Beyond Reasonable:

Scientific Evidence for Survival

a Bigelow Contest winning essay

by Julie Beischel, PhD

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About this Essay

In January 2021, the Bigelow Institute for Consciousness Studies (BICS) announced an Essay Contest (up to 25,000 words) to address the following question:

"What is the best available evidence for the survival of human consciousness after permanent bodily death?"

Prior to essay submission, each entrant submitted an application providing evidence that they had investigated the topic of Survival of Human Consciousness after Death for five years or more.

Over 1,300 entrants applied and 204 received approval from BICS to submit an essay for the competition. In November 2021, three top prize winners, 11 runner-up prize winners, and 15 honorable mentions were announced.

My essay titled "Beyond Reasonable: Scientific Evidence for Survival" (16,960 words) received one of the runner-up prizes.

Although there are several lines of evidence for the survival of consciousness reviewed in a variety of sources, I offered this argument as *THE BEST* evidence:

- There are many methods for knowing.
- Science is widely considered the most valid method for obtaining socially-relevant, generalizable knowledge.
- Peer-reviewed research my colleagues and I performed demonstrated that:
 - certain prescreened, modern-day mediums can report accurate and specific information about the deceased under controlled laboratory conditions that address alternative explanations like fraud and cueing, and
 - 2. those mediums experience increased feelings of love during readings for the deceased vs. psychic readings for the living even under blinded conditions.
- We can conclude that consciousness survives death and those mediums are communicating with the dead.
- These findings surpass what could be considered proof beyond a reasonable doubt in a court system.

I described my conclusions from the statistically significant evidence I collected under randomized, controlled conditions addressing falsifiable hypotheses. That is, the most logical explanation for what at least some mediums are doing and based on the most rigorous experiments is that human consciousness does, in fact, survive permanent bodily death.

Starting on the next page is my complete essay.

To learn more about the contest and to download essays from other prize winners, see: https://www.bigelowinstitute.org/contest_winners3.php

About Dr. B.

I received my PhD in Pharmacology and Toxicology with a minor in Microbiology and Immunology from the University of Arizona. I use this interdisciplinary training to apply the scientific method to controversial topics. For over 17 years, I have worked full-time studying mediums: individuals who report experiencing communication with the deceased and who regularly, reliably, and on-demand report the specific resulting messages to the living called sitters. My research interests more widely include relationships between loved ones and how these connections are limitless and even continue past death.

I am the co-founder (with my husband and research partner Mark Boccuzzi) and Director of Research at the Windbridge Research Center (www.windbridge.org), a 501(c)(3) public charity dedicated to easing suffering around dying, death, and what comes next by performing rigorous scientific research and sharing the results and other customized content for free with practitioners, clinicians, scientists, and the general public.

I am the author of the Kindle books *Among Mediums*, *Meaningful Messages*, and *From the Mouths of Mediums* and the paperback book *Investigating Mediums*.

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Beyond Reasonable: Scientific Evidence for Survival

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As I left the medium's house that day, my overwhelming sense was how completely normal I felt for having just connected with my dead mother. In fact, the only thing weird about the mediumship reading was that—somehow—it wasn't weird at all. Which, for me, as someone saturated with science and having had a strained relationship with my mother, was *very weird*. That experience marked the first step on a near-20-year journey of scientific exploration. I wanted to understand if it was possible for a living human being to genuinely connect with a post-mortem consciousness. My conclusion from the statistically significant evidence I proceeded to collect —under randomized, controlled conditions addressing falsifiable hypotheses—meets if not surpasses what could be considered proof beyond a reasonable doubt in a court system. That is, the most logical explanation for what at least some mediums are doing and based on the most rigorous experiments is that human consciousness does, in fact, survive permanent bodily death.

Here, I will retrace the journey that led me confidently to that conclusion.

Bugs, Drugs, and Mediums

I've always been a scientist. I grew up near Phoenix, and when I graduated from elementary school, I was chosen for the class Science Award. During my first year of high school, my water pollution project received an honorable mention in the nearby university's science fair. I received a bachelor's degree in Environmental Sciences with a Microbiology emphasis. My PhD is in Pharmacology and Toxicology with a minor in Microbiology and Immunology. Although my training primarily involved the topics of bugs and drugs, I became skilled in utilizing the scientific method to obtain answers to a wide variety of questions.

Thus, I naturally turned to those tools after my mother died by suicide while I was in graduate school. She was 54. I was 24. As you may know, not all parents are good ones. My mother was mentally ill, although not diagnosed as such until shortly before her death. My childhood was tremendously difficult, but I was well-behaved and got good grades so no one thought to intervene. When my mother died, it was, sadly, a relief to me. I'd heard about this place called Heaven because my extended family is *remarkably* Catholic, but, to me, it was a nebulous, unknowable, nearly metaphorical idea that I'd never really thought much about and

didn't feel any need to pursue. I hadn't inherited my family's cultural views about what happens after we die.

It wasn't until a couple of years after my mom's death that I was visiting with some aunts and we saw a medium on TV sharing messages from the deceased. My aunts were curious. I'd never heard of the phenomenon and didn't know anything about psychic abilities of any kind. Currently, I define a medium as an individual who experiences regular communication with the deceased and shares the resulting messages with their living loved ones, called sitters, during a process called a reading. The general purpose of these readings is facilitating communication between sitters and the deceased (e.g., 1, 2). Experiences of communication with the deceased have occurred regularly all over the world throughout time (e.g., 3, 4, 5). Although anyone can have a mediumistic experience, people termed mediums have this experience regularly, reliably, and on-demand. Psychics, on the other hand, convey information about people, events, places, or times unknown to them, but messages about the deceased are not usually shared. A specific reading may include either or both psychic and mediumistic information. It is often said that all mediums are psychic but not all psychics are mediums (e.g., 6).

Twenty years ago, when I saw the TV medium (clearly, it was John Edward) sharing messages, the people receiving them seemed, to me, genuinely moved by his statements. The content also appeared relatively specific. I was intrigued. Not as a grieving daughter but as a scientist. When one of my aunts later sent me a book featuring mediums, it further piqued my curiosity.

My First (and Only) Mediumship Reading

I knew all sorts of magic can happen with TV editing, so I wanted to see this process for myself. I got a recommendation for a local medium and received an in-person reading in the summer of 2002. I had read a little about fraudulent psychic practices (7) and was prepared for the possibility of generic information and fishing for content. But, as a scientist, I wanted to keep my assumptions and my expectations to a minimum.

I want you to understand that I do not *need* what I am going to share with you here to be true. I have been accused of being an advocate or proponent of mediumship because I personally need it to be real. I have been called, among other much more terrible things, "a believer" (8).

In reality, it would have been easier for me if I discovered that mediumship was just an entertaining parlor trick. I would have preferred to learn that death was the end and that the people we have lost are gone.

As a scientist, however, I had to go through the process of collecting data before I could draw conclusions. And now, actually, with the death of someone close to me, I could personally examine the phenomenon of mediumship in a manner that would have been a stretch if the only dead person I knew was a school acquaintance or some distant uncle.

I met with the medium in her home. She was a wife and a mother of three living in a Phoenix suburb who just happened to be a medium. She was about my age and did not look at all like a cartoon stereotype of a psychic: no crystal ball, no incense, no excessive bead accessories. In fact, she was wearing the same long denim skirt that I had at home.

The reading contained many specific and accurate items. For example, the medium spoke about our deceased pet Dalmatian being with my mom and of Colorado where we sometimes vacationed. She also spoke about the symptoms of my mother's psychiatric diagnosis, her siblings, her birth month, and where she was buried. The scoring system I used at the time demonstrated an accuracy level of 93%. Some information that I didn't understand was later verified by my aunts.

Most of the people in my life were supportive when I shared the story about the reading I'd received. I was surrounded by scientists and our training (ideally) prevents us from drawing conclusions without sufficient data. So, mostly I heard things like, "I don't really know anything about mediums, but that sounds like an interesting experience that you had."

However, a few were—actually, one guy in particular was—convinced that I'd been duped by a con artist, because there was no way that what I described could be real. (His religious ideology may have bullied his scientific training into submission.) This closed-mindedness was motivation enough for me to want to bring mediums into a laboratory setting and test the phenomenon under controlled conditions.

The general hateful reactions and ongoing derision regarding mediums as a whole I've seen since have kept that motivation at full steam. I get it. There are frauds. But claiming that every person in a group is represented by a fraudulent subset of that group is, frankly, bigotry. The right thing to do is act rationally, bring it into the lab, and check it out.

After my mediumship reading, what I knew was that there was clearly more to know.

Knowing

That mediumship reading didn't change what I knew to be true about, say, cardiac anatomy or planetary orbits, but it did unearth questions for me about the mind and the survival of consciousness after physical death (or, simply, survival). Going forward, I knew that there was more to reality than I had previously assumed. And I could never un-know that.

Textbooks discussing the acquisition of knowledge (e.g., 9, 10, 11; most of which cite 12) may list various sources or methods for knowing about the world and the people in it. Some of these ways are considered more accurate, reliable, or valid than others. Let's focus on the methods relevant to this essay. In order of least reliable to most valid, they are: tenacity, authority, logic, experience, and science. And somewhere in there is also intuition.

Tenacity

Gaining knowledge by tenacity is when you hear something so often that you come to believe it is true and then you hold on to that belief for dear life even—or especially—in the face of evidence to the contrary. It is knowing something without ever really thinking it through. It might be safe to say that most comments made by Internet trolls could be categorized as coming from a tenacious place.

The tenacity of unsupported theories about how the world works is truly obvious in the nearly immortal so-called 'stages of grief' theory that hangs on, like a zombie barnacle, in the popular culture, in medical education, and on websites far and wide despite there being little to no empirical evidence supporting its validity (e.g., 13, 14, 15). Indeed, "stage theory should be discarded by all concerned (including bereaved persons themselves); at best, it should be relegated to the realms of history" (16, p. 456).

Scientific paradigms are like tenacious weeds: the root system is deep and complex and even if we repeatedly try to eradicate them and plant new flora, those suckers keep coming back. Just ask Copernicus and Galileo (who proposed a heliocentric cosmos), Ignaz Semmelweis (the physician who suggested in the mid-1800s that doctors wash their hands), or Barry J. Marshall and J. Robin Warren (who demonstrated in the 1980s that most peptic ulcers are caused by the *Helicobacter pylori* bacterium and not stress).

The currently reigning scientific paradigm that is fading and ready to be overthrown is called scientific materialism. This theory claims that consciousness is created or produced by the brain and when the brain dies, so does consciousness. If materialism is true, survival is impossible. But fear not! The evidence supporting the theory of materialism is entirely circumstantial.

A relationship clearly exists between the physical brain and the mind/self/consciousness (what makes you *you*). When the brain is injured or damaged, the mind functions differently. However, this does not prove that the cells and chemicals of the brain make mind. Correlation does not equal causation. Alternatively, mind may be like a signal and the brain like an antenna. Without the antenna, the signal can still exist (17). This non-materialist concept fits just fine with what is currently known about perception, psychology, basic physiology, biology, geology, astronomy, sociology, fundamental physics, quantum physics, and relativity (18).

Thinkers like William James and Aldous Huxley have conceptualized the mind as being interpreted, limited, funneled, regulated, transmitted, mediated, transformed, received, guided, or arbitrated by the brain (19). In the 1995 OMNI article "Supposing something different: Reconciling science and the afterlife," astronomer David Darling explained, "The brain does not produce consciousness at all, any more than a television set creates the programs that appear on its screen" (20, p. 4). Religious studies scholar Huston Smith used this engaging simile: "The brain breathes mind like the lungs breathe air" (21, p. 187).

Plenty of contemporary authors have emphasized the idea that the theory of materialism is simply wrong and have dedicated a tsunami of pages calling for an end to this type of "upside

down thinking" (22, also 23, 24, 25). The evidence against materialism and in support of the mind as non-local (that is, not entirely localized within the brain) continues to grow and establish its own root system.

In the documentary *Third Eye Spies* (26), philosopher and Tibetan Buddhist scholar Alan Wallace noted,

How many people say they've witnessed things that do not fit within a materialistic paradigm and then they're told, "You're deluded because your experience doesn't conform to our dogma." This is so fundamentally anti-scientific it's utterly appalling... I would say before too long if you still insist mind is nothing more than an emergent property of the brain, it will be widely recognized you are just ignorant. (1:17:20)

Physician, author, and real-life cowboy superhero Larry Dossey has called the tenacious theory of materialism "the greatest superstition of our age" (27, p. 195) and noted, "In spite of the complete absence of evidence, the belief that the brain produces consciousness endures and has ossified into dogma" (p. 188). And speaking of dogma, let's consider authority as a source of knowledge.

Authority

Knowledge by authority happens when claims made by trusted authority figures are accepted as true. Because we can't learn everything through direct experience or even through logical inference, knowledge conveyed by authoritative figures is often required. Trusting that Mrs. Gustafsen was correct in saying to my kindergarten class that three follows two and N follows M was probably a valid pathway toward knowing. This can become problematic, however, when sources are inappropriately trusted simply because they, say, attended a prestigious university, are on TV, published a book, or have a Twitter following.

Inference

One step up from authority, when we can't observe or experience things for ourselves, is knowing by inference, by using logical reasoning (also called rationalism; think Sherlock Holmes). For example, because I know how peristalsis of the digestive tract works (through knowledge conveyed by the authority of physiology professors and textbooks), I can infer that it is impossible for swallowed gum (or swallowed anything) to stay in the gut for seven years. If everything in the pantry is askew or upside-down when I open it in the morning, I can infer that my husband did some late-night stress eating. If my welcome mat looks more threadbare than it did yesterday, I can infer that some neighborhood birds are making nests and need building supplies. Knowing through inference, however, can be problematic if the assumptions used in the reasoning process are incorrect. Maybe I, myself, recently developed sleep-eating or sleep-doormat-larceny habits and didn't know it. That's still logical (though not probable).

As stated above, the evidence that brain produces consciousness (materialism) is circumstantial and relies on inference. Moreover, because we can't repeatedly experience consciousness after death (short of a *Flatliners* scenario), a lot of the evidence for survival is based on inference. Survival researchers "cannot send expeditions of scientists to the next world to report on their findings and return with specimens susceptible to analysis in human laboratories, but inference is a perfectly acceptable scientific tool" (28, p. 37).

Experience

Direct personal observation or experience (also called empiricism) is another method of knowing. Early on in the evolution of our species we most likely had to do most of our learning about how the world worked through observation. Perhaps we learned which berries were safe to eat by watching the birds and animals. Most likely, we learned that leaves changing color meant that the cold season was coming.

In the modern era, by the time we reach adulthood, we've each already learned a sufficient number of facts through knowledge by authority (and hopefully less so through tenacity) and have developed the critical thinking skills necessary to use inference to collect others. Therefore, knowledge gained through individual experiences in contemporary society is primarily about ourselves and those close to us rather than about the world in general. For example, I *know* that my husband loves me. I *know* that I don't have the fortitude to watch even the trailers for most horror movies but I *know* that I will enjoy the movie *Grease 2* every time I watch it. I *know* that my dog Toggle is scared of the sounds bumble bees and hummingbirds make and I *know* that her sister, Ada Grace, couldn't care less about them (or nearly anything else). And though people and dogs may change, knowledge about which phenomena are possible in our lives is irrefutable. Once I know I am capable of, say, lucid dreaming, remote viewing, mentally controlling the timing of my menstrual cycle, or feeling physiologically connected to someone at a distance, I can never un-know that those things are possible for me. However, knowledge by experience cannot be generalized as applicable to others. This limits its usefulness.

In addition, the physical senses that humans use for observation and experience are tremendously fallible. In a novel I happened to be reading while writing this, a character named Dr. Marconi made this observation:

The human eye has to be one of the cruelest tricks Nature ever pulled. We can see a tiny, cone-shaped area of light right in front of our faces restricted to a very narrow band of the electromagnetic spectrum... We can't see heat or cold. We can't see electricity or radio signals... It is a sense so limited that we might as well not have it. Yet, we have evolved to depend so heavily on it as a species that all other perception has atrophied. We have wound up with the utterly mad and often fatal delusion that if we can't see something, it doesn't exist. Virtually all of civilization's failures can be traced back to that one ominous sentence: "I'll believe it when I see it." (29, Ch. 58, 2:23)

Similarly, my husband worked in a science museum where a colleague had a sign in his office that read, "Seeing is the brain's best guess." As do, I choose to believe, many perceptual cognition experts. Because personal experience often cannot be generalized as being true for others, and our human sensory perceptual apparatuses are so limited, empiricism falls short of being a truly valid method for knowing about the natural world in general.

Intuition

It is not clear where knowledge by intuition fits in the list of methods for knowing. If it is included at all, it may be listed as in between tenacity and authority (10) or as the very least valid method and equated with superstition (11). I'm going to use mine right now: My intuitive sense is that people who have intuitive experiences and acquire knowledge through them would give this method top billing. (Even higher than science!) For example, my colleagues and I found through our research that a phenomenon commonly experienced by mediums is "just knowing" information about the deceased (30, 31). Similarly, Emmons and Emmons (1) found that the mediums they studied "just 'g-know' (pronounced 'guh-know') things intuitively," a term based on the word gnostic (p. 243). Like experience, knowledge by intuition cannot easily be generalized to the natural world, leaving it somewhat lacking within the knowledge hierarchy.

Knowing about Survival

On the topic of survival, different people's knowledge may come through different methods. People who know there is an afterlife based on religious teachings may be using the method of knowing by authority. People who have had near-death experiences may know through empiricism that consciousness survives. For some, it may simply seem logical; they may be able to infer an afterlife. And others may know intuitively that there is life after death.

When I asked some mediums I know, each with decades of experience involving communication with the deceased, "Do you believe in an afterlife?" and "What makes you sure?" the responses I received were similar: "When you have an actual experience, you KNOW" (SA; emphasis in original), "It is a knowing, not a believing" (DC), "I know it is real because I live with it every day. I am part of it and I know it" (NM), and "I don't need to believe, I know."

Other mediums chose to quantify their beliefs about an afterlife: "I believe 100% with no doubt" (DeM), "I believe without a doubt that there is an afterlife" (MR), "There is no doubt in my mind that our loved ones live on" (JG), and "100% yes!" (GQ).

Several mediums listed personal out-of-body and near-death experiences (OBEs and NDEs) as the originating source of their belief in an afterlife. Several noted that they did not hold this belief before their OBEs, NDEs, or similar spiritually transformative experiences (STEs).

The mediums' regular and continued experiences of communicating with the deceased during readings for sitters also served to reinforce their beliefs: "I constantly look for validation

from spirit and with great success get it. Spirit does not disappoint" (MR); "Communication with the energy of those who crossed has made me certain that survival of consciousness after bodily death exists" (LJ); "The most compelling part for me is watching how people respond to the information that comes through... The sitter seems to recognize 'who' is communicating" (DoM); and "Not knowing someone, sitting down and communicating with spirit prior to the reading, and relaying that and other information/messages to the client is a very powerful validation that there is life beyond this physical world" (TN).

Although these are compelling claims, the described knowledge acquired is based primarily on experience. It is important to remember here that knowledge by experience is truly evidential and an entirely valid method of knowing for each individual. As I have noted before, science "can neither refute the existence nor defend the reality" of anyone's experiences or what they know in their hearts to be true (32, p. 72). However, society as a whole requires a more reliable method of knowing that includes conclusions that we can all agree on. Since at least the mid-1600's (9), this method has been objective scientific inquiry, the roots of which are most likely thousands of years old (10).

Science

Science is considered the most valid and reliable method for acquiring knowledge (e.g., 9, 10, 11). It combines the methods of inference and of experience to collect verifiable evidence for natural phenomena. Our Western society and culture require the objective, agreed-upon standards of science to determine what is real. Because people have already made such scientific discoveries as the laws of thermodynamics, the layout of the solar system, and the relationships of chemicals as clarified on the periodic table of elements, we currently use science to know facts like which pharmaceuticals are relatively efficacious and safe and which weather patterns are on their way to our location.

I have long supported the position that science should not have limitations. At the Windbridge Research Center, where I serve as Director of Research, we understand science as simply a set of tools for answering questions. We have found that those tools can be applied to nearly any topic, even a controversial one like life after death. Competent scientists follow the data wherever they lead and do not make unfounded assumptions about what is possible or about how the world works. Assuming that we fully understand every phenomenon in the universe is illogical. True science leaves room for discoveries (33). Scientists, ideally, just follow the data, draw conclusions, and develop theories. Through science, knowledge is ever evolving.

Viewing science as a widely applicable equal opportunist is not standard. Currently, phenomena considered metaphysical, like mind or spirit, are usually specifically called out as beyond the bounds of science. Some academic sources list metaphysical knowledge gained through various world traditions as important, but clarify that "material explanations for observable phenomena are always sufficient and metaphysical explanations are never needed" (9, p. 4).

Some sources go even further. One research methods textbook I came across (11) had this to say about the topic of this essay:

Science always investigates empirically solvable problems—questions that are potentially answerable by means of currently available research techniques. If a theory cannot be tested using empirical techniques, then scientists are not interested in it. For example, the question "Is there life after death?" is not an empirical question and thus cannot be tested scientifically. (p. 12)

I beg to differ. No, that's incorrect. More accurately: I forcefully disagree, with vehemence. Again, science can be used to learn about nearly anything. Also: "cannot be tested scientifically"? Challenge accepted.

As I have previously noted elsewhere, in the Western world, phenomena not easily explained by the traditional, established sciences are usually dismissed as impossible. As a result, people who believe in phenomena like mediumship are labeled ignorant, gullible, or delusional, and the unfortunate individuals who experience mediumistic communication are called frauds, con artists, schizophrenics, evil, or worse. Now, what if we calmed down, put aside our assumptions about how the world works, and actually applied the scientific method to the phenomenon of mediumship? Well, I did just that (32).

In an effort to evoke your knowing by authority, I will provide my credentials for studying mediums here. After receiving my PhD in 2003, I served as the William James Post-doctoral Fellow in Mediumship and Survival Research in the Department of Psychology at the University of Arizona. I went on, with my husband and research partner, Mark Boccuzzi, to co-found the Windbridge Institute, LLC, in 2008, and then the Windbridge Research Center non-profit in 2017, in order to continue addressing the survival of consciousness hypothesis. I have received multiple mediumship research grants from international funding foundations (e.g., 34), have shared my findings at various conferences through juried (35) and invited (36) presentations, and published my work performing controlled laboratory research with mediums in several peer-reviewed journals (37).

Investigating Survival using the Scientific Method

As I said, I am a scientist to my core. Oddly enough, however, most of what I know about the scientific method I probably learned through authority and observation. I know that the purpose of science is acquiring new knowledge. I know that the scientific method includes several ordered steps. I know that it is not possible for me to investigate every medium out in the wild performing readings. And I know that I can bring a sample of the phenomenon into a controlled laboratory environment and study it there.

What happens after we die is a tremendously important question that speaks to the nature of consciousness, the potentially infinite essence of our relationships to each other, and even the purpose of our existence. The scientific investigation of mediumship allows us to at least peek through the cracks, to get a glimpse of what might be going on after we die. As such, engaging in

the scientific method to examine mediumship must be a precise, careful endeavor. What follows covers specific details of my research. In my descriptions, it is necessary to be thorough in order to demonstrate the quality of the evidence I collected. I only included what was directly relevant. What I will share here may seem nearly overwhelming at times but understanding the details of the methods used and the analyses performed is necessary in order to objectively assess the validity of my conclusions. (Here we go. Buckle up!)

The Scientific Method

Using the steps of the scientific method, I can first make an observation about some aspect of nature. I can then formulate a hypothesis about the observed phenomenon. Experiments can then be designed and performed, collected data can be analyzed, and conclusions can be drawn. Then I can start again based on what I learned in the previous cycle. This standard method can easily be applied to studying mediumship.

The phenomenon of mediumship has several advantages (32) that make it an ideal candidate for scientific inquiry in order to gather the best evidence for the survival of human consciousness after permanent bodily death. A relatively plentiful population exists capable of performing the task. These individuals can intentionally engage in the phenomenon and can follow instructions while they do so. The bodily death of the discarnate in a mediumship reading is permanent rather than temporary as is the case for NDEs. We don't have to wait for the phenomenon to spontaneously happen as is the case for OBEs, for NDEs, and for children who report memories of previous lives. It doesn't require expensive equipment or a specific laboratory set-up; this makes it possible for the experiments to be easily replicated by other qualified researchers to determine if published findings appropriately reflect the actual phenomenon. We can repeatedly bring mediums into a controlled laboratory environment. This allows us to address aspects of the phenomenon that might complicate what we could conclude if we were to let it just run amok or only observe it spontaneously out in the wild.

I would now like to show you how I applied the scientific method, the most valid system for knowing, to mediumship and how what I found is the best evidence for survival.

¹ Although I have performed research examining topics like mediums' demographics, personalities, psychology, business practices, disease prevalence, adverse childhood experiences, handedness, sexual orientation, compassion, and environmental sensitivities, those findings don't specifically address the survival hypothesis and are not included here.

Step 1: Make an Observation

It is important for scientists to work from a place of observation. To complete this step, I directly observed that there are people here in the US² and here in the 21st century who identify as mediums. I further observed that, as the primary aspect of their mediumship, these modern American mediums verbally utter words, phrases, and sentences during a process called a reading. I observed that those utterances are requested by and provided to a second living person called a sitter. I observed that the content of the reading centers around a third person who is deceased and who we call, during research, a discarnate (*dis* = not, *carnate* = in the flesh). The word simply identifies the person as someone who previously existed associated with a physical living body but who is now deceased. It does not imply anything further about the survival, location, or characteristics of that person. It just allows researchers to refer to the three people involved in the reading: the medium, the sitter, and the discarnate.

So far, I don't think even the hardiest of deniers (often called skeptics) could refute the content of those observations. It is irrefutably true that mediums exist and utter words about discarnates to sitters. Therefore, we cannot move forward in the scientific method without keeping in mind the medium-discarnate-sitter triad that we have observed.

Another observation is that it does not appear to be a flawless connection. There seems to be noise or static in the metaphorical signal. Not every single statement made by a medium resonates with the sitter. That is the reality of the observed phenomenon. It is important that we not expect perfection.

A final observation is that the three people in the mediumship triad are just regular folks. The most evidential info comes from mediumship readings for everyday people containing everyday info that can be objectively verified. I observed that the information mediums most often report falls into three main categories (39, also 40). The first is identifying information that allows the sitter to recognize the discarnate. This usually includes the discarnate's physical and personality descriptions, favorite activities, and cause of death. The second type of information references events that have happened in the sitter's life since the death. And the third type of information reported in a mediumship reading involves messages specifically for the sitter. These are the types of statements that you might say to someone with whom you had a close relationship but who had to move away: 'Thank you for everything' and 'I love you.' More specific messages might encourage, reprimand, or provide advice to the sitter.

So, mediumship readings are not perfect and involve regular information from regular people. We don't need famous dead people to test mediumship scientifically. In fact, that would be problematic because we couldn't control for information that could be obtained through normal means like Googling. We don't need to ask for the secrets to the universe channeled from etheric entities. That would also be problematic because that information could not be

² Although I know (by authority and by observing the Internet) that there are mediums all over the world, the US is as far as I myself have, in my role as a scientist, observed; thus, I am not qualified to comment here on phenomena beyond those borders.

objectively verified. All we need are some regular mediums providing regular readings to regular sitters about regular discarnates. Easy peasy.

Step 2: Formulate a Hypothesis

After observing mediums make statements about discarnates, I can ask, "Are those statements correct? Do they accurately reflect reality?" To develop a hypothesis, I created a positive statement about mediums, discarnates, and sitters predicting reality and based on my observations. The statement needed to be falsifiable: that is, it must be possible for the assertion it makes to be refuted with evidence. The hypothesis was: The information about discarnates reported by mediums is accurate and specific. It is possible for that falsifiable hypothesis to be disproven. Again, I didn't expect 100% perfection. And rather than use arbitrary assumptions about what would be impressive, I used established statistical methods to objectively determine if the information was actually accurate and specific. Testing the hypothesis allowed me to acquire new knowledge about an aspect of nature. That is the aim of science.

Conjecturing about a phenomenon and then performing experiments based on assumptions does *not* qualify as science. Any direction starting with, "I wonder if a medium could..." is most likely not a scientific pursuit. I can't wonder if mediums can report lottery numbers and then ask them to buy a ticket and call that science. That's not something that they regularly do, and thus it can't be observed during Step 1. If one observes the mediumistic triad as it exists in nature and then thinks, "Well, then mediums should also be able to [blank]" without ever observing them [blank]ing, no science is happening.

Step 1: observe. Step 2: hypothesize. The scientific method is very clear.

Step 3: Design an Experiment

From the beginning (41), I knew that in order to appropriately test the hypothesis that the information about discarnates reported by mediums is accurate and specific, two equally important factors of the experiment were necessary. Ideally, laboratory-based mediumship research should include: (a) a research environment that optimizes the mediumship process for both the medium and the discarnate and (b) research methods that maximize the experimental blinding of the medium, the rater, and the experimenters in order to eliminate all conventional explanations for the reported information and its accuracy and specificity (41, 42).

Without these factors in place, we really won't know anything more about mediumship after the experiment than we did before it (32) so any results would be meaningless. I have used different analogies to demonstrate this point over the years:

- You can't study football on a baseball field using hockey equipment and the rules for soccer and then claim you've disproven the existence of football (e.g., 43).
- You can't place an acorn in your palm, wait a few minutes, and then call it a fraud when it doesn't turn into an oak tree (e.g., 32).

Optimal Environment

To bring an observed natural phenomenon into the laboratory for examination, creating an environment as close to the natural one as possible is necessary. When the phenomenon being studied involves people and not just seeds or chemicals, the research design must include the real-world, lived experiences of the people. In order to acquire new knowledge, my practice has always included bringing research participants into the conversation when designing a study. This allows me to collect feedback about what is and is not their lived experience of the phenomenon under investigation. In the observed phenomenon of mediumship readings, mediums report discarnate-associated information to the discarnates' living loved ones, the sitters. Therefore, the experimental protocol design needed to account for all three people and their relationships to each other—discarnates, sitters, and mediums—and include reasonable reading conditions.

Discarnates. The observed phenomenon involves everyday discarnates and a close sitter-discarnate relationship. In a valid research design, I can't ask a medium for information about, say, Nobel prize-winning physicist Richard Feynman. I did not have a close personal relationship with him—and don't know anyone who did—so I would not be able to identify him during a mediumship reading. Also, the mediums' lived experience is that the right discarnates find them and not vice versa. They don't have a Heaven phonebook to ring up whoever they want. They connect discarnates with sitters. Because I have no connection to discarnate Professor Feynman, there's no logical reason to think he would want to connect with me during a mediumship reading. So, I stuck with everyday discarnates and their everyday sitter loved ones in my design.

Sitters. To fully establish an optimal mediumship research environment, we need to include the sitters in the experiment. The information reported in a mediumship reading is a personal conversation between two people with an emotional connection: the discarnate and the sitter. As I have previously noted elsewhere, even if I asked you to tell me everything there is to know about your deceased loved one, truly meaningful information may still come up in a mediumship reading that you hadn't thought about in years. If I tried to act as an independent judge and score that forgotten information based on what I had collected from you, I would erroneously label it as inaccurate. Only you can decide what is identifying and accurate about your discarnate. It doesn't matter what any of your friends, what any skeptic, or even what I think; it is a reading for you, not for any of us. Only people who were close to the discarnate are qualified to assess the accuracy and meaning of a reading. Thus, in my experimental design, I was only concerned with accuracy scores provided by sitters. That's how it works in a natural, regular reading (32).

Mediums. The experimental design must also include people capable of the tasks requested of them. This involves pre-screening participants. If we wanted to study the phenomenon of high jumping, we would find some good high jumpers. We wouldn't just look for people claiming to be high jumpers on Craig's List, or invite some people off the street and

tell them, "Go jump over that bar." If those people couldn't clear the bar, we wouldn't have learned anything at all about high jumping (32).

In 2008, my team was fortunate enough to receive a research grant³ to establish a squad of credentialed mediums to participate in research. These mediums were tested, screened, and trained over several months using an intensive, peer-reviewed, 8-step procedure (41). Upon successful completion of the eight steps, mediums are termed Windbridge Certified Research Mediums (WCRMs). WCRMs agree to volunteer their time as research participants. This includes giving me feedback about protocol designs as well as participating in studies. Because certification is a time- and resource-intensive process, we stopped certifying mediums after the granted project was complete.

At its maximum, my team included 20 WCRMs. After the retirement of a couple, our current team includes 18 WCRMs. The reference I made above to "some mediums I know" who provided responses to the question "Do you believe in an afterlife?" are some of the WCRMs on my team (in the order their responses appear here): Samara Anjelae (SA), Dave Campbell (DC), Nancy Marlowe (NM), Debra Martin (DeM), Marisa Ryan (MR), Joanne Gerber (JG), Ginger Quinlan (GQ), Laura Lynne Jackson (LJ), Doreen Molloy (DoM), and T.L. Nash (TN). When I collected their responses in March 2021, they gave me permission to publicly share their names as part of "a secret media project" I wouldn't tell them anything about. I had never asked them those questions before. If this essay makes it into the world, I hope the WCRMs are pleasantly surprised to find their responses here.

Reading. During any research reading, we need to ensure that we only ask the mediums to report the types of information they usually report. Since this does not include winning lottery numbers, combinations to locks, or what color shirt the sitter should wear tomorrow, I didn't ask for any of those things in my experiments (32). Additionally, although in your physical life you are regularly known by your personally-identifiable information (PII; e.g, 44), like your name, date of birth, social security number, address, and phone number, these are not the types of information mediums are regularly observed reporting, so I didn't ask for those during research. To further optimize the environment, I needed to limit both the number and length of readings in order to best mimic the real-world experiences of practicing mediums.

Maximum Controls

In order to control for artifacts, I needed to implement maximum experimental controls. If I wanted to study how a seed grows naturally, I would need to control for things like fertilizer and supplemental UV lamps or I'd end up making errors in my understanding of plant growth. In

³ Bial Foundation Research Bursary 34/08: "Process- and Proof-focused Investigation of Anomalous Information Reception by Mediums: A Two-Part Quantitative Study;" Researchers: Julie Beischel, Adam J. Rock, Mark E. Boccuzzi, and Michael Biuso; 2009-2011

⁴ One participates anonymously; the other 17 are listed at https://www.windbridge.org/mediums/

mediumship research, we need to address the normal, sensory explanations for the source of the information the mediums report. These include factors like hot and cold readings.

The Windbridge Research Center offers descriptions (45) of how a fraudulent medium uses these to fabricate accurate readings:

With hot reading, the fraud will obtain information about the sitter beforehand and feed it back to them during the reading and act like it's coming from the deceased. The information can be looked up online through social media or using confederates onsite to chat up the sitter. With cold reading, the fraud asks the sitter questions and uses their responses or uses sensory clues or cues (for example, the name, age, or gender of the sitter, their clothing or accent, tears, gasps, nods, pupil dilation, the sitter smelling of cigarette smoke, etc.) to steer the direction of the reading. A reading containing information so general it could apply to nearly anyone is also a form of cold reading.

In addition to hot and cold reading, some sitters may have a cognitive tendency to remember many items as accurate even when they were incorrect or unclear. When a sitter knows a reading was intended for them, they may rate or score items differently. During research, this 'rater bias' can be responsible for what seems like an accurate reading. Finally, another possible explanation for a medium's accuracy is precognition: that is, the medium may obtain, from the future, information about which items in the reading were scored as accurate by the rater when the medium is given feedback about the scored reading (46).

To address these explanations for the information mediums report, the Windbridge protocol uses five levels of experimental blinding (also called masking). In research, blinding refers to the act of preventing people associated with an experiment from knowing certain pieces or types of information. For example, in a standard randomized controlled trial (RCT) involving double-blinding, the patient and the doctor are both blinded to whether the patient is taking a placebo or the medication being studied. In what we have nicknamed our "quintuple-blinded" mediumship protocol (e.g., 47), the medium, the sitter, and three experimenters are blinded to various aspects of the protocol and to different types of information. This does not mean that anyone is blindfolded or gets poked in the eye to ensure experimental constraints. It just means that access to information is controlled.

To create the quintuple-blinding, our research readings involve only phone readings, and the sitter is not on the call. An experimenter blinded to information about the sitter and their associated discarnate serves as a proxy sitter in place of the absent sitter. Because the medium has no access to the sitter, and the blinded experimenter cannot provide cues or clues, this protocol addresses the hot and cold reading explanations. In addition, the experimenter asks the medium specific questions about the discarnate's physical and personality characteristics, hobbies, cause of death, and any messages for the absent sitter. By asking for specific information, this addresses the overly general information explanation (46).

Furthermore, each medium performs two readings for two different discarnates, and then each associated sitter scores formatted transcripts of both readings without knowing which was

intended for them (the target reading) and which was intended for another sitter (the decoy reading). The protocol addresses rater bias by comparing the accuracy scores of all the target readings with the accuracy scores of all the decoy readings. To address precognition, we never give the research mediums feedback about their research readings (46). Finally, each reading contains information about only one discarnate. This prevents cues that multiple-discarnate readings may provide to the raters.

This quintuple-blind protocol was vetted and peer-reviewed at least four times by multiple qualified peers: first, when a description of the planned project was selected to be funded by the funding organization's reviewers; second, when the final report about the study findings was reviewed by the funding organization; third, when a description of the protocol and findings was vetted and accepted for presentation at a scientific conference; and fourth, when an article describing the findings was reviewed for publication in a journal.

Step 4: Perform the Experiment

Between 2009 and 2013, the 20 WCRMs on my team performed 68 quintuple-blind readings for 68 discarnates. From these my colleagues and I received 58 readings scored by sitters that contained usable data.

The main features of the quintuple-blind protocol are presented in Figure 1.

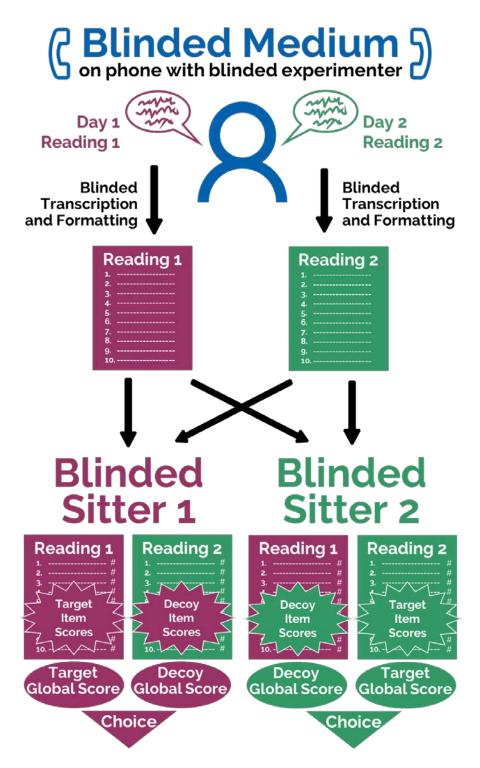
Step 5: Analyze the Data

In 2015, my colleagues and I published the results from the 58 quintuple-blind readings (48). The blinded sitters had provided overall global scores (on a 0-6 scale) for each of two readings (a target intended for them and a decoy intended for another sitter) and chose which reading of the two they believed was theirs. For 31 of those readings, the sitters also scored for accuracy each item in the portions of each of the two readings in which the mediums answered specific questions about the deceased. The scores that sitters could choose from included: obvious fit that does not require interpretation to apply, fit requiring minimal interpretation or symbolism to make sense, indirect fit requiring greater interpretation to fit, and complete miss. 'Fits' and 'fits requiring minimal interpretation' were grouped together and considered 'hits.'

The scores for target readings reflect the accuracy of the information; the comparison of target reading scores to decoy reading scores reflects its specificity. If the mediums are just making up the content or guessing, we would expect to see very low accuracy scores. If the information is overly general and could apply to any sitter, we would expect to see high accuracy scores with no differences between the target and decoy scores.

Figure 1

Features of the Windbridge 'Quintuple-Blind' Mediumship Accuracy Testing Protocol



Note: The five levels of blinding were: (1) the WCRM was blinded to information about the sitter and the discarnate before, during, and after the reading and asked questions during the

reading about the discarnate's appearance, personality, activities, and cause of death; (2) the blinded sitters did not hear the readings as they occurred; they scored blinded transcripts of two readings, one for their discarnate (target) and one for another sitter's discarnate (decoy) without knowing which was which; (3) the experimenter who consented and trained the sitters (Experimenter 1) was blinded to which mediums read which sitters and which readings were intended for which sitters; (4) the experimenter who interacted with the mediums during the phone readings and formatted the readings into item lists for scoring (Experimenter 2) was blinded to information about the sitters and the discarnates; (5) the experimenter who interacted with the sitters during scoring (Experimenter 3) was blinded to all information about the discarnates, to which medium performed which readings, and to which readings were intended for which sitters.

What we found was that, in general, the blinded sitters in this study scored readings—performed by blinded mediums—for the sitters' own discarnates (targets) as more accurate than readings for other sitters' discarnates (decoys). More specifically, I will present the data here as text descriptions as well as graphically below (Figures 2, 3, 4, and 5); different strokes for different folks, you know. Data are reported as means \pm SD.

For the sections of the 31 readings in which blinded sitters scored the mediums' responses to specific questions about the physical and personality descriptions, hobbies, and causes of death of the deceased and their specific messages for the absent sitters (vs. more 'freeform' content), analyses demonstrated statistically significant differences (two-tailed paired t test) between the average percentage of items scored as accurate for target (52.8% \pm 21.7%) and decoy (36.6% \pm 21.4%) readings [t(30) = 3.10, p = .004, d = 0.75; Figure 2]. This means that the mediums' individual responses to specific questions about the deceased were on average accurate and specific.

When the global, whole reading scores sitters gave to each of 58 readings were analyzed, significant differences (one-tailed paired t tests) were also seen when the average scores (0-6) given to target (2.88 \pm 1.39) and decoy (2.09 \pm 1.38) readings were compared [t(57) = 3.20, p = .001, d = 0.57, Figure 3]. This means that when sitters reflected on readings in their entirety, the full readings were also found on average to be accurate and specific.

In addition, the findings from the 58 readings included a significant portion (65.5%) of blinded sitters choosing the target reading intended for them (n = 38) vs. choosing a decoy reading (n = 20) when faced with a forced-choice task (binomial probability, n = 58, q = 0.5, $p(x \ge 38) = .01$; Figure 4). That is, when sitters were forced—or, more realistically, simply instructed—to choose one reading or the other in a pair as more applicable to them, even if they weren't entirely confident about their selection, the blinded responses to this 'forced choice' question (as it's called in research) were correct 65.5% of the time. This is a significant

proportion of blinded sitters who recognized descriptions of their discarnates when only 50% could be expected by chance.

Finally, a conservative 2 x 2 chi-squared analysis of the items scored as hits (obvious fit, direct hit) and misses (no fit, clearly wrong) demonstrated significant differences between the ratios of hits to misses in the target and decoy readings [χ 2 (1, N = 2474) = 66.69, p < .0001, Cramer's V = 0.17)]. That is, when readings provided by blinded mediums were scored by blinded raters, target readings received significantly more hits and less misses than decoy readings. There is an association between whether readings were targets or decoys and the proportions of hits and misses they received (Figure 5).

Step 6: Draw Conclusions

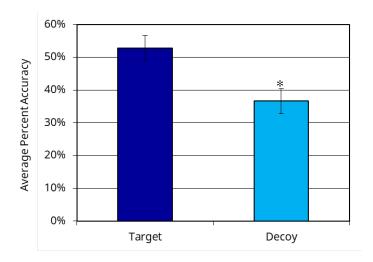
The statistically significant scoring data collected under blinded conditions reflect the accuracy and specificity of the information the mediums reported and are in line with the original hypothesis. Stated more plainly: The mediums in this experiment reported accurate information about deceased people that they had no way of knowing.

The data collected during this study demonstrate the phenomenon we call anomalous information reception (AIR), that is, the reporting by mediums of accurate and specific information about discarnates without prior knowledge of the discarnates or sitters, in the absence of any sensory feedback, and without using deceptive or fraudulent means. "There's no normal way the mediums could acquire the information they report so its reception can only be described as anomalous" (32, p. 127) (that is, not normal; inconsistent with what is standard or expected). This phenomenon is not possible within the currently prevailing scientific or medical paradigms. And we use the term "reception" rather than "retrieval" to reflect the lived experiences of the mediums who report receiving or perceiving rather than retrieving the information.

Anomalous or not, these are not fluke findings. A meta-analysis of 14 studies of mediums' accuracy published since 2001 was recently conducted (49). The method of meta-analysis (MA) incorporates an effective array of tools for combining data across studies and addressing controversial research findings. This particular MA also included publication bias tests to examine biases resulting from questionable research practices. The authors confirmed the reliability of the results from the studies analyzed and concluded that "some mediums are able to acquire information about deceased persons through some unknown or anomalous means" (p. 4). So, the current status of the field is that at least some mediums are capable of AIR.

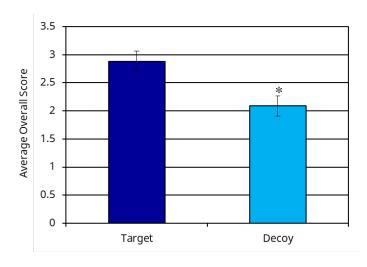
Figure 2

Item Accuracy Scores



Note: Average percentage of items scored by blinded sitters as accurate in readings intended for them (target) and intended for someone else (decoy) are shown. (n = 31, error bars: SEM) *p=.004

Figure 3 *Global Whole Reading Scores*



Note: Average overall global scores given by blinded sitters to readings intended for them (target) and intended for someone else (decoy) are shown. (n = 58, error bars: SEM) *p=.001

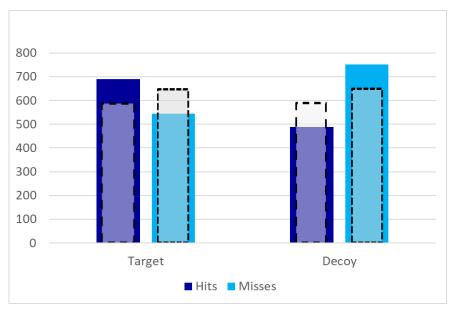
Figure 4 *Global Whole Reading Scores*



Note: Portions of blinded sitters who chose readings intended for them (target) vs. intended for someone else (decoy) as more applicable to them are shown. (n = 58) *p=.01

Figure 5

2x2 Chi-squared Test Results



Note: Dashed columns represent expected values; that is, what would be expected if there was no association between the number of items scored as hits or misses and whether a reading was scored by the sitter it was intended for (target) or scored by another sitter (decoy). Solid columns represent the actual (collected) data. Readings scored by the sitters they were intended for (targets) received more hits and less misses than would be mathematically expected. Readings scored by sitters not connected to them (decoys) received less hits and more misses than would be expected. (n = 2474 items) p < .0001

AIR but not Survival

Mediumship accuracy data collected under controlled conditions demonstrate AIR, but do not directly establish that the mediums are communicating with the deceased. The results, in and of themselves, do not provide evidence for survival. The 58 mediumship readings described above contained accurate information *about* discarnates but the data did not allow us to draw conclusions about the source of the information. The experiment was only capable of testing mediums' accuracy.

However, the experimental conditions in that study did address normal sources for the reported information, so we know the mediums were not using any standard sensory methods to acquire the information. They didn't look up, make up, hear about, or deduce from clues the accurate information they reported. So, how did they get the information? How did they seem to know that a given discarnate was an outgoing brunette, or dominated at bar trivia, or died in a traffic collision? Where did this knowledge come from? Let's look at psi.

Psi

Historically, the term psi has been used to describe the different anomalous ways people acquire information and affect the environment. In my understanding, psi includes two major phenomena which are not mediated by the senses or by logical inference: (i) anomalous cognition (previously, extrasensory perception, ESP) and (ii) psychokinesis (PK). Anomalous cognition involves telepathy, the transfer between people of information, thoughts, or emotions; clairvoyance, the transfer of information about or the perception of distant objects, events, or situations; precognition (conscious cognitive awareness of), presentiment (physiological reaction to), or premonition (affective apprehension of) future events that could not be inferred or anticipated; and retrocognition, the transfer of information about a noninferable past event. PK is the apparent influence of thoughts or intentions on physical or biological processes or objects unmediated by physical forces (e.g., 50).

Events involving psi phenomena "that seem to violate the current common-sense view of space and time" have actually been reported by people from all walks of life (51, p. 663) in "every society of which there is record" (52, p. 3); that is, psi has been happening all over the world throughout history. And people continue to believe in (e.g., 53) and experience (e.g., 54, 55) these types of phenomena today. Nonetheless, near the end of the 20th century, at the request of Congress and the CIA, evaluations were commissioned to assess the validity of psychic functioning. The findings were reported by University of California statistician Jessica Utts and published in 1995 (and republished in 2018; 56). Utts' findings were:

Using the standards applied to any other area of science, it is concluded that psychic functioning has been well established. The statistical results of the studies examined are

far beyond what is expected by chance. Arguments that these results could be due to methodological flaws in the experiments are soundly refuted. (56, p. 118)

Utts went on to suggest that, "There is little benefit in continuing experiments designed to offer proof, since there is little more to be offered to anyone who does not accept the current collection of data" (p. 119).

If only.

Psi research continued and, in a recent review of findings and meta-analyses referencing more than 125 published works, Lund University psychologist Etzel Cardeña again concluded that the published evidence

provides cumulative support for the reality of psi, which cannot be readily explained away by the quality of the studies, fraud, selective reporting, experimental or analytical incompetence, or other frequent criticisms. The evidence for psi is comparable to that for established phenomena in psychology and other disciplines. (51, p. 663)

The extensive collection of psi data implies that consciousness can function separately from the sensory limitations of the body and can transcend space and time (e.g., 57). Indeed, the US military continues to find value in psi abilities that can alert sailors and Marines to danger before it happens; the Defense Department calls this ability "sensemaking" which "Navy scientists assure the public is not based on superstition" (58).

So, if the mediums in the quintuple-blind protocol were not using normal, sensory means to get the information they reported, the only rational explanation left is that the source of the information must have involved psi.

But which type of psi?

Survival Psi and Somatic Psi

Whatever the mediums in this study were doing, psi was involved. There are, however, two competing psi-based explanations for the source of the accurate information mediums report: survival psi (59) and somatic psi (60). Together, these terms more accurately reflect the proposed theoretical framework attempting to explain mediumship and have replaced more imprecise terms like 'super psi' and 'living agent psi' (61, 62, 50).

If survival psi is the correct explanation, the medium is using psi to communicate mind-to-mind with the survived consciousness of the discarnate. In the somatic psi theory, the medium is not communicating with any discarnates. Instead, the somatic psi theory posits, the medium is using any combination of psi-based cognitive tasks to acquire information about the discarnate: accessing the minds of living persons associated with the discarnate; obtaining information about the discarnate from distant locations, documents, objects, or other sources; retrieving information from the future when the reading is scored by the sitter; or examining a psychic reservoir of information to learn about the discarnate. The root of the word somatic (soma) means body; the term is used to refer to the physical body of the living sitter and/or the body of information stored

in the universe as examples of what sources the medium allegedly accesses in this explanation (60).

At this time, somatic psi and survival psi are simply theoretical constructs; just names for ideas not backed by empirical evidence. We can't prove either one in and of itself. Thus, using them as explanations for the source of the information mediums report about the deceased would commit either (a) the logical error of reification (mistaking the abstract for the concrete) or (b) the error of nominal fallacy (thinking that something is understood simply because it has a name; or 'naming is not explaining'). Still, the two concepts are useful for thinking about and discussing mediumship, and I'll continue to use them here as placeholders to represent the two sides of this established battle.

Since the initial scientific examination of mediums in the late 19th century (e.g., 2, 24, 40, 63), being able to break this tie between the ideas of survival psi and somatic psi has seemed quite impossible. It appeared that both were equally likely to be true, which has strongly dissuaded many researchers from studying mediums (e.g., 24).⁵

This is because the source of the information reported by mediums cannot be determined from its content and, for a long time, content was all researchers had. All they could do was assess the accuracy of what mediums said. And nothing a medium can say during a reading will break the tie between somatic psi and survival psi. Any content can be the result of anomalous transfer of information from a psychic reservoir, from the future, from distant places, or from the sitter or other people through somatic psi. If a medium reports something the sitter didn't know but needed to verify through someone else, that can be explained as the medium using somatic psi to get the information from that other person. If a medium accurately reports an event that hasn't happened yet, that can be explained as somatic psi from the future. The general phenomena attributed to somatic psi are well established and make logical sense.

However, the cases above could just as logically be explained as the result of survival psi and communication with a discarnate. The discarnate could provide information the sitter didn't know and needed to verify with others. The discarnate could report information to the medium about a future event. Again, both somatic psi and survival psi could be true.

We could collect accuracy data until the end of time and it would continue to support the existence of anomalous information reception by mediums, but it could not help us get any closer to figuring out where a medium gets [their] information... The content of the reading is irrelevant in this debate because it can never break the tie or shift the balance. (32, p. 130)

So, we are at an impasse. What's a scientist to do?

⁵ But the academic mockery, limited grant opportunities, and lack of employment options may have also played roles (32).

Step 7: Start Again

This conundrum underlies the next issue we needed to address using the scientific method. So, we did what hadn't been done before: We asked the mediums about their experiences of psi.

Historically, the mediums performing the séances observed by the researchers of the British and American Societies for Psychical Research (established in 1882 and 1884, respectively) often entered into a trance state of consciousness (e.g., 63, 64). Discarnate entities took control of the mediums' bodies and spoke using their throats and mouths. The mediums were essentially unconscious during the séance, and after they took (or were given) back control of their bodies, they had no recollection of what had happened. Researchers could not ask them about their experiences during the readings because when the readings happened, the mediums weren't really there.

By the 21st century, the majority of American mediums were not regularly achieving full trance and using spirit controls, though some still do and others do sometimes. Most remain conscious, alert, and aware when they offer in-person, gallery, phone, and Internet readings. During research readings on the phone, modern mediums exhibit—compared to their typical, everyday state—a slightly altered state of consciousness including changes in their awareness of self and body, in the focus of their mental attention, and in their subjective sense of the passage of time (65). Because they remain conscious and aware, however, they can share with researchers their experiences of survival psi, which was not previously possible.

In addition, this isn't something that can be done with non-medium discarnate communication channels. That is, we can't ask spirit boards, knocks on tables, card decks, or electronic equipment (no matter how sophisticated) if the information they share comes from a discarnate or originates from the psi effects of the living. Because, in our current understanding, psi is limitless through space and across time, we can't blind, control for, sham, placebo, or in other ways remove the effects of the living on alleged communication methods. This is especially true for electronic methods which have been repeatedly demonstrated to be easily affected by the general intention or even the subconscious effects of the living (reviewed in 25). And it is true even if a process seems intricate enough to outsmart psi. A phenomenon like psi that can function across distance, through time, around complexity, and regardless of the type of random source being examined (66) surely cannot be fooled by the likes of lowly humans. So, there's no way to determine the source of the discarnate-related content from these physical or electronic processes: is it the effects of a discarnate or is it the psi of the living? There's no way to know.

Thus, asking contemporary mediums—whose abilities have been demonstrated in the lab—about the source of the information they report about the dead seems to be the best way to gather evidence about the survival of human consciousness after permanent bodily death.

Second Step 1: Make another Observation

In the last round of the scientific method, we established that certain modern mediums can report accurate information about the deceased under controlled conditions. Here we will observe, from the lists of services various contemporary mediums offer on their websites, that they participate in both mediumship readings for the deceased and psychic readings for the living. At the start of real-world readings, the medium may ask the client which type of reading they are interested in: mediumistic or psychic. They are then presumably able to shift their mental focus to perform the type of reading requested. As I said above, the rule of thumb is that all mediums are psychic but not all psychics are mediums. Recent research supports this idea.

The Windbridge Psi and Related Phenomena Awareness Questionnaire (WPRPAQ) is an online survey which describes experiential phenomena without mentioning the terms previously used to identify them that might trigger survey respondents because of the cultural baggage they carry (like 'psychic' or 'ESP'). In a recent study, the WPRPAQ was completed by 316 self-identified mediums and 1,030 self-identified non-mediums. Results included 77% of mediums reporting "knowing—without using any sensory cues—accurate information about another person's thoughts or feelings," 82% reporting "knowing—without using any sensory cues—accurate information about an object or event that is at a distance or otherwise concealed," and 80% reporting "knowing accurate information about an event that will happen in the future and that could not be logically predicted from current information" (54). Thus, the large majority of these self-identified mediums reported experiencing psychic functioning (i.e., telepathy, clairvoyance, and precognition, respectively).

We can also observe that most mediums report that during a mediumship reading they are communicating with the deceased and not using 'regular' psychic functioning. That is, in fact, what makes a medium a medium.

Let's then focus on a testable hypothesis.

Second Step 2: Formulate a Hypothesis

In order to fulfill the mission of science and gain new knowledge, my colleagues and I hypothesized that what mediums experience as survival psi is different than the phenomenon proposed by the somatic psi theory.

Second Steps 3, 4, and 5: Design and Perform Experiments and Analyze the Data

This hypothesis falls within the field of phenomenology, the study of experiences as they are experienced by the experiencer. The word phenomenology is also used to refer to the experiences themselves. For examinations of experiences like mediumship, phenomenological research methods usually employ collecting introspective verbal reports from participants (67).

For many phenomena, researchers only have the reports of the person having the experience. To assess pain, for example, different sections of the standard McGill Pain

Questionnaire (68) ask respondents to choose specific descriptors to qualify their pain as, for example, throbbing, shooting, stabbing, crushing, searing, and/or vicious and also rate its strength from mild to excruciating. Similarly, depression has no biological marker and is often assessed on the basis of self-report or, since 1960, by using a version of the Hamilton Depression Rating Scale (e.g., 69), or Ham-D. We cannot objectively measure fatigue, anger, or psychiatric disorders like sociopathy. We regularly rely on phenomenological reports. Indeed, a lot of psi research is contingent on participant reports of their experiences. We can only ask participants to choose which image from several that they dreamed of, remote viewed, or intuited; we can't directly observe which image appeared in their minds. Obviously, there are limitations to using the reports of humans about their experiences, but "it is still the best method we have" (70, p. 46).

In the next set of experiments, we wanted to examine mediums' phenomenology related to survival psi (communication with the deceased) and somatic psi. However, somatic psi cannot be specifically requested; we can't instruct a research medium to, "Get information *about* a discarnate, but don't actually communicate *with* the discarnate." That is not how it works for them. Additionally, we couldn't prove they'd done that anyway: somatic psi cannot be experimentally demonstrated. Source, remember, cannot be determined from content. Thus, the phenomenon closest to somatic psi that we can use experimentally is psychic readings for living people.

So, we designed and performed a series of experiments to assess mediums' phenomenology during mediumship readings for the deceased using survival psi and during psychic readings for the living to represent the theoretical concept of somatic psi. Here, I will nickname these studies UVO-I (30), UVO-II (31), and UVO-III (50, 71) as shorthand for these sUrvival psi Vs sOmatic psi examinations (72).

Because both are psi experiences and involve anomalous information transfer, we expected to see similarities but were on the look-out for differences. I will highlight the differences we noted here. Some are simply related to the different functions of psychic and mediumship readings, but some speak to different sources for the types of information mediums report.

UVO-I Study: Qualitative Analysis

We wanted to first formally collect retrospective reports from the pre-screened WCRMs on the team. My colleagues and I (30) asked six WCRMs (all the mediums on the team at the time) two counter-balanced questions. We asked them to describe their subjective experience when communicating with discarnates during mediumship readings and also during psychic readings in which they use telepathy, precognition, or clairvoyance to provide information about the living but in which they *do not* communicate with discarnates. My colleagues used a qualitative thematic analysis methodology to find common themes in the WCRMs' descriptions that I had collected. One difference that emerged is that survival psi experiences were described

as including "signs" confirming the presence of the discarnate; these included visual (e.g., light flashes), auditory (e.g., ringing), and physical (e.g., heat, vibration) signs. The WCRMs also reported experiencing discarnates as separate, independent entities capable of, for example, arguing with or startling them. One participant said, "Now you would think being a medium I would want to look and connect with them sitting on the edge of my bed. What really happens is they startle me which makes me freak out!" (30, p. 81).

My favorite quote about the differences between the two experiences collected during this study was this: "a psychic reading is like reading a book... a mediumship reading is like seeing a play." The UVO-I Study data demonstrate that these WCRMs were able to effectively describe—so that researchers were able to find common themes in their descriptions—the specific differences in how they experience communication with the deceased and while performing psychic readings for the living.

UVO-II Study: Qualitative and Quantitative Analysis

We also wanted to know if the experiences of the WCRMs on our team were representative of those from a broader group of mediums. What did other mediums have to say? To gather this data, we designed an online survey that was completed by 14 WCRMs and 113 self-identified secular mediums (individuals who do not practice mediumship or spirit communication as part of an organized religion). The 127 participants were first asked "Can you tell the difference between communication from the deceased and psychic information about the living?" Roughly 97% of the participants responded "Yes" to this question (n = 123). This data point confirmed what we had learned from the pre-screened WCRMs: most mediums can tell the difference between survival psi and 'regular' psychic functioning (31).

It is important to note here that being able to discern this difference seems to come with practice and training. It is not necessarily something that novice mediums can do. Indeed, the four participants who answered "No" or "I don't know" when asked if they could tell the difference between communication from the deceased and psychic information about the living reported, in a different part of the survey, that they had been performing mediumship readings for other people for an average of less than 10 years.

When I asked about believing in an afterlife, WCRM Joanne Gerber shared with me that:

Initially, it wasn't that I assumed that I was communicating with a loved one passed, I thought I was relaying 'psychic information' during a beginner's spiritual development class. It took many readings and experiences for me to understand that the dead are not really dead in the way that we think they are. Learning from my experiences and educating myself, I began to find the clarity I needed. Now, as a medium with over two decades of experience communicating with discarnates, there is no doubt in my mind that our loved ones live on as 'spirit energy' which is very much real and palpable to the trained mind of a medium.

The participants in the UVO-II Study who reported that they were able to tell the difference between the two experiences then completed two counter-balanced items: "In your own words, describe your experiences when receiving communication from the deceased" and "In your own words, describe your experiences when getting psychic information about the living." Complete responses were provided by 122 participants (14 WCRMs, 108 self-identified) and the resulting 244 retrospective narratives (122 mediumship, 122 psychic) were quantitatively and qualitatively analyzed.

Quantitative analysis. For the UVO-II Study quantitative analysis, Linguistic Inquiry and Word Count (LIWC, pronounced 'Luke,' http://liwc.wpengine.com/) software was used. LIWC is a validated text analysis software program that calculates the degree to which different psychologically meaningful categories of words are used in a given text. The output of the software is the percentage of a participant's text that falls into each category. For the UVO-II Study, we averaged the 122 participants' data during analysis. We found that the descriptions of their experiences of communicating with the deceased contained statistically significantly higher percentages—compared to their descriptions of getting psychic information from the living—in the LIWC-defined categories of social processes (e.g., words like family, parents, friends; 11.76 \pm 5.80 vs. 9.93 \pm 5.64, p = .004, r = .2); perceptual processes (e.g., sight, sound, touch; 6.63 \pm 4.31 vs. 4.81 \pm 3.81, p < .001, r = .2); ingestion (e.g., cooking, dish, food; 0.23 \pm 0.57 vs. 0.05 \pm 0.20, p < .001, r = .2); past-focused time orientation (e.g., former, happened, previously; 3.09 \pm 3.23 vs. 2.06 ± 3.19 , p = .001, r = .2); and (not unexpectedly) religion (e.g., soul, spirit, afterlife; 0.90 ± 0.11 vs. 0.34 ± 0.09 , p < .001, r = .3). Conversely, participants' descriptions of mediumistic communication contained a statistically significantly *lower* percentage of words describing the cognitive process reflected by the LIWC category of insight when compared to descriptions of psychic readings (e.g., discern, reason, evidence; 5.06 ± 2.97 vs. 6.48 ± 4.30 , p =.002, r = -.2). That is, when describing communication with the deceased, mediums talked more about family, sensory experiences, food, the past, and spirituality than when describing psychic readings for the living. These quantitative, statistically significant results support the concept that what mediums experience as survival psi is different than what is proposed by the somatic psi theory.

Qualitative analysis. For the UVO-II Study qualitative method, content analysis was performed on the 244 participant descriptions. This methodology involves a systematic classification process that results in the identification of consistent patterns or themes within the text. Within the descriptions of mediumistic communication with the deceased, my colleague discovered three main themes containing nine categories and 18 subcategories. The parts relevant here were the themes of triangulated communication and how the mediums described the actual communication.

The common theme of a triangulated model of communication represents information *from* the deceased being received *by* the medium and communicated *to* the sitter. Participants also described the discarnate as controlling what information the medium receives and when the information is sent. For example, one participant noted, "The Spirit is in control of the information given to me. I don't seek it out" (31, p. 68). The mediums described communication as involving spontaneous events in which the discarnate guides the communication. One participant reported that the discarnates "give the information they wish to convey. And then we go wherever spirit wants to go" (p. 68). This finding is in line with the results from a previous quantitative study that found the mediumistic mental state involved a significantly lower level of volitional control than did a control condition (65). That is, in their experience, mediums are not driving mediumship readings; discarnates are.

Both. A common difference seen through both the quantitative and qualitative analyses involved concepts related to the sense of taste and/or to food. This was seen in the significantly higher percentage of words in the mediumship descriptions that fell in the LIWC category of ingestion and a content analysis theme of gustatory imagery which was only present in descriptions of mediumistic experiences. It is unclear if this reflects that the discarnates actually miss physically enjoying the foods the medium can taste during the reading or if the discarnates are just trying to convey how much they liked those meals and snacks in order to identify themselves. Either way, it seems that dead people talk about food, but living people getting psychic readings are not receiving input about what to order for lunch.

Descriptions of cognitive processes were also different between experiences and were seen through both the quantitative and qualitative analyses. Psychic experiences were qualitatively described as involving a download of new information, whereas mediums "just know" the information during mediumistic communication. Compared to descriptions of psychic readings, the descriptions of mediumistic communication contained a quantitatively lower content of LIWC-categorized words related to the cognitive process of insight (e.g., discern, categorize, evidence). This suggests that mediumistic communication may be a process that is more intuitive than analytical (metaphorically, more 'right-brained' than 'left-brained') when compared to psychic readings for the living. This finding was also supported by a subsequent study that found that the cognitive learning styles of mediums were not correlated at all to their accuracy scores (73, 74). Learning styles are the cognitive and behavioral preferences people have for acquiring new information; some people are hands-on learners, for example, some prefer verbal vs. visual information, etc. Because mediumship is an intuitive and passive perception and not an analytical and active cognitive process, it seems logical that mediums' learning styles would not be relevant to their accuracy scores. It shouldn't matter if a medium prefers watching videos over reading articles or hearing concerts over seeing plays when the way they receive the information during readings seems to be guided by the discarnates. And this is what the data demonstrated.

The quantitative and qualitative UVO-II Study data support the hypothesis that the experience of mediumistic communication with the deceased is phenomenologically distinct from that proposed by the somatic psi theory.

Skeptical Viewpoints

The main limitation of all of this phenomenological research is that the mediums know which experiences they are describing. One theory is that the mediums' own psychological needs are transforming, within their own minds, their experiences of somatic psi into what seems like survival psi. This could involve non-malicious, unconscious self-delusion that results in psychological or social benefits (e.g., 75) for the medium.

Alternatively, some skeptics claim that all mediums are well aware of the true nature of their experiences and simply fake it. Because no one would pay them to give readings *about* the deceased, goes the deniers' theory, each reading is a performance where the medium dramatizes somatic psi into survival psi. And when I present my data at scientific conferences, this is the theory that I am confronted with.

That's right. My colleagues accuse my participants, *to my face*, of being manipulative liars. They have no evidence and most have never even observed an actual mediumship reading take place. It usually goes a little like this...

For ease in reading, let's group all the skeptical somatic psi proponents into a representative persona. Let's call him, I don't know, how about "Steve"? And let's call a representative medium "Laura." Representing the empirical data, I will play myself in this fictional dramatization:

Julie: "Mediums provide accurate and specific information about the deceased under controlled laboratory conditions."

Steve: "They are obviously using somatic psi to retrieve information about dead people."

Laura: "I know what intentionally retrieving psychic information feels like.

Communicating with the dead feels different."

Steve: "You have to say that. No one would pay you to do mediumship readings if the information was merely *about* the deceased."

Laura: "I've been having these experiences consistently throughout my life. I am just as capable of discerning what they are as you are capable of knowing what is a ruptured appendix and what is gas."

Steve: "Hmph!" (Stomps feet like a child.) "Somatic psi is the correct explanation!"

Julie: "Prove it."

Steve: "Uh... Um..."

Julie: "Show... Me... Data."

Steve: "I have absolutely no empirical evidence that somatic psi is what these modern mediums like Laura are doing and so I will just stand here with folded arms behind this shield of philosophical rhetoric."

Julie: "Me and Science will be over here. Enjoy your rhetoric." [And scene.]

Another argument is that because there's plenty of laboratory evidence that psi is real, it's more logical to think that mediums are engaging in somatic psi than communicating with the deceased. This is an especially tenacious stance for researchers who study psi phenomena and are intimately familiar with how widespread psi functioning is. Psi is their go-to explanation for anomalous information transfer. And that's usually a safe bet. But it's not what mediums are experiencing.

Psi researchers calling mediums' survival psi experiences somatic psi is like someone who works extensively with digital sounds claiming that everything that makes a noise is a cell phone ring tone: "I know a lot about ring tones and what you're hearing are ring tones." "But no," says the medium in this fake metaphorical example, "I know what ring tones sound like. What I'm hearing is far more complex. More nuanced. What I'm hearing is music." "Nope," says the psi researcher, "it's ring tones."

Furthermore, beyond the simple fact that mediums are reporting that what they are doing is survival psi, a major logical flaw exists with the above lines of thinking: If mediums are just psychics reporting information *about* dead people, *then why aren't all psychics mediums?*

If it is easy to dramatize the theoretical process of somatic psi, then why aren't all psychics acting like mediums? It would potentially broaden their customer base making it a much more lucrative career choice. However, there are plenty of talented practicing psychics who never claim to be talking to the dead. It seems far more likely that mediums can tell the difference between what it feels like to communicate with a deceased consciousness and what it feels like to acquire psychic information.

But enough philosophical conjecturing about what may or may not be happening. Let's bring it into the lab.

UVO-III Study: Quantitative Analysis

For the UVO-III Study, our aim was to see if mediums' reports of differentiating between the two psi experiences would hold up under blinded and controlled laboratory conditions (50, 71, 72). The goal was to see if empirical research findings would mirror what was found during the previous qualitative and quantitative phenomenological studies. (Are you on the edge of your seat?!) Again, because somatic psi is a theoretical construct and is not an experience that mediums report having, it cannot be requested of participants during an experiment. Therefore, psychic readings for the living serve here again as the best surrogate experience to include during research. The UVO-III Study examined—under randomized, counter-balanced, and blinded

conditions with prescreened participants—the phenomenology of mediumship readings for deceased targets in which survival psi is used and of psychic readings for living targets in which 'regular' psi (i.e., telepathy, clairvoyance, and/or precognition) is used.

The UVO-III Study examined the experiences of 10 WCRMs who had previously demonstrated AIR (anomalous information reception; reporting accurate information about the deceased under blinded conditions with no feedback or any shenanigans). The 10 WCRMs participated in two counter-balanced experimental conditions: a blinded reading for a living target and a blinded reading for a deceased target. After each condition they completed a questionnaire about their experiences. The reading conditions were recorded phone sessions in which only the blinded medium and a blinded experimenter were on the phone.

At the start of each reading, the WCRM was given the first name of a target person by an experimenter. Targets could be living or could be deceased. WCRMs had been given these instructions at the beginning of the study: "You will be randomly assigned two readings. Each of the readings may be a psychic reading for a living target or a mediumship reading for a deceased target. That is, you may read for two living people, two deceased people, or one of each." When directly asked by my scientifically-minded research participants how we would see any differences in conditions when they might read for two living or two deceased targets, they were told that combining the results from all the participants would allow us to see differences when averages were compared. In reality, they each read for one living target and one deceased target. The experimenter on the phone with them was also blinded to which names were living targets and which were deceased.

After being given the first name of a target, the WCRMs were asked questions about the target's physical appearance, personality, and hobbies and asked to provide any other relevant information. The questions were identical regardless of whether a target was living or deceased. This ensured that the medium and the experimenter stayed blinded to whether a given target was living or deceased.

During 19 of the 20 readings in the UVO-III Study, the WCRM mentioned their impressions regarding whether the named target was living or deceased. In a statistically significant portion (14 of 19, 74%), those impressions were accurate (50% is what could be expected from guessing) [binomial probability, n = 19, q = 0.5, $p(x \ge 14) = .03$)]. Six of the 10 WCRMs were able to accurately determine the status of the targets in both of their readings (71).

After each reading condition, the WCRMs completed a questionnaire called the Phenomenology of Consciousness Inventory (PCI; 76) about their experiences. The WCRMs were told, "It is essential that you simply attempt to answer each question during the reading and then fill out the PCI about that experience." The PCI is a widely used valid and reliable 53-item questionnaire that quantifies 26 different aspects of consciousness grouped into 12 major and 14 minor dimensions. WCRMs also completed PCIs after an initial baseline condition and after a control condition.

When all four conditions (baseline, control, living target reading, deceased target reading) were compared statistically, differences were seen in the PCI scores reflecting the experiences of the reading conditions as compared to the scores reflecting the experiences of the baseline and control conditions. That is, the psi readings induced experiential situations that were quantitatively different from the WCRMs' normal, usual waking consciousness (represented by baseline and control conditions). Similar to previous research (65), the reading conditions created changes in the mediums' level of mental imagery, in the focus of their mental attention, and in their subjective sense of the passage of time (50).

The two different types of psi readings, however, were similar to each other in their PCI profiles. And this is what we expected. Psi is an anomalous situation and its variants can only be so different. Also, the PCI was not designed to capture differences between mediumistic and psychic experiences. It may not be able to measure the "phenomenological variables that are fundamental constituents of mediumistic states" (77, p. 190). We may need to specifically develop an instrument or method that can capture the nuanced differences between mediumistic and psychic experiences in order to accurately capture the holistic nature of psi. However, one of the dimensions the PCI does quantify is love and that is important here.

Mediums anecdotally talk about feelings of love related to mediumship readings. When, years ago, I informally asked the mediums on my team about their experiences (32), their responses often focused on love. For example, Joanne Gerber reported that, "The energy of love is the bond between the physical and spiritual worlds" (p. 285). Kim Russo described mediumship readings as including "many emotions running through my body... especially love. The emotion of love comes to me in the strongest way" (p. 254).

In a 2017 online survey study, one of the questions we asked the medium participants (14 WCRMs, 113 self-identified; n = 127) was, "What is your explanation for why you are a medium?" Love was mentioned in some of the responses (78). For example, one participant described their purpose as, "To help others. To bring Light and Love where there is darkness... We are all eternal beings of Light and Love, we can never be destroyed."

A different survey question asked, "In your own words, describe your spirituality as it is related to your mediumship." Qualitative analysis of the responses revealed a major theme that involved love (78). Participants' statements included:

"I believe that life continues. Energy changes form but it never lessens or increases. I believe in a light/love in the universe, whatever we call it. People move on in a new form rather than dying and no longer existing."

"...what I believe in is... levels of ascension and learning of dark to light based on soul growth, with love carrying over each lifetime, until you are purely good and at peace with the universe."

Because of these types of statements, we specifically predicted that love would be experienced to a greater degree during the blinded readings for deceased targets when compared to blinded readings for living targets. Our prediction was confirmed when this specific analysis demonstrated a statistically significant difference in PCI love scores [deceased target: 3.65 ± 0.63 vs. living target: 2.75 ± 1.18 ; t(9) = 2.78, p = .02; paired t-test, two-tailed (50, 72)].

Let's really take that in and metabolize it: *Under controlled conditions, the mediums in this study felt more love when performing a blinded reading for a deceased target than they did when performing a blinded reading for a living target.* All the mediums had was a first name. And dead people brought love to the party.

After collecting the UVO-III Study data, I also informally interviewed the WCRMs about their general experiences during psychic functioning and survival psi (mediumship readings) (e.g., 42, 71, 72). Referencing the overall differences between the two experiences, the WCRMs noted:

"It's very different. It's like listening to someone versus looking myself."

"In a mediumship reading, it feels like someone is talking to me. With psychic readings, it's information about someone."

"With mediumship, I get to meet new people all the time. Psychic information is boring."

The mediums' comments also related to differences in how they actually perceive the information:

"With psychic information, I have to 'squint' from the inside out like to focus on something in the distance. When I do mediumship, it's not squinting at all. It's just receiving."

"There's a heaviness around the sensation of living people; like air compared to helium. The auditory aspect is much sharper when I'm perceiving someone who is deceased. Their energy is more like helium."

These statements are similar to a finding from Roxburgh and Roe (79) who interviewed 10 Spiritualist mediums about their experiences and qualitatively analyzed the responses. The metaphor of energy was used by one participant "to make the distinction between a psychic link that is 'static' and 'dense,' and spirit communication that is 'vibrant' and 'lighter'" (p. 33).

One WCRM discussed the spatial orientation of the information in response to my query:

"Somebody from the other side steps in to communicate on the right side of the 'movie screen' in my mind's eye. Psychic information from the living comes to the left-hand side of the screen. The dad's side comes on the bottom right-hand side and the mom's side comes in the upper right-hand side of the screen."

Several WCRMs discussed differences in their physical sensations:

"The physical feeling I get is a tingling or a pressure in my head when the medium stuff starts to happen or when they're entering the room. I don't get that at all during a psychic reading."

"Physically, mediumship charges me up. It's like having eight cups of cappuccino. It's like a buzzing. I've learned I can't do reading too late at night because I'll just be up all night. It's like a super-charge. Psychic information doesn't do that."

One WCRM spoke specifically about love:

[In mediumship readings,] "there's more of a loving feeling. When I connect with somebody on the other side, everything's happy and great. I feel like I don't know who I am any more. I lose myself. My identity is gone. Who cares who I am? I'm just part of the universe; I'm part of love energy... It's like I'm connecting with that sacred love, that universal love, on the other side even though it's just in little tiny bits for a moment. Reading psychically is very different. I'm more aware of myself. It's more grounded. It makes me feel alone."

The UVO-III data collected under blinded conditions and these additional informal interview responses support the conclusions of the previous phenomenological research studies: mediums know what acquiring psychic information about the living feels like and communicating with the deceased feels different.

Second Step 6: Draw Conclusions from all the Phenomenology Research

From the data collected during the UVO-I, -II, and -III Studies, we can assuredly conclude that what mediums experience as survival psi (communicating with the deceased) is statistically and in most other ways completely different than psychic readings for the living, the placeholder experience for the theoretical situation proposed by the somatic psi explanation. Most convincingly, from the quantitative PCI love data collected during the UVO-III Study under blinded conditions, we can conclude that the different ways mediums describe the two experiences cannot be solely a result of knowing which phenomenon they are talking about and consciously or unconsciously spinning the narrative to fit their needs.

And let's season our hearty science with some tasty logical inference: When we consider the extensive experiences of people throughout history and across the globe who have ongoing relationships with the souls of the deceased (e.g., 4, 80, 81), it is actually more logical to land on the survival side of the survival psi/somatic psi argument. It just makes more sense that these

21st century, American mediums are communicating *with* the deceased, like they say they are doing and like people have been doing for eons all over the world, rather than using psychic functioning to acquire information *about* the deceased. That is, in addition to the science, the history and ubiquitous nature of communication experiences allow us to infer that survival psi is a better explanation than somatic psi for the source of mediums' accuracy under controlled conditions.

Grand Finale Step 6: Draw Conclusions from all the Research

As established above, science is considered the most reliable, valid way of knowing. Based on the science described here, this is what we know:

- 1. Certain prescreened mediums can report accurate and specific information about the deceased under controlled laboratory conditions that address normal explanations for the source of the information they report.
- 2. The anomalous source of that accurate information must involve psi.
- 3. The two possibilities are that (a) they are communicating telepathically *with* the survived consciousnesses of deceased people (survival psi) or (b) they are using precognition, clairvoyance, or telepathy with the living to gather information *about* the deceased (somatic psi).
- 4. Twenty laboratory-tested mediums and over 100 self-identified mediums have reported that survival psi and psychic readings for the living (the surrogate for the somatic psi theory) feel different. Extensive qualitative and statistically significant quantitative phenomenological research supports their claims.
- 5. Quantitative findings from blinded readings performed by laboratory-tested mediums for deceased and living targets specifically demonstrated that, at the very least, love is experienced to a greater degree during mediumistic readings for the deceased compared to during psychic readings for the living.

Taken together, these facts provide the best available evidence for the survival of human consciousness after permanent bodily death. As we have stated all along this journey (e.g., 82, 83),

With a combination of evidence for AIR and support that the use of survival psi during the mediumship process is phenomenologically or physiologically different from somatic psi under blinded conditions, it could be inferred that survival is the best explanation for the data. (38, p. 279)

The most logical explanation for the collection of data described above is that people can survive the death of their bodies and can communicate with mediums.

But how can that be?

While these conclusions may seem like heresy or profanity to some, controversial ideas can be the "key to scientific progress" and keeping them "at the scientific margins is strikingly at odds with the potential public impact such work could have" (84, p. 1024).

Moreover, competent scientists are comfortable with uncertainty and mystery. In *Brida* by Paulo Coelho, another novel I happened to be reading while writing this, Brida's boyfriend explains to her the classic physics double-slit experiment that demonstrates that particles can inexplicably act like both particles and waves simultaneously. "You may not believe it, but it's true," he says. "It's something scientists know but can't explain."

Brida asks, "What do scientists do when confronted by these mysteries?"

"They enter the dark night," he responds. "We know that the mystery won't ever go away and so we learn to accept it, to live with it... It isn't explanations that carry us forward, it's our desire to go on" (85, Ch. 2, 52:34).

Here's to living with the mystery.

Proof Beyond a Reasonable Doubt

When I asked the Windbridge mediums, "Do you believe in an afterlife?" as part of the 'secret media project' they knew nothing about, Traci Bray, who worked in and around law enforcement prior to focusing on her mediumship full time, chose to respond this way: "Yes. Were I presented this question in a court room, I would vote along with beyond a reasonable doubt." But how does scientific evidence fit in a court system?

Although "they evolved independent of each other to serve similar functions," (86, p. 133) the decision-making schemes in both law and science share extensive similarities. For example, the threshold level of probability used by scientists to determine whether or not to reject a null hypothesis (usually p < .05) can be equated to the 'standard of proof' threshold used in a court system to determine whether or not proof beyond a reasonable doubt has been established (e.g., 87). Furthermore,

The structure of the decision situation is the same. Each reflects a true state of reality, which can never be known directly, but must be inferred (that a defendant is innocent or guilty; that a null hypothesis is true or false). (87, p. 118)

When scientific findings are used as evidence in court, their "falsifiability," the extent to which they can be contradicted by observation, is considered "the supreme criterion of authenticity" (88, p. 169).

There are also important differences between law and science. The philosophy stating that 'law seeks justice and science seeks truth' has been "announced by many legal authors and applied by several courts" (89, p. 266) and is based on the fact that courts will exclude evidence (such as that which has been illegally obtained) and science will not (as long as ethical and methodological standards are adhered to). In addition,

Law relies primarily on what scientists would consider unreliable anecdotal evidence in the form of oral testimony. Science finds its truths by making generalizations from a mass of events. Thus, its focus is often at a population level. In contrast, law seeks to resolve disputes between certain named parties. (89, p. 265)

As stated above, this is a significant advantage of mediumship research in establishing evidence for survival: we can assess the phenomenon as demonstrated by multiple skilled participants, using peer-reviewed methods and controlled laboratory conditions, which result in generalizable conclusions; we do not need to rely solely on anecdotal testimony about individual reported experiences.

Using these comparisons to law, it is clear that the statistically significant scientific evidence described above, collected under randomized, controlled conditions in order to address falsifiable hypotheses, meets if not surpasses what could be considered proof beyond a reasonable doubt in a court system.

I will leave you with the rest of Traci's response to my afterlife question: "In my personal life, I am very calm and assured about where at least parts of our soul travel to after the death of the physical body and I have no fear of death itself."

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