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WHAT THE BLEEP IS THE SECRET?

The physical world is a creation of the observer.

—Deepak Chopra¹

Amanda in Quantumland

In 2004 an independent documentary film appeared in theaters around the country called *What the Bleep Do We Know?*² According to the film's website, it "went on to become one of the most successful documentaries of all time . . . while serving up a mind-jarring blend of Quantum Physics, spirituality, neurology and evolutionary thought." Modestly funded, it grossed \$10 million with more in spin-offs.

In the film, Amanda, a deaf photographer played by Marlee Matlin, finds an Alice in Wonderland world of quantum uncertainty hidden behind familiar reality—all dramatized by extensive special effects. The theme is simply stated: *Quantum mechanics teaches us that we make our own reality.* As we will see, this theme is central to what I call *quantum spirituality*, going back to the 1970s to an era that was called the *New Age*.

Interspersed with Amanda's experiences in the film, many of the individuals who have been promoting quantum spirituality over that period are interviewed. These include a number of PhD physicists who have written books suggesting a connection between quantum physics and consciousness. These include: Fred Alan Wolf, the author of many popular books on quantum spirituality; John Hagelin, prominent leader in the *Transcendental Meditation* (TM) movement; and Amit Goswami, retired professor from

the University of Oregon and author of *The Self-Aware Universe*.³ Appearing in an expanded later version or “director’s cut” is David Albert, who directs a program in the philosophical foundations of physics at Columbia University.

Also interviewed are two physicians who have written extensively about quantum mechanics and consciousness, anesthesiologist Stuart Hameroff and psychiatrist Jeffrey Satinover, along with assorted spiritualists and finally a 35,000 year-old warrior.

In this chapter I will briefly introduce quantum spirituality by providing quotes from the *Bleep* interviewees and their published writings. I will also relate the similar claims made in an even more successful documentary released in 2006 called *The Secret*⁴ along with some of the statements by earlier proponents of quantum spirituality. I will simply report and not evaluate these views at this time. In the chapters to follow we will discuss in non-technical detail what quantum mechanics teaches that has led many of those seeking new paths to enlightenment, supported by a small minority of highly trained scientists to reach revolutionary conclusions that go well beyond the mainstream of physics. I will then ask if these conclusions are justified by either the theories of physics or the empirical facts.

The first bleeper I will quote is Fred Alan Wolf. Wolf received a PhD in physics from the University of California at Los Angeles (UCLA) in 1963. So did I! I don’t recall ever meeting him. His *Taking the Quantum Leap* won the 1982 National Book Award for Science.⁵ Wolf, who fashions himself as “Dr. Quantum,” has appeared on many radio and TV shows, including the Discovery Channel and should be regarded as a popularizer rather than a serious scholar. Here’s how Wolf summarizes the role of physics in consciousness:

The importance of consciousness as an element in physics is becoming apparent . . . Consciousness acts or has an effect on physical matter by making choices that then become manifest. It now appears that such an action cannot simply take place mechanically. Implied now is a “chooser,” or subject who affects the brain and nervous system . . . I suggest that this chooser/observer does not exist in spacetime and is not material, which suggests that it is a spiritual essence or being residing outside of spacetime.⁶

John Hagelin ran for president on the Natural Law Party ticket in 1992, 1996, and 2000. We will meet him again later when we discuss Maharishi Mahesh Yogi and the Transcendental Meditation (TM) movement.

According to Hagelin,

The quantum-mechanical Unified Field of Natural Law is a field of self-referral consciousness which generates the whole manifest universe by its process of self-observation.⁷

David Albert does not appear in *Bleep* but is the first one interviewed in the expanded director’s cut sequel *Down the Rabbit Hole*.⁸ He was “outraged” when he saw the product and disassociated himself from the project. He says he told his interviewers that quantum mechanics has nothing to do with consciousness and spirituality, but the film makers rearranged his words to make it sound he was saying the opposite.⁹

In *Beyond the Bleep: the definitive unauthorized guide to What the Bleep*, Alexandra Bruce identifies Amit Goswami as the one physicist interviewed who “expresses views which are so antithetical to what is accepted by both Western science and common sense

that his statements have become a lightning rod for the film.”¹⁰ I agree that Goswami’s thinking accurately represents the supposed scientific and philosophical basis, such as it is, for quantum spirituality, so let us look at his views in a little more detail.

The Self-Aware Universe

Amit Goswami received a PhD in physics from Calcutta University in 1964 and taught physics at the University of Oregon for 32 years. In the 1980s Goswami proposed an interpretation of quantum mechanics he called “monistic idealism.”

Monism is a name usually attached to the philosophical doctrine in which the universe is composed of one kind of stuff. For example, material monism assumes the world is made of matter and nothing else. This is to be compared with *dualism* in which, for example in Cartesian dualism, the universe is composed of matter and some other component such as “spirit” or “soul.” I think it would be fair to say that most of the world’s religions teach some kind of Cartesian dualism, including Hinduism, the main religion in Goswami’s nation of birth, India. On the other hand, the vast majority of philosophers of mind and neuroscientists hold to material monism and view the mind as a product of matter. This marks an even greater gulf between religion and science than evolution that has yet to have broken out into political warfare,

Goswami’s monism, which he says is drawn from both the Hindu school of Advaita Vedanta as well as Theosophy, claims that the universe is not composed of matter at all but of a “universal consciousness.” As Goswami puts it in his *Bleep* interview:

The material world around us is nothing but possible movements of consciousness. I am choosing moment by moment my experience.¹¹

Goswami notes that the “You” in “You Make Your Own Reality” is not the individual “you” exercising his or her free will, but the collective You (or “I”) of an all pervasive cosmic consciousness that connects all minds throughout the universe at speeds faster than the speed of light.

As the real experiencer (the nonlocal consciousness) I operate from outside the system—transcending my brain-mind— that is localized in space-time . . . My separateness—my ego—only emerges as an apparent agency for the free will of this cosmic “I,” obscuring the discontinuity in space-time that the collapse of the quantum brain-mind state represents.”¹²

The terms *local* and its opposite *nonlocal* will appear frequently in this book. Two events in space and are said to be “local” if they can be connected by a signal moving at the speed of light or less. The term “local” follows from the fact that in this case you can find a frame of reference in which the two events occur at the same place in space. For example, you get on a train at one station and get off at another, using the same door in both cases. Those two events are at different places in Earth’s reference frame but at the same place in the train’s reference frame. The two events are thus local because there exists at least one reference frame where they are at the same place.

If it is not possible to find such a reference frame for two events they are said to be nonlocal. Nonlocality is usually connected with superluminality, that is the motion of bodies or signal faster than the speed of light. This is forbidden by Einstein’s special theory of relativity. One of my many tasks will be to evaluate the claim that quantum mechanics is necessarily nonlocal, that is, involve phenomena that are superluminally connected. Einstein called these phenomena “spooky action at a distance.”

A few years before I retired from the University of Hawaii in 2000, Goswami was invited to speak to the Philosophy Department on campus and I was asked to follow his presentation with comments of my own. In those comments I accused Goswami of “solipsism,” which is the doctrine that the self is the only reality and the world is all made up in our heads. Goswami objected vehemently that this was not at all his position. However, he has said elsewhere that our notion of being separate individuals is an illusion. I still do not see how the existence of one common “self,” the cosmic consciousness in which we all participate that manufactures reality, is any different from the solipsistic self who does the same. But, I suppose, the distinction does not matter. The simple thing to remember is that Goswami teaches that the universe is all in “our” heads where “we” are the totality of universal consciousness. And how does he know this? Because quantum mechanics says its so.

As we will see as we proceed through this book, several of the same themes are repeated over-and-over by the quantum spiritualists with little more than changes in language and usually not even that. “We make out own reality” is the primary theme. Another is that “We are part of an inseparable whole.” And “Quantum mechanics is behind it all.”

Other bleepers

Let me briefly summarize the views of two other *Bleep* interviewees who have provided input to the quantum spiritualism story.

Jeffrey Satinover is an MD psychiatrist with a strong physics background and a large and varied résumé. Among his several books is one called *The Quantum Brain*.¹³ His

main thesis is that humans are undeniably material (that is, non-spiritual) machines, but the fact that we do not behave deterministically is evidence that quantum effects must be present. As he says in *Quantum Brain*, “A 100 percent mechanical system cannot under any circumstance generate an indeterminate outcome.” The fact that human beings have the capacity to act indeterministically “would either have to derive from the quantum nature of matter, amplified, or arise from some other, utterly mysterious source.”¹⁴

Another Bleeper who has long promoted the idea of a quantum brain is anesthesiologist Stuart Hameroff. Hameroff is noted for his collaboration with the eminent Oxford mathematician and cosmologist Roger Penrose in trying to find a place for quantum mechanics in the brain.

In 1989 Penrose wrote a bestselling tome called *The Emperor’s New Mind* that was packed with wonderful material on physics, mathematics, and computers.¹⁵ Penrose’s main thesis was that the human brain is not a computer but must operate in some way that cannot be replicated with any computer no matter how powerful. That is, the brain did not follow “algorithms” in solving every problem it was dealt with. He made a rather remarkable proposal that the actual mechanism had something to do with quantum gravity.

Penrose was met with considerable skepticism, especially in the artificial intelligence community—which he was basically arguing out of business—but also among physicists who could not see what quantum gravity could possibly have to do with a large, hot structure such as a brain.

Here’s how Penrose and Hameroff explain their mechanism:

According to the principles of OR (*orchestrated reduction*, proposed by Penrose in 1994¹⁶), superpositioned states each have their own space-time geometries. When the degree of coherent mass-energy difference leads to a sufficient separation of space-time geometry, the system must choose and decay (reduce, collapse) to a single universe state, thus preventing “multiple universes.” In this way, a transient superposition of slightly differing space-time geometries persists until an abrupt quantum classical reduction occurs and one or the other is chosen. Thus consciousness may involve self-perturbations of space-time geometry.¹⁷

Hameroff had the idea that the quantum mechanism for consciousness involved quantum coherent effects taking place in *microtubules*, hollow cylindrical polymers that are part of the cytoskeleton of all cells in the human body, from head to toe. For some reason, only the microtubules of nerve cells in the brain participate in conscious decisions, although there is some suggestion that in the case of the human male, microtubules in the cells of the penis dominate.

Ramtha the Lemurian

Another prominent interviewee in *Bleep* is identified as Ramtha, a Lemurian warrior who fought against the people of Atlantis 35,000 years ago. Ramtha is said to have conquered two-thirds of the known world before ascending to heaven at a spot near the Indus River.

On February 7, 1977 Ramtha appeared to J. Z. Knight and her husband in the kitchen of their trailer home in Tacoma, Washington. Since then Knight has been able to “channel” to Ramtha by leaving her body and having Ramtha speak through it. Knight formed Ramtha’s School of Enlightenment through which she passes on Ramtha’s

wisdom for a fee. She has become one of the nation's best-known spiritual mediums, earning about \$10 million yearly. Knight has moved out of the trailer to a French-chateau-styled mansion in Yelm, Washington.

The three directors of *Bleep* are all students of the Ramtha School, but they deny the charge that *Bleep* is a recruitment film for the school. In the film, Ramtha does not appear directly but is interviewed through Knight. Ramtha speaks in a deep Indian accent with an occasional hint of modern British English.

Judging from Ramtha's words, some have seen the film as an attack on Christianity and other religions. Calling Christianity a "backward" religion, Ramtha, in keeping with the quantum theme of *Bleep*, informs us that the parables of Jesus are photon waves of probability.

Here is a sample of Ramtha's teachings that relate to the quantum:

The soul is the recorder of unfinished business, the tallier in which in the mind of God each subject's achievements are added to this fluid mind that the ancients used to call the Akashic Record, but all it means is space. And we know it today in a much more sophisticated term called the quantum field, and its spiritual name is the mind of God.¹⁸

The Secret

Hot on the heels of the success of *Bleep* has been another blockbuster independent documentary film called *The Secret*, which makes a slight but clever variation on the primary New Age theme that we make our own reality. The main character in the film is an Australian television writer and producer Rhonda Byrne. She relates how her life had collapsed about her until given a glimpse of "a Great Secret—The Secret to Life" in a

hundred-year old book given to her by her daughter Hayley.¹⁹ She traced the history of the Secret and found it was known by some of the greatest men of history: Plato, Shakespeare, Newton, Hugo, Beethoven, Lincoln, Emerson, and (of course) Einstein. Byrne wondered why everyone did not know the Secret and so began searching, finding one living master after another. These gurus were included in the film she made to reveal the Secret to humanity.

And what is this magnificent Secret? It is the *law of attraction*. As Bob Proctor, author of the bestseller *You Were Born Rich*²⁰ explains,

Everything that's coming into your life you are attracting into your life.

And it's attracted to you by virtue of the images you're holding in your mind. It's what you are thinking.²¹

Proctor travels the globe teaching the Secret, helping companies and individuals to create lives of prosperity through the law of attraction.

And how do you make this happen? You think about it!

If you think about what you want in your mind, and make that your dominant thought, you *will* bring it into your life.²²

Here's how it works. Your mind is transmitting your thoughts throughout the universe. Each thought has its own unique frequency and attracts like things of the same frequency. So if your thought is one of becoming wealthy, you will attract wealth into your life.

So why isn't everybody wealthy? Because most people aren't thinking the right thoughts. As Byrne explains,

The only reason why people do not have what they want is because they are thinking more about what they *don't* want than what they *do* want, Listen to your thoughts, and listen to the words you are saying. The law is absolute. There are no mistakes.²³

This theme is repeated over and over in the film and book, by the various masters of the Secret (who, for some reason, do not all look like 20-year old movie stars). These include our old friends, the presidential candidate John Hagelin and the ubiquitous Dr. Quantum, Fred Alan Wolf. You can guess where Wolf says the Secret comes from:

I'm not talking to you from the point of view of wishful thinking or imaginary craziness. I'm talking to you from a deeper, basic understanding. Quantum physics really begins to point to this discovery. It says you can't have a Universe without mind entering into it, and that mind is actually shaping the very thing that is being perceived.²⁴

John Hagelin gives us more details:

Quantum mechanics confirms it. Quantum cosmology confirms it. That the Universe essentially emerges from thought and all of this matter around us is just precipitated thought. Ultimately we are the source of the Universe. . . . So we are the creators of our own destiny, but ultimately we are the creators of Universal destiny. We are the creators of the Universe.²⁵

In his three runs for the presidency, 1992-2000 John Hagelin amassed a total of 232,000 votes.

Quantum healing

Certainly we expect that one of the prime uses of *The Secret* for most people would be for their health. You are guaranteed good health if you think about it. However, the techniques taught in *The Secret* were certainly not unknown prior to its appearance in theaters and bookstores.

The 1952 publication of *The Power of Positive Thinking* by Norman Vincent Peale stayed on the *New York Times* bestseller list for 186 consecutive weeks. Peale taught a kind of self-hypnosis in which by a series of constant repetitions of positive thoughts the subject would fight off any adversity. Peale did not attribute this to quantum mechanics, however.

Perhaps the first well-known spiritual healer to specifically teach “quantum healing” was, and still is, Deepak Chopra, a physician who was originally a member of the Transcendental Meditation movement. In the 1980s he broke off and formed his own organization that specialized in Ayurvedic (ancient Indian) medicine and self help. He is the author of many bestselling books, including *Quantum Healing* (1989)²⁶ and *Ageless Body, Timeless Mind* (1993)²⁷, that rest on the assumption that quantum mechanics enables us to make our own reality.

In June, 2007, I was at the giant Book Expo America in New York City to help sell my book *God: The Failed Hypothesis*.²⁸ While waiting to be interviewed on TV I noticed all these people lined up in the area reserved for author signings. I asked someone in what was by far the longest queue whom he was waiting for. It was Deepka Chopra who had just published his latest effort, *Life After Death*.²⁹

Alternative medicine

Much of complementary and alternative medicine makes allusions to physics. In particular, a common thread in these therapies is the concept coming out of traditional Chinese medicine according to which life is the product of an “energy field” that flows through the human body. The Chinese call it *qi* or *ch’i* (pronounced roughly chee), the Japanese, *ki*. In Sanskrit it is *prana*. In Chinese, *qi* also means breath.

In the ancient Western world it also was commonly believed that breath was the force of life, leaving the body upon death. In Greek *pneuma* is literally the word for “that which is breathed or blown” but was used in Stoic thought to refer to the vital spirit or soul of a person. The word for breath in Latin, *spiritus*, is also used to refer to spirit.

Modern alternative medicine has adopted many of the techniques of traditional Eastern therapies, such as acupuncture and massage, and added a few such as therapeutic touch and chiropractic that claim to manipulate the body’s energy fields. That field is variously identified with electromagnetic fields, quantum fields, or as we will see in the case of Maharishi, the *grand unified field* of physics.

I have already written extensively on the various forms of alternative medicine in books and articles and will not repeat any examples that I have previously discussed.³⁰ There are always many to choose from, with new ones coming along every day. My *Google* search on “quantum healing” yielded 1,490,000 hits. Here are just two random examples.

Quantum Touch. Practitioners focus and amplify the life-force energy of *qi* or *prana* by various breathing and body awareness exercises:

When the practitioner resonates at a high frequency, the client often entrains to, or matches, the higher frequency, thereby facilitating healing using the body's biological intelligence. Life-force energy affects matter on the quantum, subatomic level and works its way up through atoms, molecules, cells, tissue, and structure.”³¹

Quantum Depth Healing:

Health does not come from a pill, a potion, a lotion, surgery, a doctor or even an herb. It comes from the body's own innate intelligence or inborn wisdom to survive and rejuvenate. Our bodies ultimately are domains of information, intelligence and energy. The very fact that our body is an assembled mass of molecules implies that we are energetic entities.

Further, quantum physics discovered in the last decades that every particle of matter is associated with interaction and resonance quanta (parcels of energy) at a ratio of about 1 nucleon to 1 billion quanta. The quanta exhibit specific patterns and are susceptible to resonance. These subtle energetic configurations (bodies) can be disturbed causing unwellness and pain. Therefore, the body is a quantum mechanical device and Quantum Healing is healing the bodymind from a quantum level. That means from a level, which is not manifest at a sensory level, Quantum Depth Healing involves a shift in the areas of energy information, so as to bring about a reconstruction in an idea that has gone wrong. So quantum healing involves healing one mode of consciousness “the mind” to bring about

changes in another mode of consciousness “the body.” Another important point in quantum biology is that consciousness is not consolidated or focused in any one particular place. Each thought, feeling, desire, attitude, instinct, or drive you have affects your nervous system through all its organs and tissues by a group of chemicals called neuropeptides in the brain. Each thought, feeling, desire, attitude, instinct, or drive you have affects your nervous system by means of these specific messenger units.³²

These examples and the other I have examined pretty much say the same thing we hear from Chopra, *Bleep*, and *Secret*. They all rely on the claim that quantum mechanics has eliminated the reductionist, deterministic, and atomic doctrines based on Newtonian mechanics. Furthermore, they assert quantum mechanics announced a connection between quantum, body, and mind that was previously unrecognized in the West but was already deeply embedded in traditional Chinese and Ayurvedic (Hindu), healing practices. These have been adopted by the New Age movement for some thirty years now and are hardly newly discovered “secrets” to those who have followed the movement over this period.

Notes

¹ Deepak Chopra. *Ageless Body, Timeless Mind: The Quantum Alternative to Growing Old* (New York: Random House: 1993).

² William Arntz, Betsy Chasse, and Mark Vicente. *What the Bleep Do We Know?* (Lord of the Wind Films, LLC, 2004). www.whatthebleep.com (accessed May 12, 2008).

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- ³ Amit Goswami. *The Self-Aware Universe* (New York: Penguin Putnam Inc, 1993).
- ⁴ Drew Heriot, *The Secret (Extended Edition)* (TS Production, LLC, 2006).
- ⁵ Fred Alan Wolf. *Taking the Quantum Leap* (New York: HarperCollins, 1981).
- ⁶ Fred Alan Wolf. *The Yoga of Time Travel: How the Mind Can Defeat Time* (Wheaton, IL: Quest Books, 2004): p. 197.
- ⁷ As quoted in Alexandra Bruce, *Beyond the Bleep: the definitive unauthorized guide to What the Bleep Do We Know?* (New York: The Disinformation Company, 2005): p. 153.
- ⁸ William Arntz, Betsy Chasse, and Mark Vicente. *What the Bleep? Extended Director's Cut*. (Lord of the Wind Films, LLC, 2004).
- ⁹ Gregory Mone, "Cult Science. Dressing up mysticism as quantum physics," *Popular Science*, October 2004. <http://www.popsci.com/scitech/article/2004-10/cult-science> (accessed May 12, 2008).
- ¹⁰ *Beyond the Bleep*, p. 101.
- ¹¹ As quoted in *Beyond the Bleep*, pp. 101-02.
- ¹² *The Self-Aware Universe*, p. 9.
- ¹³ Jeffrey Satinover. *The Quantum Brain: The search for Freedom and the Next Generation of Man* (New York: Wiley & Sons, 2001).
- ¹⁴ *Ibid*, p. 80.
- ¹⁵ Roger Penrose. *The Emperor's New Mind: Concerning Computers, Minds, and the Laws of Physics* (Oxford: Oxford University Press, 1989).
- ¹⁶ Roger Penrose. *Shadows of the Mind: A Search for the Missing Science of Consciousness* (Oxford: Oxford University Press, 1994).

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- ¹⁷ Roger Penrose and Stuart R. Hameroff, “Orchestrated Objective Reduction of Quantum Coherence in Brain Microtubules: The ‘ORCH OR’ Model for Consciousness.” *Toward a Science of Consciousness—The First Tucson Discussions and Debates*, eds. S. R. Hameroff, A.W. Kaszniak, and A.C. Scott (Cambridge: MIT Press, 1996), pp. 507-40.
- ¹⁸ J. Z. Knight, “The Akashic Record and the Quantum Field,” Fireside Series, Vol 3, No. 3, *Parallel Lifetimes: Fluctuations in the Quantum Field* (JZK Publishing, 2003-2005), http://ramtha.com/html/community/teachings/Akasha_and_Bohm.pdf (accessed May 12, 2008).
- ¹⁹ Rhonda Byrne. *The Secret* (New York: Attria Books, 2006): p. ix.
- ²⁰ Bob Proctor. *You Were Born Rich* (LifeSuccess Products, 1997), <http://www.synergylifesuccess.com/> (accessed July 12, 2008).
- ²¹ Byrne, *The Secret*, p. 4.
- ²² Ibid. p. 9.
- ²³ Ibid. p. 12.
- ²⁴ Ibid. p. 21.
- ²⁵ Ibid. p. 160.
- ²⁶ Deepak Chopra. *Quantum Healing: Exploring the Frontiers of Mind/Body Medicine* (New York: Bantam: 1989).
- ²⁷ Chopra, *Ageless Body, Timeless Mind*.
- ²⁸ Victor J. Stenger. *God: The Failed Hypothesis. How Science Shows That God Does Not Exist* (Amherst, NY: Prometheus Books, 2007).
- ²⁹ Deepka Chopra. *Life After Death: The Burden of Proof* (Harmony Books, 2006).

³⁰ Victor J. Stenger. "Bioenergetic Fields," *The Scientific Review of Alternative Medicine* 3, no. 1 (Spring/Summer 1999); *Has Science Found God? The Latest Results in the Search for Purpose in the Universe* (Amherst, NY: Prometheus Books, 2003): 268-76.

³¹ Quantum-Touch, online at <http://www.quantumtouch.com/> (accessed May 12, 2008).

³² Quantum Depth Healing, <http://elevatedtherapy.org.uk/index-page12.html> (accessed May 12, 2008).