

SUPERPOWERS AND THE STUBBORN ILLUSION OF SEPARATION

by Dean Radin, Ph.D.

ABSTRACT

Since the dawn of humanity, people have investigated the relationship between intention and the physical world through practices like prayer and meditation. Starting a half-century ago, science began to systematically explore these relationships in the laboratory. After briefly reviewing the history of this scientific exploration, I will discuss two recent experiments. Both were conducted to explore the nature of the mind's eye and its interaction with physical systems distant in space or time. In one, an eyetracking system was used to test whether seers could actually "see" future events. In another, meditators and non-meditators were asked to use their mind's eye to "see" a beam of photons in a light-tight optical apparatus. Both experiments provided intriguing glimpses of the role of the human mind in weaving the fabric of reality. I will also discuss an experiment that examined the effect of highly focused intention applied toward food by measuring the food's influence on people who consumed it. Finally, I will touch on the predictable stages of acceptance of new ideas.

KEYWORDS: illusion, authority, quantum mechanics, consciousness, superpowers, telepathy, presentiment, meditation, intuition, space and time

This talk is about the stubborn illusion of separation. What I mean by this phrase is illustrated visually in Figure 1. When most people look at this image, what they see is a dark spot in the middle, a slightly lighter ring surrounding that, an even lighter ring surround that, and so on to the outside. But if I start covering up the boundaries between the rings, what you find is that the background is actually all the same illumination level (Figure 2). This image is called the Craik-Cornsweet Illusion, named after the two psychologists who studied this effect in detail. The reason the illusion works is because in real life when you see objects with this type of shading, you've learned through experience that the objects are probably at different heights, like steps. This illusion is a simple but effective way of illustrating that our expectations drive what we perceive. We don't see the world as it is – we see what we expect to see.

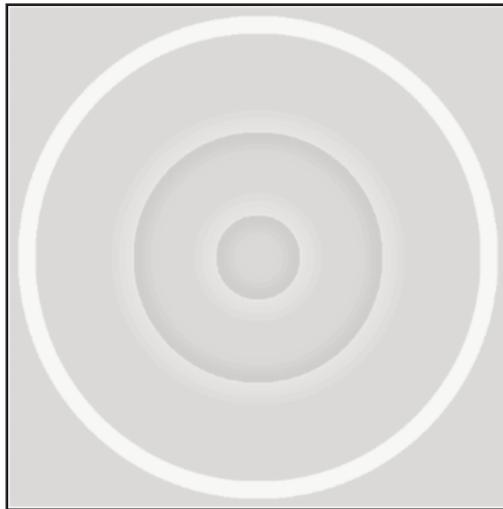
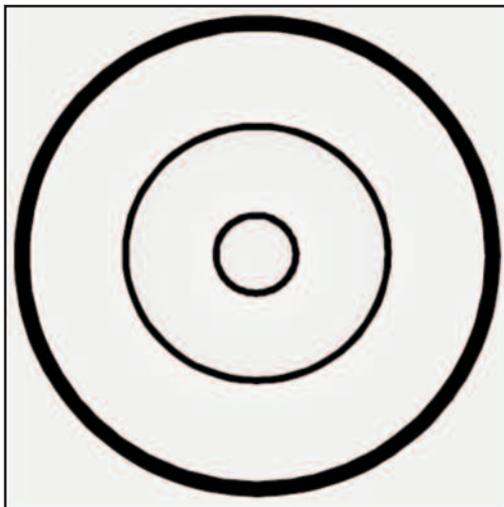


Figure 1. Craik-Cornsweet Illusion

What else drives our expectations? One of the strongest drivers is authority. I'll use as an example what might well be the longest-standing scientific mistake in history, based on Aristotle's writings. For two millennia, Aristotle was the voice of authority when it came to understanding the natural world. Among many other things, Aristotle wrote that "the day-fly [or house fly], as it is called, uses four feet and four wings," and this was his image of what a fly looked like (Figure 3).

Does this look like an ordinary house fly to you? To most people it kind of *looks* like a fly, except that 2,000 years after Aristotle wrote this, the Dutch scholar Jan

Figure 2. Craik-Cornsweet Illusion with boundaries filled in.



Swammerdam risked heresy by saying, in effect, “With all due respect to Aristotle, if you actually look at a fly, you’ll see that it has six legs and two wings.” In other words, for over 2,000 years people were swatting at flies, and thinking, “Hmm, Aristotle said these things had four legs, but this one I’m looking at has six legs, so I suppose it must be a mutant, or maybe two legs fell off. I guess I won’t tell anyone about it.” This is a case where authority reigned supreme until someone was courageous, or stupid, enough to point out a problem. The moral of the story is that it’s exceptionally difficult to see beyond our expectations, and especially what authority leads us to believe.

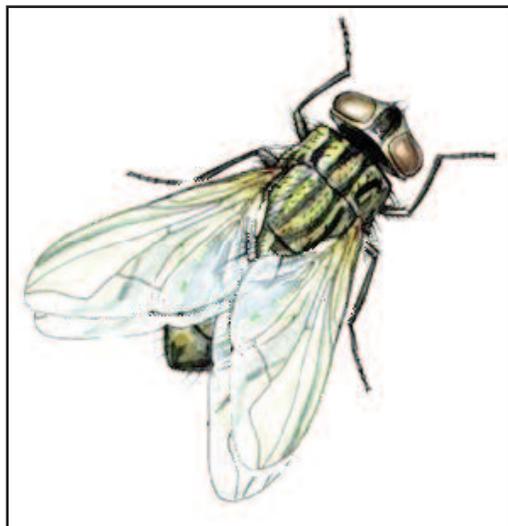


Figure 3. Aristotle’s fly

What does authority tell us today? In the form of the scientific mainstream, authority tells us that (a) quantum effects are irrelevant in understanding human experience, (b) for all practical purposes objects at the human scale are completely separate, (c) consciousness emerges from brain activity, (d) intention acts only inside the head because it, like consciousness, is an illusion generated by the brain, and (e) there’s no evidence to the contrary. Taken together, such assertions help explain why authoritative assertions tend to persist, sometimes for generations. Our collective expectations lead us to ignore evidence that would contradict what authority has told us must be true.

Before we go any further, I have to confess that by virtue of being a speaker at this conference, I’m placed into the role of an authority, which makes me uncomfortable. As Einstein once said, he distrusted

authority so much that the universe punished him by making him one. That’s how I feel; most of the time I really don’t feel like I understand anything, but I do have some ideas and the opportunity to talk about them. I might be completely wrong, but I don’t think so.

Contrary to prevailing authority, I believe that quantum mechanics is intimately connected to consciousness. A very good book on this issue is *Quantum Enigma*, by Bruce Rosenblum and Fred Kuttner, both physics professors at the University of California at Santa Cruz. They describe what they call the skeleton in the closet of mainstream physics – the idea that as much as you’d like to try to extract consciousness from quantum theory, it just isn’t possible. Now, a lot of working physicists don’t pay much attention to that aspect of quantum mechanics, because you don’t need it for most practical purposes. But when it comes

down to the real essence of how quantum theory works, it turns out that you cannot remove consciousness. Eugene Wigner, the Nobel Laureate physicist who was one of the founders of quantum mechanics, stated it most simply: “It was not possible to formulate the laws of quantum mechanics in a fully consistent way without reference to consciousness.” There are many other statements like this by quantum theorists, because they realized that a comprehensive description of any physical system intimately includes the observer.

I would also propose, as an alternative to orthodox authority, that objects are not entirely separate. This is not only true at the quantum level via quantum entanglement; it’s probably also true at the macroscopic level. Further, mind is not completely identical to brain, intention does act at a distance, and there is substantial evidence – even extraordinary evidence – in favor of these claims.

The title of my talk includes the word “superpowers.” Popular culture is saturated with images and concepts of superpowers. These stories are part of the zeitgeist, and they always have been. There is emotive power underlying these stories, something that most of us resonate with. You could say that maybe these superstitious beliefs reflect wishful thinking in uncertain times. But maybe not – maybe there’s something more. The usual skeptical response to superpowers is: Well, there are billions of people out there having trillions of experiences, and so all we hear the weird stuff. What people claim to be paranormal or

psychic is a very tiny class of coincidences that are just plain weird – but because those weird things are the very stories that are repeated so often, that’s why the media gives the impression that the paranormal is everywhere. But beyond that explanation, there are plenty of other valid reasons why we can dismiss all those amazing tales of the paranormal, as portrayed on television and in the movies. They include illusions, delusions, wishful thinking, cognitive biases, and fraud – these things cannot be dismissed lightly.

So when I’m talking about superpowers, I’m not talking about the comic book hero, because Superman is not even human. But I am talking about something like Spiderman, because Spiderman is a human – slightly mutated but nevertheless human – who has certain enhanced skills. In particular, I’m talking about *Star Wars* Jedis and the kinds of things that Jedis are portrayed to be able to do. The evidence that some of those skills are real is surprisingly good. I’m going to go through a bit of that evidence, and I’ll return specifically to Alec Guinness (who played the Jedi Master Obi Wan Kenobi in *Star Wars*) a bit later.

My first claim is that objects are not as separate as they appear to be. That’s what physics has learned through the verification of “quantum entanglement” in the microscopic world. But what about minds? Are minds as separate as they appear to be? Well, if the mind is identical to the brain, then minds must be isolated—and Jedi powers must be pure fantasy. But what do

controlled experiments say? Well, laboratories that have studied telepathy in a systematic way, starting from about the 1920's, including such places as City University of New York, McGill University in Montreal, Harvard, Duke, Cornell, Stanford, Cambridge, and the Universities of Leningrad, Gotenberg, Edinburgh, and Amsterdam.

Without going through the details of the experiment, it's basically a test where you have to choose one out of four correct targets – and so you'd expect to get a 25% hit rate by chance. After some 3,145 test sessions conducted in 25 different laboratories over about four decades, the overall hit rate result is 32%, not 25%. The participants in these tests are typically college sophomores, not people who make special claims about telepathic ability. This research has been reported in mainstream psychology journals, and repeatedly discussed, and the overall odds against chance of this effect – after 88 experiments – is 29 quintillion to 1 (that is, 29 million trillion to 1). Surely that counts as extraordinary evidence. So we know that whatever's going on in these experiments absolutely isn't chance. We also know that it's not due to a long list of possible design flaws, or selective reporting, or fraud.

What do confirmed skeptics report when they try the same experiment? First, a few words about skepticism. It is a vital and necessary part of science. But you often encounter people who are so skeptical that the very concept of telepathy is exceedingly threatening to them. So it's unusual to find

skeptics who will actually go ahead and challenge their fears by conducting an experiment. Fortunately, there are a few exceptions. One was described in an article published in the journal, *Humanistic Psychologist*, in 2005, by two psychology professors, one at the University of Georgia and the other at the University of Notre Dame. They clearly did not believe in telepathy. But to their credit, they nevertheless conducted the same kind of experiment that I just described, and they found that after a series of eight studies, they obtained an overall [statically significant] hit rate of 32% – which is exactly the same overall average result found in the previous studies. But then they went on to say that this result was “precariously close to demonstrating humans do have psychic powers.” So they conducted one additional study based on an ad hoc “psychic theory” they came up with, and that study obtained a significantly *negative* result, so they concluded that telepathy wasn't real after all. I can't think of a more dramatic way of illustrating the power of wishful thinking.

If telepathy is real in experiments where you ask somebody to report something consciously, then it ought to exist unconsciously as well. It turns out that many experiments have looked at unconscious, psychophysiological analogs of telepathy. To give just one example, say you take a couple, isolate them both in dimly lit rooms, and then ask them to think about or “feel the presence” of the other person. Then at random times you flash a light in the eyes of one person (the “sender”) and see what happens in the brain of the other

person (the “receiver”). The receivers in this experiment have no idea when the light flashes will occur. They’re sitting alone in a dark room just having their EEG recorded. So if telepathy is real, and one person sees a light flash, then the other person’s brain should react. This type of experiment has been repeatedly conducted in a half-dozen different laboratories starting in the 1960s, and the overall evidence is very clear: there is an EEG “brain correlation” effect that shows up in these studies. More recently, my colleagues have conducted the same type of experiment using functional MRI to find out *where* in the brain these effects are occurring. For light-flashing type experiments, the effects appear in the visual cortex, with highly significant results.

So does telepathy exist? If you were to ask a court of scientific opinion charged with looking at all of the previous studies involving waking states, altered states, correlations in the autonomic and the central nervous system, and confirmed in functional MRI, the jury’s answer would very likely be yes – with very high certainty – that telepathy exists.

What this implies is that like quantum entanglements among elementary particles, minds too are not as separate as they appear to be: they are connected *nonlocally*. If these nonlocal connections genuinely resemble quantum interconnections, then minds should also not be as separate *in time* as they appear to be. This can become difficult to think about because our language is sequential and linear, and we are

no longer in a linear realm when we start talking about effects through time – but nevertheless, we can do experiments on it.

Remember that I mentioned Obi Wan Kenobi from Star Wars? Some of the Jedi’s abilities involved premonitions. And as it turns out, the actor who played Obi Wan Kenobi had an actual Jedi-moment of his own. Here is a video with Sir Alec Guinness:

Interviewer: *You also met Dean, didn’t you – James Dean?*

Guinness: *Well, my very first night in Hollywood I met James Dean. It was a very very odd occurrence. I’d arrived off the plane, and you know, it took a long time in those days – about 16 hours for a flight – and I’d been met by Grace Kelly and various people, but then I found that I was alone with myself for the evening, and a woman I knew, I phoned her up and said, “Let me take you out to dinner,” and we went to various places and she was wearing trousers, and they wouldn’t let her in any of the smart Hollywood restaurants. Think of it – you know, it was 1952 or ‘54 – something like that. However, we finally went to a little Italian dive and that was full, and so we got turned away. I said all I want is a hamburger anyway – I was hungry by then. Then I heard feet running down the street, and it was James Dean and he said, “I was in that restaurant and you couldn’t get a table – my name is James Dean,” he said, “Would you come and join me?” So we said yes, it was very kind of him. Then, going back into the restaurant, he said, “Oh, before we go in, I must show you something – I’ve just got a new car.” And*

*there in the courtyard of this little restaurant was – I don't know what the car was – some little silver, very smart thing, all done up in cellophane, with a bunch of roses tied to its bonnet. And I said, "How fast can you drive it?" And he said, "Oh, I can do 150." And I said, "Have you driven it?" He said, "No, I've never been in it at all." And some strange thing came over me, and in some almost different voice I said, "I won't join your table unless you want me to, but I must say something: please **do not** get into that car, because if you do," and I looked at my watch – I said, "If you get into that car at all, it's now Thursday ... 10:00 at night, and by 10:00 at night next Thursday you'll be dead if you get into that car." He waved it off as nonsense. So we went off and had dinner – we had a charming dinner – and he was dead the following Thursday afternoon in that car. It was one of the oddest things.*

Interviewer (shocked): *Had this ever happened to you before?*

Guinness: *No, I'm glad to say. It was part of a very very odd, spooky experience. He was – I liked him very much – I would've loved to have known him more.*

I think this is an excellent example where fact and fiction blur. Here's an actor who played a Jedi with superpowers, and he actually had that experience in real life!

Now here's how we test for these curious time slips in the laboratory. I call it a *presentiment* test, a feeling about an event in the future. You sit a person down in front of a blank computer screen, and you record some aspect of their physiology – skin conductance is a convenient measure – and

then, when the participant is ready, he or she presses a button. The screen remains blank for five seconds, and then the computer randomly selects one picture out of a large pool of pictures and presents it. The picture remains on the screen for three seconds, then it goes away. The screen remains blank for ten seconds and then the participant can repeat this at will. In a typical test session, 30 to 40 trials like this are run in a row. The pictures come from an international standard pool of about 800 pictures, which was developed for the National Institutes for Mental Health for laboratory studies of emotion. Each picture has a standardized rating of the degree to which it is emotional (to most people), and its valence (positive or negative emotion).

When the session ends, we average all of the emotional trials the participant saw, and separately average all of the calm trials. Then we look at the difference in physiological measurements *before* the stimulus picture appeared. The prediction is that before the emotional pictures, physiology will show more activation than before the calm pictures.

I've conducted four studies of this type with over a hundred participants, using skin conductance measures. The results indicate that people can unconsciously feel what they're about to experience. The overall odds against chance in favor of presentiment were 33,000 to 1.

This same type of experiment has been repeated now many times. My colleague Dick Bierman, from the University of

Amsterdam, got almost exactly the same results that I did in this experiment. He did this initially thinking that I must have made a mistake, because the results looked too good – but he was quickly able to replicate the same result. Then Rollin McCraty at the Institute of Heartmath replicated the effect, using heart rate variability as the principal measure – and again, he found that people’s heart rates changed in accordance with what their future was about to be.

I’ve conducted similar studies using a simple light flash as the stimulus, to see whether the brain responded before seeing a light flash as opposed to before no flash. In this test you press a button and four seconds later you either see a flash or no flash, determined randomly. When you later analyze the EEG signals, you find a difference in slow cortical potentials that is consistent with a presentiment effect. The difference is in what’s called a “readiness wave,” and what it means is that people are unconsciously behaving differently just before a light flash than before no light flash.

This experiment has also been conducted in a functional MRI, to find out where in the brain this effect was occurring. My colleague Dick Bierman did this, and he found that it occurred primarily in the amygdalae, the emotional processing centers of the brain. This makes sense, because the stimuli in most of these experiments involves emotional responses.

To make sure that these presentiment effects are what they appear to be, we go through

a long list of conventional explanations. We’ve looked at possible artifacts like sensory cues, nonrandom target sequences, protocol flaws, physiological artifacts, selective reporting, multiple analyses, programming errors, statistical violations, subject fraud, and anticipatory effects, and none of them are able to explain the results. What we end up with is very good evidence for short-term precognition – a matter of three to five seconds in advance of a stimulus. There have been nineteen of these studies conducted to date, of which seventeen had results in the predicted direction and ten were statistically significant. This is an impressive replication rate for a new kind of experimental paradigm.

The most recent experiment I conducted investigated presentiment in pupillary dilation. The pupil is an interesting object of study because it provides a very sensitive measure of emotional response. You can also see where the eye is looking, which provides information about the real-time allocation of attention. We predicted, and found, that before emotional trials the pupil was dilated more than before calm trials.

We were able to infer which side of the brain was more active during presentiment. We know, for example, that right-handed people tend to look to the left when answering questions having to do with affect. So now we could also ask, did they also look to the left *before* seeing an affective picture? If they did, then it suggests that we not only get a sense of what is about to occur, but we also know something about its degree of emotionality. So we looked at this data and found

that for the calm trials, the eye was not looking significantly to the left or the right. But before the emotional pictures, the eye was indeed looking significantly to the left.

From these experiments we can infer that separations in space and time are, as Einstein showed, stubborn illusions. From other experiments, there is growing evidence that separations between mind and matter also are illusions. One way to demonstrate this is with Young's double-slit apparatus. This is one of the most elementary and yet fundamental demonstrations in physics, because it captures the essential mystery of quantum mechanics.

The way it works is this: If you shine a light through a single optical slit, the light that comes out resembles (in its most elementary form) a pattern consistent with what you'd expect if light behaved as a particle. But if you shine a light through a double slit, you get an interference pattern, which is consistent with light behaving as a wave. This is the classical way to demonstrate that light behaves as a particle or a wave depending on how you look at it.

One of the surprises about light is that if you send single photons through a double slit, you end up not with a particulate pattern, which you might expect given that you were shooting individual objects through the slits, but rather you end up with an interference pattern. This would not be expected if "particles" of light were behaving like separate objects.

What's more remarkable is that if you use a detector to see which of the two slits the

photon went through, then the interference pattern will disappear, and you'll see a particulate pattern instead. Physicists call this disappearance a "collapse of the quantum wave function," and the reason it disappears is because you gained information about which path that the photon took. *Knowledge alone* is sufficient to collapse the system from indeterminate waves into determinate particles. And here is where consciousness enters the quantum world. Your knowledge of what's happening changes the way that the quantum system behaves.

What if you asked someone to gain this information purely mentally? That is, what if you asked a person to *imagine* that they could see which slit the photon was going through, not with their eye, but with their mind's eye – would you get an interference pattern? If the mind's eye is only a fantasy inside your head, then it doesn't do anything out in the real world, and you'll get an interference pattern. But if the mind's eye is causal in some way, and can gain knowledge at a distance, then the interference pattern should collapse.

This is very similar to the idea of Schrödinger's cat – that famous paradox where you take a unfortunate kitty and you put it in a box, and at some probabilistic time in the future a radioactive particle causes a flask to be broken with poison in it, causing the cat to be killed. Before you look at this system, *you don't know* whether the cat is alive or dead. From a quantum perspective, before observation, the cat is simultaneously both alive and dead. Schrödinger presented this paradox as an

absurdity, where he was actually arguing that this couldn't possibly be true. But actually, it turns out that it is true, at least at the quantum scale, and maybe even in the macroscopic world.

To test this idea, we used an optical device called a Michelson interferometer. It's basically the same as a double slit apparatus, but easier to work with when trying to explain to someone what they should do with their mind. With this device, incoming photons hit a half-silvered mirror; half of them go through it and half bounce off. The resulting two beams then bounce off two solid mirrors, the beams reconnect, and in the process they form an interference pattern. A very sensitive digital camera is then used to record this interference pattern.

People in this experiment were asked to put their mind's eye into one of the two photon beams in the interferometer, so as to "see" the incoming photons, or cause them to be deflected, or to gain knowledge about the photons. Or they were asked to withdraw their mind's eye from the photon beam. These instructions were alternated in a randomly counterbalanced way. Then we examined the results to see if there was a change in the interference pattern under the two conditions. If there was, it would suggest that the act of putting your mind's eye in the box causes a measurable effect at the quantum level.

The Michelson interferometer was placed inside a light-tight, shielded room, and we had the participants sit quietly outside that room. The camera was controlled from

outside the shielded room by a computer. We ran 18 experimental sessions, half performed by advanced meditators and half by non-meditators. The overall results, with all participants combined, significantly deviated from chance. We also ran a series of calibration trials to check out the equipment, and those results were not significant, indicating that the results of the experiment were not due to an artifact. Then, when we separated the results of the meditators from the non-meditators, we found that all of the experimental effects were due to the mediators. It was an extremely significant result: odds of 106,000 to 1 for the mediators.

The reason we used meditators and non-meditators in the test was because the task requires, in essence, that you place your mind "over there" for 30 seconds, and then you put it "over here," alternating back and forth according to the instructions. A trained meditator can do that task for 30 seconds, but a non-meditator can do it for maybe two seconds, and then they start thinking about lunch. I expected that if this experiment was going to work at all, it would probably work best with people who are disciplined at doing things with their minds. In this case, that's exactly what happened, so we're planning a follow-up series of similar studies, again with very advanced meditators.

What we've seen so far is that separation in space and time, and between mind and matter, are illusions. We're not talking about illusions at the macroscopic level, rather at a deeper level of reality. So one might ask whether these microscopic effects influence

the everyday world in practical terms. To find out, we conducted an experiment to see whether the act of intention alone would affect food. Why food? Well, the background of this story is that I always felt that something about eating Mom's chicken soup made me feel better, even though it was the exact same ingredients that I could get out of a can. So I wondered whether the act of intention in cooking – the love that goes into the food – could be considered a kind of “ingredient.” In the experiment we conducted, we used chocolate instead of chicken soup because if you've ever conducted clinical trials, you know how difficult it can be to recruit people. In this case, the experiment involved asking people if they would be willing to eat chocolate. In fact, not only would they be willing to, they *had* to as part of the experiment. So it was very easy to recruit people for this study.

We used the gold-standard, double-blind, randomized, placebo-controlled design in our study, the same type of design you would use to test the efficacy of a new drug. Some of the chocolate was exposed to the meditative intentions of Venerable Geshe Sopa and his senior monks. Geshe Sopa is a Tibetan Buddhist monk and was the tutor of the Dalai Lama. We also asked Mongolian shaman Banzar Zorigtbaatar to apply his intention toward the “treated” chocolate. They were both asked to intentionally impress into the chocolate the intention that anyone who ate the chocolate would experience an enhanced sense of energy, vigor and well-being.

Geshe Sopa and two senior monks spent

twenty minutes doing the intention. They had a large batch of chocolate in front of them that we then divvied up for the experiment. The Mongolian shaman spent about an hour doing a ritual involving a lot of chanting and beating of drums. This study was published in the journal *Explore: The Journal of Science and Healing* last year (2007). And by the way, the experiment I mentioned earlier on the effects of intuition at the quantum level was published in the same journal, this past January (2008).

We recruited 62 people and assigned them into four groups. The groups were matched on age and degree of neuroticism. We used the Neo-PI scale to measure neuroticism, because since our main measure was mood, it turns out that the more neurotic you are, the more your mood will fluctuate. So we used neuroticism as a covariate in our analysis. We also asked people how much chocolate they tended to eat on average. The reason is that if somebody eats a pound of chocolate a day, by asking them to eat a little bit more for this experiment, we wouldn't expect to see much of an effect because they'd likely be saturated with chocolate already. So we predicted that for people who only ate a little chocolate on average, they would show a bigger intentional effect than people who tended to eat lots of chocolate.

One thing you'd expect to find in an experiment of this type is that on the first day of the experiment, most people would report some improvement in mood because of the novelty of being “forced” to eat chocolate. But typically, mood enhancement as a result of eating chocolate lasts only about twenty

minutes; then the effects of the caffeine and other mood-enhancing biochemicals would begin to fade. What we were hoping to find is that intention would sustain the short-term mood enhancement effect normally produced by chocolate. Our primary outcome measure was change in mood, as measured with the Profile of Mood States, a well-known mood measurement scale.

We asked participants to record their mood daily over the course of a one-week period. On the middle three days of the week, we asked them to eat chocolate. We actually gave a prescription: at 10 a.m. you must eat half an ounce, and at 3 p.m. you must eat half an ounce. They had little packets of prepared chocolate, blindly labeled so they couldn't tell (and neither could we) whether they were eating the regular or the identically-looking intentionally treated chocolate.

What we found was that on the first day of eating chocolate, overall all subjects' mood improved. On the second day, mood bounced back in the control condition, but it remained improved in the intentional condition. By the third day we saw a significant difference between the two conditions. People eating the intentional chocolate reported a 67% improvement as compared to the control chocolate. The people involved in this test were matched so the differences we saw were not due to mundane differences among the participants. When we looked at the subset of people who ate less than the average amount of chocolate per week (3.2 ounces for this population), the "intentional group" showed

a surprising 1,000% improvement. This proof of principle experiment showed that highly focused intentions influenced mood states associated with consuming food. Previously reported experiments looking at conceptually similar effects of intention on various target substances have reported similar outcomes.

When faced with a new idea, there are several predictable stages of acceptance. These ideas are not new to this audience, but from the mainstream perspective, they are very new. The first stage of acceptance is: "It's impossible, because there's no evidence." What this means is, "I've not seen the evidence" – not that there is literally no evidence. Stage two is: "Well, maybe it's possible, but it's not very interesting," or perhaps, "It's so weak maybe it will go away." Stage three is: "It's real and important, so patent it." Stage four is: "Critics claim that they thought of it first." Stage five is: "No one remembers it was controversial." Stage six is: "Insurance covers it."

So where are we now in terms of these kinds of phenomena? I think that – for what I'll refer to as the "scientific superpowers" – stage one was roughly from the 1500s to about 1950. Stage two was approximately the last half of the last century. Stage three is, I think, emerging now. One piece of evidence supporting that idea is the appearance of patents. In the patents pending arena, you can presently find applications for enhancing the efficiency of electrochemical processes with intention; electronic circuits that influence you at a distance, programmed by intention; novel forms of communication systems related to

mind/matter interaction effects; and a process that predicts lotteries based on a precognition effect. Patents that have already been issued include means of achieving direct mind/machine control, an intuition training system, and an ESP testing system.

∞ ∞ ∞

I predicted about twenty years ago that because the stages of acceptance of new ideas are so predictable, that when you reach stage three you should start to see a trickle of patents. This is because at that point, entrepreneurs will see beyond the stage where effects are considered weak and uninteresting, and they will recognize that there's money to be made. So they will begin to protect intellectual property, just in case. We're presently up to seven patents or patents pending, and I may have missed a few. The first patent was issued in 1998. Between 2000 and now we're beginning to see a steady trickle. And so I predict that in another twenty years, we'll see a flood. By then these effects will no longer be seen as weak and uninteresting, but robust and important.

In conclusion, experiments of the type I've discussed, plus a large and growing supporting literature, suggest that all objects, including mind and matter, are connected though space and time. This may be the source of real superpowers.

• • •

This paper is based on Dean Radin's Address, presented at the Eighteenth Annual ISSSEEM Conference, Energy, Intent, and Healing (June 19-26, 2008).

CORRESPONDENCE: Dean Radin •
dean@noetic.org

