based on what we take to be paradigmatic cases of psi can be tricky for another reason. It is not immediately clear what to say about cases exemplifying characteristics not present in our current paradigmatic set of psi cases. Do

they represent an entirely different phenomenon such as survival or are they simply cases of LAP that exhibit properties not found in what we have antecedently accepted as paradigmatic cases of LAP? In other words, when we come across cases that resemble psi in certain ways but also include novel features, why should we not regard such cases as providing evidence for the expansion of the domain of LAP, especially when such a view would be compatible with theorizing about psi based on the experimental data. This matter can be very sneaky, for when Lund asks for "independent evidence" for super psi, it is natural to ask whether any such evidence could be presented that would not be regarded by Lund as evidence for survival.

Now these are just two preliminary methodological concerns, but there are substantial problems too. Lund's contention that some characteristics of survival data are not found in paradigmatic cases of LAP is mistaken at several points.

Lund attributes apparitions of the living to LAP (Lund 2009:131–134), but he argues that since we have no cases of LAP where a person creates an apparition of another person who is deceased, this characteristic of apparition-of-the-deceased cannot be explained by ordinary LAP. To illustrate one of the concerns mentioned above, note that if LAP *did* have this characteristic, it would be a case that is phenomenally indistinguishable from apparitions of the dead that Lund takes to be evidence of survival. Moreover, notice that Lund has described the relevant characteristic as an apparition of a person distinct from one's self, not the more generalized description of *apparition of a person*. But there's no evidence that suggests that the psi needed to produce an apparition of one's self is any less potent or refined than the psi needed to produce an apparition of another person (dead or alive). Claiming that we have *no* evidence that LAP can produce apparitions of other persons is a lot like saying that we have no evidence that a particular artist is capable of painting a picture of other people because the artist's known works only include impressive self-portraits. If a person has the ability to produce a lifelike apparition of himself using LAP, it seems implausible to argue that LAP *cannot* account for apparitions of the deceased, unless of course one has independent evidence that the LAP needed for the latter is radically different in kind from the LAP needed for the former.[9]

Moreover, the conclusion that apparitions of the dead are ESP or PK productions by the living is entirely compatible with Lund's own endorsement of Hornell Hart's conclusion (Lund 2009:134) that apparitions of the living and the dead are so similar in their characteristics that they should be regarded as belonging to the same kind of phenomenon. Since apparitions of the living involve the consciousness of the apparent being

the cause of the apparition, Lund infers that apparitions of the dead must involve the consciousness of "the deceased" apparent being the cause of the apparition. But this would be evidence for survival only if we had good reason to believe that "the deceased" caused the apparition at some point after death. Given the evidence for telepathic deferment (i.e. a delay between the time a telepathic stimulus occurs and when the subject actually experiences it), there is no way to adequately ensure that an apparition experienced at some particular time after the death of the apparent was in fact generated by the apparent *after* his death. Nor is it clear why the symmetry between cases of apparitions of the living and the dead require the conclusion that the consciousness *of the apparent* be the cause of the apparition, rather than the consciousness *of some living agent*.

Lund's alleged explanatory defects of the LAP hypothesis with reference to the phenomenal features of NDEs are equally suspect. As indicated earlier, in free-response tests for clairvoyance and telepathy, target hits are often mediated by imagery with varying degrees of detail and vividness. Also, cases of reciprocal apparitions include cases where subjects have a vivid sense, even perceptual experience, of being outside their bodies, together with other worldly imagery and perceptions of places, people, objects, activities, and events in this world. Since Lund mentions such cases and regards them as instances of LAP (Lund 2009:132–135), his claims about the inadequacy of the LAP hypothesis for accounting for these features of NDEs seems mistaken.

Lund also claims that ordinary clairvoyance and telepathy do not include instances where information is drawn and integrated from multiple sources, and yet in some mediumship cases the medium's knowledge, if the result of LAP, would have to have done precisely this, for at the time of the sittings no single source contained all the information communicated through the medium (Lund 2009:194–199). This has often been proposed as a serious problem facing the LAP hypothesis since it seems to demand super psi (Braude 2003:36–38, 82–84, 93–94, Gauld 1982:59–60, 68–73).

However, there are two problems with Lund's argument at this juncture.

First, Lund's general claim is contradicted by experimental research that provides evidence that subjects have successfully carried out ESP tasks involving the integration of information from multiple targets. For example, subjects have successfully carried out blind matching ESP tasks in which they have matched two unknown cards, as opposed to simply identifying a single unknown card (Kennedy 1995). While such experimental evidence is clearly not on the same level as the better mediumistic evidence, it is nonetheless highly relevant to the plausibility of accounting for that evidence in terms of LAP. Indeed, it is worth noting that with reference to

the Runki Case—a mediumship case involving multiple sources to confirm the medium's veridical claims—the principal investigators (Erlendur Haraldsson and Ian Stevenson) cautioned against a survivalist interpretation on the grounds that living agents (in spontaneous cases) have performed "remarkable feats" of psychically deriving and integrating complex information without any participation from purported discarnate persons (Haraldsson & Stevenson 1975:57).[10] I mention this in part because Lund himself appeals to the Runki case as being especially problematic for the LAP hypothesis because of what it would have allegedly involved in the way of the gathering and synthesizing of information from diverse sources (Lund 2009:195–199).

Second, Lund frequently mentions a concern about the "complexity" of the kind of psi that would be needed to account for survival data. This concern seems rooted in the assumption that LAP operates in a way analogous to ordinary information processing, proceeding in a step-by-step manner, gathering and then organizing information. Lund thinks that psi would have to move through discrete steps or stages: selecting, organizing, and integrating information. It is as if LAP would have to operate like a librarian trying to reconstruct a physical card catalogue after the cards had been scattered throughout a city by a hurricane and mixed together with tens of thousands of other pieces of paper (Lund 2009:174, 199). However, as explained earlier and illustrated by blind psi experiments, the experimental data suggest that LAP is not bound by the constraints of ordinary information processing (Foster 1940, Kennedy 1980). LAP seems resistant to many of the limitations that characterize task complexity. Lund's contention that LAP must become super LAP to account for "multiple source" cases seems to depend on a false premise about how psi is related to task complexity. More generally stated, we are not warranted in supposing that what is obscure, difficult, or complex from the vantage point of normal information gathering and organizing would present similar challenges to psi.

Finally, in the case of mediumship Lund contends that ordinary LAP does not involve the presentation of information in the form of subjective impressions of having originated from discarnate persons. However, this is not correct. As explained in connection with the section *"(3) There is prima facie evidence that in some instances mediumistic claims, ostensibly originating from the deceased, are actually the product of telepathic interaction with the minds of sitters"* above, in instances where mediums have made claims that are most plausibly the product of telepathy with sitters, they have had no less a subjective impression that the information was originating from the deceased with whom they were ostensibly communicating. And we will see shortly why LAP, once situated

in its broader psychological landscape, would lead us to expect situations where LAP is conjoined with the subjective impression that information is originating from a person distinct from the medium herself.

So Lund has significantly overstated the explanatory deficiencies of the ordinary LAP hypothesis, and some of his reasoning seems to depend on unwarranted assumptions about the limits of LAP or otherwise questionable inferences from the data. Nonetheless, we can grant Lund that at least *some* of the characteristics he attributes to the data are not found in cases that inform our conception of ordinary LAP, of these the two most important are the first-person character of veridical claims in ostensible reincarnation cases and the skill-set data Lund notes for both reincarnation-type cases and data from mediumship. It will of course be highly relevant whether the survival hypothesis can account for any of this, a topic to which I will return in the section **The Predictive Power of the Survival Hypothesis** below. For the moment I want to explore what can be said in defense of the LAP hypothesis in relation to such recalcitrant data.

Recalcitrant Data and the LAP Hypothesis

It is important to remember that according to Lund the survival hypothesis is the best explanation of the data only if it is a relatively simple hypothesis that leads us to expect a suitably robust range of observational data that are otherwise quite unlikely. The LAP hypothesis can defeat the satisfaction of this condition by leading us to expect or rendering unsurprising a significant *portion* of the data, even if it does not account for all the data. The latter would arguably be required if we are to be justified in claiming that the LAP hypothesis is clearly *superior* to the survival hypothesis as an explanatory competitor. But there is no need for such a strong claim in order to challenge the survival hypothesis. Even if we suppose that the ordinary LAP hypothesis is not the best explanation of the data, it might nonetheless reduce the conditional epistemic probability of the survival hypothesis, maybe even significantly enough to prevent the case for survival from being more probable than not.[11]

To see how this works, we only need to recall that explanatory power is a function of both the predictive power of the hypothesis and the prior probability of the data. With respect to the latter, the explanatory power of a hypothesis is inversely proportional to the value assigned to the prior probability of the data. A good explanation for some range of observational data is one that renders the data probable and where the data are otherwise improbable. The more likely our observational data are, whether or not our hypothesis is true, the less our hypothesis actually explains, even if our hypothesis leads us to expect our data. Where the epistemic probability of

the hypothesis is conditioned by its explanatory power, the net result is a diminished epistemic probability for the target hypothesis.

Now the prior probability of the data is just the probability of that data conditioned on our background knowledge—how likely are the data given everything else we know (independent of the survival hypothesis)?[12] Arguably, the strength of survival arguments against the usual naturalistic counter-explanations (e.g., fraud, coincidence, malobservation) is that central features of the data, such as the way in which the data exemplify veridical features, are still improbable given the usual naturalistic suspects. However, unlike the naturalistic explanations, LAP appears to render significant domains of the relevant data probable or unsurprising: living agents having veridical apparitional experiences, detailed and systematic knowledge of deceased persons they have never met, veridical out-of-body experiences, and the occurrence of physical phenomena (and some mental phenomena) with the appearance of having originated from discarnate entities. Since the explanatory power of the survival hypothesis depends on these domains of data being improbable apart from the truth of the survival hypothesis, the fact that LAP makes them probable results in a diminished explanatory role for the survival hypothesis. This is true, even if the survival hypothesis also renders such data probable, and even if LAP does not render other survival data probable.

Finally, it is worth adding here a point that is easily overlooked in survival literature. The case for the explanatory superiority of the survival hypothesis would face a formidable challenge even if we did not know or could not show that the LAP hypothesis rendered the data probable. The survivalist is trying to show that the survival hypothesis is the best or better explanation of the data, but as we have seen this requires that the survivalist argue that the data are otherwise quite surprising. So the survivalist is in the rather difficult position of having to argue that the data, ostensibly rendered probable by the survival hypothesis, are *not* probable given the LAP hypothesis. However, it is exceedingly difficult to see how this can be shown without having to argue that the efficacy and magnitude of psi have rather clearly defined boundaries and limits. Lund nowhere argues this point, and—given our present state of ignorance about psi—I do not see how this *can* reasonably be done.

A Robust LAP Hypothesis without Super Psi

Up to this point my argument has assumed that the LAP hypothesis has limited predictive power. While it can account for veridical features of the data, it does not render probable data concerning skill-set features and the first-person character of the veridical features of the data in cases of

alleged past-life memories and some cases of mediumship. There is no doubt that LAP of unlimited scope and refinement would account for these data (and indeed everything!), but this is explanatory overkill and overlooks more sensible options that equally, if not more effectively, diminish the explanatory force of the survival hypothesis.

Since Pierre Duhem (1861–1916), it has been widely acknowledged in the philosophy of science that single hypotheses rarely have observational consequences. The testable consequences of hypotheses are the result of logical deductions from bundles of statements, typically a central hypothesis conjoined to various independently testable auxiliary assumptions. Even my own account of the explanatory power of the LAP hypothesis (in the section **The Living-Agent Psi Hypothesis**) relied on auxiliary assumptions. For example, I assumed that LAP is linked to contextual features of paradigmatic cases of psi so that we should expect both veridical and phenomenal features of ordinary psi functioning in non-survival contexts. Now in order to account for the apparently recalcitrant features of survival cases, we need simply to expand the content of the LAP hypothesis by adding the right sort of non ad hoc and independently testable auxiliary assumptions.

Motivated Psi Hypothesis

It seems to me that no survival theorist has done a better job at this than Stephen Braude, who has developed what he has called a *motivated* psi hypothesis. In this hypothesis, psychic functioning is integrally related to a person's larger psychological life, for example, a person's needs, goals, and interests, whether these be conscious or not (Braude 2003:13–14, 23–29). So the LAP hypothesis must be considered in conjunction with various auxiliary assumptions drawn from general and special psychology that illuminate the possible psychodynamics in which psychically acquired information about other (deceased) minds is embedded. The LAP hypothesis will therefore cover considerably more than the veridical features of survival data. This has highly relevant consequences for the explanatory power of the LAP hypothesis, especially over otherwise recalcitrant data. Sadly, Lund nowhere mentions Braude's *Immortal Remains* (2003), in which the motivated LAP hypothesis is systematically developed and its explanatory merits compared to the survival hypothesis, but Braude's motivated psi hypothesis adequately circumvents the kinds of problems that Lund believes render the LAP hypothesis implausible.

Consider first data from mediumship. Since a motivated psi hypothesis appeals to some living agent's psychological needs, the fairly widespread human interest in personal survival becomes explanatorily relevant for why the data should take the form of "survival evidence." Sitters typically have

a powerful and conscious interest in communicating with their deceased loved ones, and there is little doubt that mediumistic phenomena often meet their fundamental need for assurance that a loved one is still alive, for them to still connect with the person in some way, or to have assurance that their own life will not terminate with death. And many mediums have an overriding interest in offering comfort to sitters, and the appearance of the survival of a loved one provides just such a comfort. Such motivations would lead us to expect the content of much ostensible spirit communication, such as providing evidence that establishes the deceased person's identity and relaying messages that comfort family and friends.

Of course, needs may be covert and unconscious, and not even related to any interest in survival.[13] For example, when formerly living personalities in cases of the reincarnation type belonged to a higher caste, it is reasonable to ask whether the desire for increased social or financial status is a motivating factor in living agents identifying themselves with a former personality. And while it may be implausible to attribute such motivations to children with ostensible past-life memories, it remains a reasonable supposition for their parents or other family members. And of course interest in higher social class and its direct benefits is only one of a multitude of possible efficacious motivations for (unconsciously) simulating survival evidence. Others could include relieving parental or family responsibility, guilt, or anxiety over children born with physical or mental abnormalities or who develop negative character traits, both of which easily lend themselves to karmic interpretations in eastern cultures. Nor need the psychic agent with the relevant motivations be restricted to the family of the current personality, but the relevant psychic agent(s) might be family members of the former personality.[14]

Lund's Appeal to Discarnate Motivations

Lund is aware of the relevance of motivational factors in attempting to explain survival cases, but he appeals to motivation as a reason for preferring the survival hypothesis to the LAP hypothesis for some cases. For example, Lund argues that with respect to drop-in communicators—discarnate spirits who appear uninvited at séances but who are not related to the medium or any of the sitters—it seems that they have better reason to manifest than the medium has for engaging in psychic sleuthing that results in the acquisition of information about their particular life history (Lund 2009:195–199). When children claim to remember past lives, it seems that the child has less of a reason to identify himself with the formerly living person than the formerly living person would have to reincarnate (Lund 2009:175–176).

The intuitive obviousness of this in any particular case depends largely

on the range of motivations one is willing to entertain as plausible, as well as the scope of the relevant psychic agents. In cases of children who claim to remember past lives, Lund begins by restricting the pool of potential psychic agents to the children themselves, and he then argues that the negative social consequences for children who identify themselves with formerly living persons would override any personal motivation for identifying with them (Lund 2009:173–174). However, there are no obvious social stigmas or other negative social ramifications attached to many cases of children who remember past lives. Moreover, particular needs can function as powerful motivations in behavior even where the pursuit of satisfying such needs has negative social consequences. We need only think of the negative social consequences of associating with particular people, having a particular occupation, or identifying oneself with a particular religious group. Finally, in cases where children claim to remember past lives, there is no good reason to restrict the pool of relevant psychic agents to the children. The motivated agents may be family members or friends, either of the child or the former personality. Hence, even where there are negative social consequences for children who claim past lives, such consequences can easily be outweighed by the stronger needs or interests of other people.

In the case of drop-in communicators, Lund says that it seems inexplicable why without any apparent motive a medium would select one particular communicator as opposed to another and psychically acquire information about him, whereas the communicators seem to have good and often overt reasons for communicating (Lund 2009:195–197). Now for the two cases Lund describes, the Harry Stockbridge case and the Runki case, no actual reason is provided for supposing that the communicators actually had better reason for communicating. This is just asserted, without any analysis of the psychodynamics of the relevant sittings. Lund appears to be relying on Alan Gauld's account of these two cases (Gauld 1982:68–73), but Gauld provides no specific reason for favoring the motivations of the alleged deceased persons in either case. He only notes that, in connection with the Stockbridge case, the communicator indicated a wish to help one of the sitters who was also a military serviceman.

First, it is important not to exaggerate the extent to which drop-ins provide us with anything special here. Haraldsson and Stevenson point out (Haraldsson & Stevenson 1975:34) that *many* drop-in communicators provide no reason for their appearance, and they often disappear just as quickly as they appeared, leaving sitters with little if any knowledge of even their actual identities. So drop-ins as a class of communicators do not seem particularly special with respect to supplying us with clear-cut motives that outweigh the motivations that might plausibly be attributed to living

agents. In the absence of any stated motive, we are certainly not adequately situated to judge that discarnate persons have better reason to communicate on some particular occasion than mediums have for psychically acquiring information about them and unconsciously constructing their persona using such information.

Second, ruling out relevant and plausible motivations in living agents is only as effective as our abilities to grasp subtle and complex psychodynamics in particular situations. Motivations behind behavior are frequently not apparent to the subject or onlookers, even to those with the appropriate nose for detecting it. Attempting to uncover potentially psi-guiding psychodynamics in a group context is more difficult, though of course not impossible. There certainly *are* drop-in cases that seem susceptible to a kind of psychological deconstruction in terms of motivated psi once we dig beneath the psychological surface, as Jule Eisenbud did in his analysis of the Cagliostro case (Eisenbud 1993:227–243, Braude 2003:39–43). Moreover, the widely acknowledged fictitious nature of the controls of many mediums who nonetheless provide detailed and highly accurate information about the deceased is evidence that motivated psi is unconsciously guiding the manifestation of different personae in mediumistic settings, even though we sometimes cannot specify what needs or interests are at work. Therefore, we cannot treat the absence of evidence for relevant motivations among living agents in particular cases as evidence of their absence. While such cases do not provide compelling evidence that all drop-in cases are best explained in terms of motivated LAP, they do render drop-in phenomena less surprising than they would be in the absence of motivational considerations.

Third, suppose we agree with Lund that in *some* cases ostensible discarnate persons have a reason to communicate with the living that appears to outweigh any interests or needs that can be reasonably attributed to the medium (or sitters) as the alternate source of the discarnate persona. Unless the alleged motivations of the discarnate person are reasons to communicate with the particular medium, we are saddled with a similar problem. Many reasons for "communicating" with the living will not sufficiently explain why and how the communicator selects one particular medium as opposed to another from among the potentially thousands that exist to be the recipient of biographical snippets. To use one of Lund's own examples, an agitated Runki communicator shows up through the medium Hafsteinn Bjornsson in Iceland in the 1930s and says (for over a year) he wants his missing leg. But Runki's "unfinished business" underdetermines the selection of the medium Hafsteinn Bjornsson, in much the same way we might imagine that living-agent needs or interests served by the appearance of survival underdetermine Hafsteinn Bjornsson's selection of Runki. By contrast, in

the Harry Stockbridge case the alleged discarnate person provided a fairly specific reason for showing up, namely that he wanted to help a sitter who, like him, was a military serviceman. But if Harry is so motivated because of something he and a sitter have in common, living agents *could* psychically access this information and *would* if a convincing lifelike representation of Harry most effectively serves needs best met by an appearance for survival.

These sorts of issues reveal why it is difficult to determine whether an ostensible discarnate agent has a more sensible motive for showing up than what we might attribute to the living agents in such cases. Survivalists may point out that there may be ontological constraints on discarnate psi that limit or direct a motivation to communicate through mediums, a kind of otherworld to this-world filter. Perhaps Hafsteinn Bjornsson is the best or only *available* option to aid Runki in the retrieval and burial of his missing femur, or maybe the medium is just where Runki's discarnate psi fortuitously connects him. However, once we are willing to make these charitable accommodations to the survival hypothesis, there is no good reason for not extending the same charity to a motivated LAP hypothesis. Drop-in communicators may simply be the result of psychic sleuthing (by the medium or sitters) that is filtered or otherwise influenced by factors beyond the control of the medium and sitters. The sleuthing is interest-driven, but without any particular discarnate person in mind.

Dissociative Phenomena and Unusual Skills

While motivation is crucial to the directedness of psi processes, and hence to the LAP hypothesis, leading us to expect the appearance of survival, dissociative phenomena are of considerable importance as well. First, we have evidence that dissociative states are psi-conducive (Zingrone & Alvarado 1997), so needs that are served by the appearance of survival might be best met as the result of dissociative states. Second, we have good reasons for believing that the fictitious controls and communicators of trance mediums are dissociated aspects of the medium (Braude 2003:33–35, 56, Gauld 1982:114–118). If the conscious or unconscious needs of the medium (or sitters) are best satisfied by an appearance of survival, then—given the psi-conducive nature of dissociated states—the medium's making veridical claims about deceased persons during dissociated states would not be surprising. There are also some interesting similarities between the communicators and controls of mediums and alters in cases of dissociative identity disorder (DID), which arguably constitute evidence that the phenomena are closely related (Braude 1995:218–240).

However, the most relevant aspect of dissociative phenomena is that they provide illustrations outside the context of survival of the sudden

manifestation of novel skills without prior learning or practice. Recall that Lund claims that LAP cannot account for the skills displayed in the better cases of mediumship and ostensible cases of reincarnation, for example, the speaking of a new language, artistic or musical abilities, and refined literary skills. First, according to Lund, LAP can generate only knowledge-*that* something is true not knowledge-*how* to do something. Second, Lund argued that since the skills manifested in survival cases are skills that are developed through practice, their presence in living agents who have never engaged in the practice is very surprising. It is considerably less surprising if we regard the living agent either as a reincarnation of a formerly living person (who retains skills developed through practice in a former life) or a medium being controlled by a discarnate spirit (who retains the skill).

In response to Lund's position, it is highly relevant that dissociative phenomena are commonly linked to the sudden manifestation of novel cognitive and behavioral patterns, including unusual and impressive linguistic, artistic, and musical skills (Putnam 1989, Ross 1997). In DID cases, alters manifest, in addition to radically different personality traits, skills not previously manifested in the person and which typically require learning and practice before their initial manifestation. The linguistic, artistic, and musical skills manifested by ostensible reincarnation subjects and by trance mediums are significantly similar in kind to what is exhibited in abnormal psychology, and this fact renders their appearance in survival cases less surprising. Nor is it the case that living agents acquire such skills through LAP. There is no good reason to believe that skills in survival cases have been *transferred* or *acquired*, only that novel skills are suddenly *manifested* without any obvious antecedents. A dissociative psi hypothesis, then, attempts to explain the data of trance mediumship and cases of the reincarnation type in terms of dissociation, which in turn facilitates potent and refined psychic functioning, as well as the manifestation of latent and impressive skills (Braude 2003:101–132). Where an agent's (conscious or unconscious) needs are best met by the appearance of survival, the psychic functioning facilitated by dissociation will lead us to expect a confluence of dissociative characteristics and the appearance of survival.

In fairness to Lund, he does note that while the LAP hypothesis by itself does not account for the recalcitrant features of ostensible reincarnation cases and mediumship, it may be supplemented with a theory of "subconscious impersonation," a position that Lund believes deserves to be taken seriously (Lund 2009:173–177, 191–193). But he rejects this move for the following reasons.

(i) Subjects with alleged past-life memories exhibit a behavioral pattern of identifying themselves with a former personality,

but—as noted earlier—Lund maintains that psychically acquired information about a formerly living person does not lead us to expect that the subject would personalize the information in the form of memorial experiences.

(ii) LAP would not explain the patterns of recognizing relatives of the formerly living person, as we find in reincarnation cases.

(iii) While impersonation can affect how skills are exercised, it cannot explain how they come to be initially possessed, so neither LAP nor impersonation explain the relevant skills in the survival cases.

(iv) In both reincarnation cases and mediumship, living agents do not merely imitate the deceased; they carry on lengthy conversations "in character," but this requires harnessing an extremely powerful ESP to make the persona seem convincing to many different people who knew the formerly living person.

Since I have already noted that a subject's identification with a formerly living person is explicable in terms of the motivations of some living agent, (i) may be quickly dismissed. (ii) may also be quickly dismissed. While Lund wants to understand the recognition of people as a kind of skill and thus not the sort of thing that can be acquired by LAP, sadly he provides no supporting argument for this claim. I see no reason why LAP cannot result in the identification of persons known to the formerly living person. As for (iii), Lund is correct that neither LAP nor impersonation explains how skills are acquired, but what we know from cases of dissociative phenomena, hypnosis, child prodigies, and savants, is that high-level skills, which most people must develop through practice, are latent and emerge suddenly in some subjects. As indicated earlier, there is no reason to suppose that the skills in survival cases are *acquired* through LAP or in any other way. (iv) seems to depend on questionable assumptions about task complexity (addressed earlier in the paper) and limits on the functionality of personae that are generated as dissociated aspects of the self. On the "impersonation" side of it, the alters in DID cases have no difficulty carrying on protracted conversations with other parties, and people "in character" induced through hypnosis do the same. On the "veridicality" side of it, we need only to remember that obviously fictitious controls and communicators are most likely dissociated parts of the medium, but they are capable of delivering impressive amounts of accurate information over long periods of time, for example Mrs. Piper's "Phinuit" control and Mrs. Leonard's "Feda" control (Gauld 1982:32–44, 114–118). We should also exercise caution in the weight we afford to human testimony to the convincing nature of mediumistic impersonations, as there are profoundly subjective factors that shape such assessments.

Now the basic problem in Lund's treatment of the LAP hypothesis supplemented with "unconscious impersonation" is what he does not discuss. He neither describes nor even mentions dissociative phenomena or their link with psi and the emergence of novel cognitive and behavioral skills.[15] Similarly, he does not consider the relevance of the manifestation of impressive skills in prodigies and savants to the discussion of the skills manifested in survival cases. This failure to get beneath the psychological surface of survival cases results in treating the LAP hypothesis in its least plausible forms and thereby missing the ways in which the case for survival is challenged by LAP and our background knowledge from the field of psychology.

To summarize: The plausible motivational aspect guiding psi functioning, the characteristics of dissociative phenomena, and paradigmatic cases of rare cognitive abilities outside cases of survival each leads us to expect different aspects of the range of data adduced in support of survival. It is also highly relevant that a number of these psychological factors are intimately related to each other, for example, dissociative states are psi-conducive, and subjects experiencing stronger dissociative states manifest unusual abilities that resemble the abilities of savants and prodigies. It is difficult to resist the conclusion that we have here a way of accounting for *all* the main features of survival data, and in a somewhat unified or integrated manner, including data that prove to be recalcitrant under a very narrow construal of the LAP hypothesis. The motivational–dissociative aspects of the robust LAP hypothesis also show us that a robust LAP hypothesis leads us to expect, not just individual bits of data taken in isolation from each other but the confluence of several central features.[16] This is precisely why the debate between the survival hypothesis and LAP alternatives is unresolved.

It is worth clarifying at this point that I am not arguing that a psychologically robust LAP hypothesis is the best explanation of survival data, only that the above considerations render implausible Lund's contention that the only explanatorily adequate LAP hypothesis would have to be a super-LAP hypothesis. Whatever difficulties we might attribute to the robust LAP hypothesis, its ability to render unsurprising most, if not all, of the central features of the survival data in a way that is not transparently ad hoc and dependent on untestable assumptions is not among them.

The Predictive Power of the Survival Hypothesis

I take it that my defense of the appeal to LAP in the prior two main sections shows that a crucial component of "best explanation" is not adequately satisfied in the case of the survival hypothesis, that is, its ability to lead

us to expect phenomena *that are otherwise improbable*. (Recall that the explanatory power of a hypothesis is inversely proportional to the prior probability of the data.) In this section I turn attention to the survival hypothesis itself and explore its explanatory merits (independent of the LAP alternative), for another necessary condition of survival being the best explanation of the data is that it does some explanatory work: It must account for the data and in a way that avoids the explanatory deficiencies of its nearest explanatory competitor.

Simple Survival Hypothesis Is without Predictive Power

An essential aspect of the ostensible explanatory power of the survival hypothesis is its alleged ability to "account for" or "lead us to expect" the body of data Lund surveys in his book. Lund, of course, is not the first survivalist to contend that the survival hypothesis succeeds in this regard. Robert Almeder has strongly insisted on the predictive power of the survival hypothesis (specifically in relation to data suggestive of reincarnation) on the grounds that reincarnation has specific deductive consequences, which he believes are confirmed in part by the testimony of some people to have systematic memory of past lives.[17] However, I think the contention that survival (whether as discarnate entities or reincarnating souls) has predictive power in the required sense does not withstand logical scrutiny.

Contrary to what we might naturally suppose, simply postulating the survival of human persons does not by itself entail or make probable the data that survival is adduced to explain. This is true even if we understand a person to be what Lund contends in the first half of his book: an immaterial subject of mental states possessing various causal powers. Postulating the continuing existence of such a person after death does not have the relevant sort of predictive power since it does not lead us to expect a world in which there are any observational phenomena brought about by such persons, much less the specific observational phenomena that constitute the data Lund outlines.[18]

First, there is the general problem that postulating a surviving immaterial person does not logically entail or even make probable that such persons possess the causal powers or mental states in their postmortem state that would lead us to expect there being any kind of observational data brought about by such persons for the purpose of providing evidence of their survival. After all, there is no contradiction in supposing that (i) immaterial persons survive death but—in the absence of a functioning brain—do not exhibit any mental states or exert causal influence on our world,[19] (ii) some persons survive death as conscious beings, desire and intend to communicate, but lack the power to communicate, (iii) some persons survive death as conscious beings, possess the power to communicate, but lack the desire and/or intention to communicate, or (iv) some persons survive death as conscious beings but lack the power, desire, and intention to communicate. There is not even a probabilistic inconsistency involved in any of these scenarios. Nor can we deduce from a simple conception of the survival of consciousness anything about the specific mode of survival, whether as a disembodied person or a reincarnated self.[20]

Second, even if we grant the survival of an immaterial conscious self with the requisite power, intentions, and knowledge to communicate with living persons in our world, it is incredibly difficult to see how any of this would lead us to expect the particular bits of observational data that Lund outlines. Lund argues that LAP explanations of NDEs cannot explain why subjects would view their environment (including their bodies) from an elevated position above the body as reported in NDEs. But Lund nowhere argues why the survival hypothesis should lead us to expect this either, and I fail to see how it can be a deductive or probabilistic consequence of postulating a surviving conscious immaterial self. Why should we expect a surviving self to have continuing perceptions of the empirical world after death, as opposed to being causally isolated from the physical world? And even if we could extrapolate the continuing perception of this world, we cannot derive any prediction about the specific location from where a surviving immaterial self will observe this world. And there is no expectation as far as I can see that such entities would experience deceased relatives in their afterlife environment.[21] So what does it actually mean to say that survival "accounts" for these particular data? It is pretty hard to say. And something similar must be said for immaterial persons becoming re-embodied again (as data from reincarnation assume), taking executive control of a medium's body to speak or write messages (as the data from trance mediumship assume), or appearing in apparitional forms (as apparitions of the dead assume).

Constructing a Robust Survival Hypothesis

Obviously the survival hypothesis needs exactly what the LAP hypothesis needs: a suitably robust range of auxiliary assumptions that will conjointly entail or render probable the data. Survivalists typically operate with auxiliary assumptions, but their fairly covert employment of such assumptions only masks what ultimately proves to be a serious liability for survival arguments. To see this, I will explicitly spell out some minimal necessary auxiliary assumptions for the survival hypothesis.

One is what I will call *discarnate interactionism*. This circumvents one wave of obvious objections. Since the survival hypothesis posits persons

as the cause of observational datum, it is a species of personal explanation. Such explanations attempt to explain some observational data as the effect of causal powers exercised by intelligent agents guided by mental states in the form of certain beliefs, desires, and intentions. Someone who argues in favor of the hypothesis that Jack stole $150 from Lisa's desk drawer is attempting to explain the disappearance of Lisa's money from a particular location within a certain range of time in terms of the actions of a particular person. This requires auxiliary hypotheses about the extent of Jack's causal powers (he had the ability to steal the money) and his having the appropriate mental states to guide the exercise of his causal powers (e.g., beliefs about the whereabouts of the money and how to remove it), and his having the desire and intention to steal the money. For the data associated with mediumship, apparitional experiences, and NDEs, the persons who are supposed to be causally responsible for the observational data are *discarnate* persons who have the requisite causal powers and mental states (in the form of beliefs, desires, and intentions) to bring about the relevant data.

Hence, we need something like the following auxiliary hypotheses:

[A1] At least some discarnate persons possess the power, desire, and intention to communicate with the living.

[A2] At least some discarnate persons possess empirical knowledge of events taking place in our world after their death.

[A1] and [A2] conjointly constitute the discarnate interactionist hypotheses. Successful communications require not only that discarnate persons initiate causal chains terminating in observational phenomena in our world, but that they are aware of what is happening in our world (either the mental states of living persons or physical events), otherwise they cannot properly have communications with a responsive element. However, since the surviving persons in view are ex hypothesi discarnate, the discarnate interactionist hypothesis entails a *discarnate psi hypothesis*.

[A3] At least some discarnate persons exhibit efficacious psychic functioning in the form of ESP and PK.

The conjunction of the simple survival hypothesis and [A1], [A2], and [A3] constitutes at least the makings of a fairly robust survival hypothesis. Now inasmuch as Lund seems to acknowledge all three of these auxiliary hypotheses (Lund 2009:102, 144), he may be seen as advocating a robust survival hypothesis, though he does not explicitly acknowledge the particular relevance of this for ascertaining predictive consequences.

Problems Facing a Robust Survival Hypothesis

Nonetheless, several serious problems remain.

First, the auxiliary assumptions I have introduced differ in a crucial way from the auxiliary assumptions adopted in scientific reasoning and that arguably also characterize the LAP hypothesis: They are not independently testable. Fundamentally, these assumptions presuppose that we already know something about what it either is like to survive death or what it would have to be like (for purely conceptual reasons), and I dare say we are not in the position to make this kind of judgment with sufficient accuracy. While discarnate interactionism posits persons with powers, desires, and intentions that approximate those found in embodied persons (and in this sense fits with our background knowledge of persons), we simply do not know whether any immaterial person who survives death will exhibit this degree of psychological continuity with their prior existence as embodied persons, much less retain or have enhanced exotic cognitive and causal powers that are at best obscurely understood in living persons in this life.

We have adopted [A1], [A2], and [A3] in this context only because without them the survival hypothesis would not have any predictive consequences. But it is all too easy to add assumptions to a hypothesis so that the new set of statements jointly entails our observational data. "There is an invisible old man who lives in my garden" does not generate much if anything in the way of observational consequences, but if I conjoin it to "invisible men attract blonde women who wear red shirts," the conjunction of the two statements leads me to expect my observational datum of having been visited by a large number of blonde women wearing red shirts. But of course the auxiliary assumption cannot be independently tested. The challenge is to find statements that are independently testable and that lead us to expect observational data once added to a central independently plausible hypothesis. When observable perturbations in the orbit of Uranus did not fit with what was predicted by Newtonian celestial mechanics, scientists postulated that there was another planet (Neptune) beyond Uranus exerting gravitational influence on Uranus and affecting its orbital path. Scientists did not postulate a novel kind of entity to account for the data, and they postulated something whose existence could be (and eventually was) confirmed by independent tests. Similarly, the robust LAP hypothesis outlined above appeals to our ordinary concept of psi and various facts about human psychology as its stock of auxiliary assumptions to account for the same kind of data that the survival hypothesis can account for only once we have adopted untestable auxiliary assumptions.

Second, the auxiliary assumptions I have introduced above are, however necessary for generating predictive consequences, nowhere nearly

sufficient. The robust survival hypothesis would not lead us to expect the particular modes of communication presupposed by the data of psychical research. At best what the robust survival hypothesis leads us to expect is that there should be *some* phenomena caused by discarnate persons (for the purposes of communicating with the living), but it does not predict with any discriminating detail what these phenomena should actually look like, or when or where they should occur. It is true, of course, that *if* we assume significant psychological continuity, this would lead us to expect that the content of communications would include details about the afterlife and the attempt to assure the living that their loved ones had survived death (and hence content should have markers of the identity of the communicators), but this is a far cry from expectations about how such messages would be delivered. If discarnate spirits can move objects, turn on televisions, turn house lights on and off, and produce apparitions, why not spell out their name with rocks in my garden or send me an email? It is possible of course that some modes of communication may be easier than others for discarnate persons or they may have personal preference for communicating in one particular way, but we do not know enough about the afterlife to make determinations about any of this in a reliable manner.

Lund criticized the LAP hypothesis for not being able to account for the fact that some living persons possess information about the deceased in the form of apparent memories, as if they had lived such lives. But this fact is certainly not explained by the survival hypothesis as Lund has developed it. Nothing in the robust survival hypothesis above leads us to expect that living, embodied persons will have past-life memories, for there is nothing in the robust survival hypothesis that entails or makes it probable that discarnate persons will ever become re-embodied again, much less carry retrievable memories with them. To get this, the survival hypothesis will have to adopt a highly specific doctrine of karma or endow psychological attachments to the physical world with a degree of causal efficacy sufficient for bringing our individual consciousness back to this world. The latter assumption endows living agents with something akin to super PK, and neither assumption would, without further specification, lead us to expect details about who would reincarnate, when the individual would reincarnate, or where and under what new bodily identity the person would reincarnate. And I am even less persuaded that these auxiliary assumptions could be tested in any reasonable way. As for the so-called "impersonation skills" exemplified in trance mediumship and the various linguistic and artistic skills exemplified in some cases of the reincarnation type, nothing in the robust survival hypothesis entails such observational consequences, though much in abnormal psychology does.

If survivalists wish to maintain that the survival hypothesis can be treated as a scientific hypothesis because it makes actual predictions, they need to do more to show this in a way that is commensurable with actual scientific reasoning. The reason why predictive power is important in the sciences is because fairly *precise* predictions can be made, in the hard sciences with quantitative and mathematical accuracy. In 1705 astronomer Edmond Halley proposed that the sun and a previously observed comet formed an approximate Newtonian system. One of the crucial tests for this hypothesis was Halley's prediction about the future time and location of the appearance of the comet. The prediction was deduced from Newtonian celestial mechanics together with descriptions of three past observations of the position of the comet going back 150 years. However, Halley's predictions were very specific ones. Given the Newtonian model and the past positions and velocities of the comet, Halley predicted the same comet, with a specific orbital path, should reappear again in December 1758, which of course it did and was named Halley's comet. Halley's prediction was not the vague prediction that some comet or other would appear between 1705 and 1758, or that the same comet would appear again at some point between 1705 and 1758. Halley predicted a comet with a specific orbital path to appear within a 30-day period 53 years in the future. Clearly, if survival is anything like a scientific hypothesis, survivalists must show that fairly specific predictions can be made from it together with a set of independently testable auxiliary assumptions.

In the final place, the criticisms leveled here prove fatal to one of Lund's earlier arguments against the LAP hypothesis. Lund argued that the LAP hypothesis cannot account for all the data unless it is adjusted to a super-LAP hypothesis, but he rejects this hypothesis on the grounds that it involves postulating a degree of psi for which we have no independent evidence. Lund's reliance on a principle of independent support is a two-edged sword in this context because the survival hypothesis is in exactly the same position as the LAP hypothesis. In its simple form, the survival hypothesis cannot account for all the data since it has little if anything in the way of predictive consequences. In a robust form it may account for the data, but only at the expense of having to conjoin itself to a large number of auxiliary assumptions that are not independently testable. Moreover, the situation is even more dire if—as Stephen Braude and I have argued elsewhere (Braude 2003, Sudduth 2009)—the psi powers needed by discarnate persons are at least equal to those needed by living agents to produce the same observational data. If we are to reject super-psi explanations because they posit a degree of psi for which we have no independent evidence, how sensible is it to maintain that survival is a superior explanation of the data when it involves

postulating persons we have no independent reason for supposing exist and attributing to them powers Lund has himself acknowledged we have no independent reason for supposing exist? The survival hypothesis is no more plausible as an explanation than the super-psi hypothesis if each suffer from exactly the same defects.

Conclusion

The focus of this paper has been David Lund's contention that postmortem survival is the best explanation of data drawn from the field of psychical research. Lund bases this claim on the ostensible explanatory virtues of the survival hypothesis and the alleged explanatory deficiencies of its nearest explanatory competitor, the living-agent psi hypothesis. By way of criticism, I have argued modestly that Lund has not presented a very strong case for supposing that survival is the best explanation of the data he surveys. In the latter part of the paper, I have argued a stronger case, namely that—given Lund's own criteria for explanatory virtue—we have good reason for supposing that the survival hypothesis is not the best explanation of the data.

My central argument for the stronger claim has involved presenting reasons for supposing that the survival hypothesis does not satisfy necessary criteria for explanatory power. Roughly stated, the best explanation must be a hypothesis that, together with independently testable auxiliary assumptions, leads us to expect observational data that are otherwise severally or jointly improbable. First, since most of the data ostensibly explained by the survival hypothesis are at least equally explicable by a carefully nuanced motivated living-agent psi hypothesis (that incorporates our knowledge of dissociative phenomena and rare cognitive gifts), the survival hypothesis attempts to account for data that are *not* otherwise improbable. Second, the explanatory virtues of the survival hypothesis can be purchased only at the cost of proclaiming explanatory success on the basis of confirmations grounded in vague predictions and the adoption of typically unstated auxiliary assumptions that cannot be independently tested.

Since Lund's positive assessment of the evidential probability of survival (as being more probable than not) depends on the survival hypothesis being the best explanation of the data, it follows that Lund has not succeeded in showing that survival has this favorable epistemic probability. Moreover, since Lund claims that survival is a rational belief because it is more probable than not, it follows that Lund has not shown that belief in survival is a rational belief. Of course, it does not follow that belief in survival is not a rational belief. Lund has just not provided a sufficiently good reason to think so. Indeed, nothing I have argued in this paper entails that a successful

evidential case for survival cannot be constructed, only that doing so will require more carefully addressing the formal problems facing attempts to make such arguments. There are plenty of data on which to reflect. What is needed is greater clarity and rigor in the process of reflection, and it may well be time for survivalists to radically rethink the logical framework in which survival arguments are developed.[22]

Notes

[1] "Epistemic probability" is the probability that some belief or proposition is true relative to some body of evidence (in the form of other beliefs or propositions). For example, we can speak of the likelihood that Jack committed the robbery given that his fingerprints were found on the safe, he had a particular motive, and he was seen there about the time of the robbery. This kind of probability should be distinguished from "factual probability" (including "physical" and "statistical" probability) that is a function of objective features of the physical world (e.g., its laws and structure). For example, the factual probability of drawing a black ball from a sealed box containing nine black balls and one white ball is .9 (almost certain), whereas its epistemic probability will vary depending on the evidence one has about the color and number of the balls in the box.

[2] Considerations from philosophy of mind and cognitive science, such as physicalist theories of mind or data allegedly showing the dependence of consciousness on a functioning brain, are frequently used to argue that the antecedent probability of survival is low. In the first part of his book, Lund attempts to refute such arguments and thereby show that the antecedent probability of survival is not low or that arguments purporting to show otherwise are logically defective.

[3] My use of "predictive power" here and elsewhere in the paper does not assume that the predictive consequences of a hypothesis were formulated prior to the time when the confirming observations were made.

[4] To clarify the dialectical structure of the arguments here, *undercutting* Lund's argument for (III)—the survival hypothesis is more probable than not—involves showing that we do not have good reasons to believe that (III) is true, whereas *rebutting* (III) involves providing good reasons for believing that (III) is false. Since (III) is a premise in Lund's argument for supposing that survival is a rational belief, it follows that, for two independent reasons, we lose our reasons for supposing that his main conclusion is true.

[5] In "forced-choice" experiments, subjects must make a selection from among a small number of known candidate targets (say, one of five cards), whereas in "free response" experiments (below in the text) subjects are

asked to describe targets without being given any potential candidates (say, simply describe the imagery they experienced during a dream state or while in the ganzfeld).

[6] Inasmuch as Lund accepts spontaneous exhibitions of LAP (Lund 2009:131–135), he is likely to be more sympathetic to a more liberal range of phenomena that are suggestive of the nature of LAP.

[7] It is sometimes argued that we cannot justify appeals to the physical phenomena associated with D. D. Home and Eusapia Palladino as evidence for LAP since Home and Palladino claimed to be communicating with discarnate spirits who might have been responsible for the phenomena. However, there are important similarities between phenomena associated with older physical mediumship and more recently documented physical phenomena in modern RSPK and sitter-group situations that are better interpreted as cases of LAP. We have good reason to believe that human agents are, individually or jointly, causing physical phenomena, even where there is ostensible contact with discarnate entities. For example, in the Bindelhof Group in the 1930s, Batcheldor's sitter-group experiments in the 1960s, and the Philip Group in the 1970s the ostensible discarnate spirits do not exhibit sufficient autonomy from the sitters themselves, as we would expect from some distinct center of self-consciousness (Pilkington 2006:202–226). These "personalities" often end up relaying messages to sitters that correspond to the ideas or wishes of the sitter-group participants. In the Philip Group sittings, the participants intentionally created the "Philip" personality by collaborating in the production of a fictional biography prior to this alleged spirit being conjured by the group. For a good summary of connections between physical mediumship, sitter-group experiments, and RSPK, see Roll (1982:212–226).

[8] As will be explained in some detail in the section **Motivated Psi Hypothesis**, the *prima facie* appeal of the LAP hypothesis is greatly strengthened when motivational factors are introduced that explain why LAP *would* tap into veridical information relating to deceased persons and in a way that presents such information as ostensibly arising from the deceased. In that case, the LAP hypothesis will actually lead us to expect that living agents will possess veridical information about other minds, including the deceased, as the result of psychic functioning among living agents. This would *significantly* increase the prior probability of the veridical features of the data and so significantly reduce the explanatory force of the survival hypothesis. We will shortly examine this more robust understanding of the LAP hypothesis.

[9] As mentioned above, the evidence for living-agent PK drawn from spontaneous cases not only involves physical phenomena characteristic of the great physical mediums of the nineteenth century, but the sitter-group experiments mentioned above involved the production of physical phenomena that give the appearance of having been produced by discarnate persons. This is significant evidence for the *externalizing* of LAP effects, that is, psi effects taking a form in which they have the appearance of having been produced by an autonomous agent.

[10] Gauld (1982:131–136) discusses the performances of E. Osty as illustrative of high-level LAP, including the apparent derivation of veridical information from multiple sources.

[11] Survivalists have a tendency to exaggerate what is claimed on behalf of appeals to LAP as an explanatory competitor, sometimes maintaining that critical appraisals of survival evidence involve attributing superior explanatory power to LAP. For example, Ian Stevenson committed this mistake in his assessment of Braude's defense of "super-psi" (Stevenson 1992:145). See also Braude's response (Braude 1992:151).

[12] Technically stated, the background knowledge will include the disjunction of all hypotheses that lead us to expect our data.

[13] "Unconscious" psi effects are well-established in experimental psi research. See Stanford (1977).

[14] Stephen Braude provides a fairly detailed development of these possibilities in connection with particular cases (Braude 2003, especially Chapter 6).

[15] One exception: The term *dissociation* appears in a lengthy endnote (Lund 2009:220) in which Lund discusses matters related to the philosophy of mind covered in the first half of his book.

[16] This is an important point, as the survivalist might contend that it is not enough to show that for each essential datum (d), there is some hypothesis (h) that renders d unsurprising. For example, h1 might render d1 unsurprising, h2 might render d2 unsurprising, etc. It does not follow that a single event in which d1 and d2 both occur together is unsurprising. A particular weather pattern might render a particular meteorological phenomenon probable on a given day of the week, and another weather pattern might render another meteorological phenomenon likely on another day of the week. This does not tell us that it would be unsurprising to witness both meteorological phenomena together on any given day of the week. For this we would need a hypothesis that would lead us to expect the joint occurrence of otherwise diverse or independently occurring phenomena.

[17] See Almeder (1996).

[18] Prominent survivalists have insisted that a necessary condition for a good explanation of physical phenomena is that it must have "some test impli-

cations by way of providing deductively specific predictions of sensory experience" (Almeder 1996:504).

[19] This point is sometimes missed because survivalists sometimes assume that a surviving soul must exhibit conscious states, but this is not true, at least not a conceptual truth. The functioning of a soul, which results in conscious episodes, might depend on a functioning brain (even if its existence does not) in much the same way that a lightbulb depends on electrical current to give off light (even if its existence does not). See Swinburne (1986:176, 310).

[20] Almeder (1996:497–498) is thus incorrect when he says that we *know* antecedently what would count as evidence for reincarnation because of our intuitions about personal identity. We have no more reason to suppose that a reincarnating soul would have memories of its past life than lack these, unless we assume a fairly contentious thesis about "personal identity," namely that it consists in the continuity of memory. Moreover, as a technical point, "past-life memories" are not observational data. The observational data would be the testimony people provide that they have such memories. But in that case, it is not possible to directly confirm the alleged prediction.

[21] H. H. Price (1953) presented an account of surviving immaterial persons in which they do not have continuing perceptions of this world, but exist in an image world constructed from their pre-mortem memories and desires. On Price's model, telepathic interaction (in the form of projected telepathic apparitions) between discarnate minds *could* provide a means for discarnate persons to communicate with and experience other deceased discarnate persons in the afterlife. But this is merely one conceivable theoretical possibility from among a number of others.

[22] I would like to thank Stephen Braude for his comments on an earlier draft of this paper.

References

Almeder, R. (1992). *Death and Personal Survival*. Lanham, MD: Rowman and Littlefield.

Almeder, R. (1996). Recent responses to survival research. *Journal of Scientific Exploration, 10*(4), 495–517.

Batcheldor, K. (1966). Report on a case of table levitation and associated phenomena. *British Journal of the Society for Psychical Research*, 43, 339–356.

Batcheldor, K. (1984). Contributions to the theory of PK induction from sitter-group work. *Journal of the American Society for Psychical Research, 78*, 105–122.

Bem, D. J., & Honorton, C. (1994). Does psi exist? Replicable evidence for an anomalous process of information transfer. *Psychological Bulletin, 115*, 4–18.

Braude, S. (1992). Reply to Stevenson. *Journal of Scientific Exploration, 6*(2), 151–155.

Braude, S. (1995). *First Person Plural: Multiple Personality and the Philosophy of Mind* (revised edition). Lanham, MD: Rowman and Littlefield.

Braude, S. (1997). *The Limits of Influence: Psychokinesis and the Philosophy of Science* (revised edition). Lanham, MD: University Press of America.

Braude, S. (2002). *ESP and Psychokinesis: A Philosophical Examination* (revised edition). Parkland, FL: Brown Walker Press.

Braude, S. (2003). *Immortal Remains*. Lanham, MD: Rowman and Littlefield.

Broad, C. D. (1962). *Lectures on Psychical Reserarch*. London: Routledge and Kegan Paul.

Dodds, E. R. (1934). Why I do not believe in survival. *Proceedings of the Society of Psychical Research, XLII*(Part 133), 147–172.

Ducasse, C. J. (1961). *A Critical Examination of the Belief in a Life after Death*. Springfield, IL: Charles C. Thomas.

Eisenbud, J. (1993). *Parapsychology and the Unconscious* (revised edition). Berkeley, CA: North Atlantic Books.

Foster, A. A. (1940). Is ESP diametric? *Journal of Parapsychology, 4*, 325–328.

Gauld, A. (1982). *Mediumship and Survival*. London: Heinemann.

Griffin, D. R. (1997). *Parapsychology, Philosophy, and Spirituality: A Postmodern Exploration*. Albany: State University of New York Press.

Haraldsson, E., & Stevenson, I. (1975). A communicator of the "drop in" type in Iceland: The case of Runolfur Runolfsson. *Journal of the American Society of Psychical Research, 69*, 33–59.

Hart, H. (1956). Six theories about apparitions. *Proceedings of the Society for Psychical Research, 50*(185), 153–239.

Honorton, C. (1985). Meta-analysis of psi ganzfeld research: A response to Hyman. *Journal of Parapsychology, 49*, 51–91.

Kennedy, J. E. (1978). The role of task complexity in PK: A review. *Journal of Parapsychology, 42*, 89–122.

Kennedy, J. E. (1980). Information processing in ESP: A survey of forced-choice experiments using multiple-aspect targets. *Journal of Parapsychology, 44*, 9–34.

Kennedy, J. E. (1995). Methods for investigating goal-oriented psi. *Journal of Parapsychology, 59*, 47–62.

Lund, D. (2009). *Persons, Souls, and Death: A Philosophical Investigation of an Afterlife*. Jefferson, NC: McFarland.

May, E. C. (1996). The American Institutes for Research Review of the Department of Defense's STARGATE program: A commentary. *Journal of Scientific Exploration, 10*, 89–107.

Myers, F. W. H. (1889–1890). A record of observations of certain phenomena of trance. *Proceedings of the Society for Psychical Research, 15*, 436–659.

Owen, I. M., & Sparrow, M. (1977). *Conjuring Up Philip: An Adventure in Psychokinesis*. New York: Harper and Row. Paterson, R. W. K. (1995). *Philosophy and the Belief in a Life after Death*. New York: Saint Martin's Press.

Pilkington, R. (2006). *The Spirit of Dr. Bindelof: The Enigma of Séance Phenomena*. New York: Anomalist Books.

Podmore, F. (1910/1975). *The Newer Spiritualism*. New York: Arno Press.

Price, H. H. (1953). Survival and the idea of another world. *Proceedings of the Society for Psychical Research, 50*(182), 1–25. Reprinted in F. B. Dilley, Editor, 1995, *Philosophical Interactions with Parapsychology: The Major Writings of H. H. Price on Parapsychology and Survival*, New York: Saint Martin's Press, pp. 237–262.

Puthoff, H. E. (1996). CIA-initiated remote viewing program at Stanford Research Institute. *Journal of Scientific Exploration, 10*, 63–76.

Putnam, F. W. (1989). *Diagnosis and Treatment of Multiple Personality Disorder*. New York: Guilford.

Roll, W. (1982). The changing perspectives of life after death. In S. Krippner, Editor, *Advances in Parapsychological Research, 3*, New York: Plenum Press, pp. 147–291.

Roll, W. (2004). *The Poltergeist*. New York: Paraview. [Originally published in 1972 by Doubleday]

Ross, C. A. (1997). *Dissociative Identity Disorder: Diagnosis, Clinical Features, and Treatment of Multiple Personality*. New York: John Wiley.
Salter, W. H. (1926). A report on some recent sittings with Mrs. Leonard. *Proceedings of the Society for Psychical Research, 36*, 187–332.
Sherwood, S. J., & Roe, C. A. (2003). A review of dream ESP studies since the Maimonides dream ESP programme. *Journal of Consciousness Studies, 10*, 85–109.
Sidgwick, E. M. (1915). A contribution to the study of psychology of Mrs. Piper's trance phenomena. *Proceedings of the Society for Psychical Research, 28*, 1–657.
Stanford, R. G. (1977). Experimental psychokinesis: A review from diverse perspectives. In B. B. Wolman, Editor, *Handbook of Parapsychology*, New York: Van Nostrand Reinhold Company, pp. 324–381.
Stevenson, I. (1992). Survival or super-psi: A reply. *Journal of Scientific Exploration, 6*(2), 145–149.
Sudduth, M. (2009). Super-psi and the survivalist interpretation of mediumship. *The Journal of Scientific Exploration, 23*(2), 167–193.
Swinburne, R. G. (1986). *Evolution of the Soul*. Oxford: Clarendon Press.
Targ, R. (1996). Remote viewing at Stanford Research Institute in the 1970s: A memoir. *Journal of Scientific Exploration, 10*, 77–88.
Ullman, M., & Krippner, S. (2002). *Dream Telepathy: Experiments in Nocturnal Extrasensory Perception* (third edition). Charlottesville, VA: Hampton Roads.
Zingrone, N. L., & Alvarado, C. S. (1997). Psychic and Dissociative Experiences: A Preliminary Report. Paper presented at the 37th Annual Convention of the Parapsychological Association, Amsterdam, The Netherlands; August 1997.

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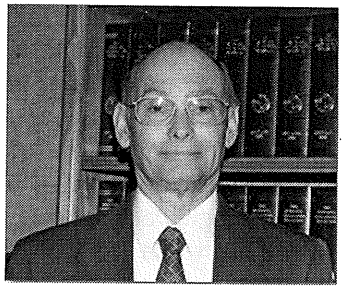
OBITUARY



Jack Houck (1939–2013)

With great regret the SSE recognizes the passing of one of its Dinsdale Award recipients, Jack Houck. Born George B. Houck, Jack, as he was better known to his many friends, was raised in Mechanicsburg, Pennsylvania. He attended the University of Michigan where, in 1961, he received a Masters of Aeronautical and Astronautical Engineering degree. For more than four decades he was a researcher, theoretician, experimentalist, engineer, and analyst of anomalous phenomena. His most significant contributions to the field came with his direct contact with more than 20,000 people and with his providing them a firsthand, demonstrable experience of psychokinesis.

In 1981 Jack Houck developed the concept and protocols for psychokinesis metal bending (PKMB) parties. Rather than simple demonstrations by a talented individual who professed special skills, Jack proved that the process could be taught to anyone who was prepared to attempt it. For many participants, the PKMB experience that he provided proved to be a life-changing event. Importantly, his interests and explorations took him into many other controversial topics such as remote viewing, firewalking, spontaneous germination of seeds, EEG biofeedback, and healing with human energy.

Like many other members of the SSE, Jack delicately, and successfully, bridged the dichotomous fields of science and psi research. From 1961 until 2003 he worked as an aeronautical engineer with the Douglas Aircraft Company, which became McDonnell Douglas and then Boeing. Jack held many positions of increasing responsibility. As a rocket scientist he initially was involved in missile defense studies, and in 1972 he was selected as one of the authors of the Strategic Arms Limitation Treaty (SALT). For more than two decades Jack simultaneously managed a number of extremely sensitive defense and intelligence programs. During that period he formed the Advanced Research group that engaged in evaluating data of foreign rockets and associated weapons systems. Later he became involved as a risk management expert on large, classified space systems. In his final position he performed as the risk manager for all of the company satellite systems.

While most of his efforts in researching unexplained events were conducted outside his traditional work assignments, there were times when