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# FROM PROMS TO CELLS The Psychic World of Stephen King

Carrie • Firestarter • The Dead Zone Hearts in Atlantis • Cell • The Green Mile

They were silent. There was a kind of haunted avidity about them, and that feeling was back in the air, that breathless sense of some enormous, spinning power barely held in check.

—Cell

# It All Started with Carrie

Any discussion of Stephen King novels and psychic powers must begin with *Carrie* (Doubleday, 1974), his first published book. It was with *Carrie* that King established himself as the premier novelist of the supernatural, the dark, and the bizarre. Story aside for the moment, the novel itself displayed King's ability to write from unusual perspectives. He gave us slants of Carrie, the main character, from multiple viewpoints, newspaper clippings, and expert testimony. The dormant supernatural gifts of Carrie, a high schooler entering puberty, are brought to full force when she becomes enraged at the tauntings and cruelty of her classmates. King wrote

about Carrie as if she truly existed, yet we never peer inside Carrie deeply enough to see accounts of her powerful supernatural forces fully from her perspective. Rather, we see Carrie as if she is drawn by everyone who remembers and analyzes her youth.

Carrie became incredibly famous when the movie by the same name was released in 1976, with Sissy Spacek playing the lead role. She was eerie, petite, and not even close to being as grotesque as the Carrie of the novel. In the book, Carrie is overweight, has pimples, and is washed out and terribly plain. Her mother is a raving psychoreligious, psychosexual lunatic who keeps her poor daughter locked in a closet, forced to pray and read the Bible. Carrie is not allowed to wear pretty dresses, go to parties, or even talk to girls who dare to lounge on their lawns in bathing suits and laugh. Carrie is imprisoned throughout her childhood and her early teenage years by the insane woman who is her mother. By the end of the novel, we realize that Carrie's mother possibly knew of her daughter's latent supernatural powers and, hence, wanted to protect the world from her and from any potential offspring. After all, Carrie's grandmother also had the power to move objects telekinetically and to make "things happen." Why inflict another Carrie-type child upon the world? Carrie alone is capable of destroying an entire town and nearly all of its inhabitants.

Carrie grows up surrounded by votive church candles and a shrine to the martyr St. Sebastian. Rather than listening to rock-and-roll music, Carrie hears her mother wailing and shrieking about religion and sin and how horrible it is to be inherently, innately female. To be born female is an unforgivable sin. Any form of sexual expression, even simply having the body parts, is enough to condemn a young girl to hell forever.

Many people are bullied as teenagers or, at minimum, feel like outsiders. They are too fat or too ugly or too dumb. Or maybe they just aren't popular enough to feel comfortable inside their own skin. With the power to destroy their tormentors, would they do it?

Carrie holds off for as long as possible. She endures more than most of us are forced to endure as teenagers. She lives our worst nightmares, and then some. It is to her credit that she doesn't use her supernatural powers until she reaches her breaking point. But when Carrie breaks, so does the world. And here, we see Stephen King at his best: when someone with the power to destroy the world breaks.

So how does Carrie reach a breaking point and unleash her powers? And just what are her powers, and how possible, in reality, are they?

Teenage Sue Snell feels guilty about making fun of and torturing Carrie along with all of the other kids at school. She is essentially kind and good-hearted, and she wants to make things better for poor Carrie. So Sue asks her boyfriend, Tommy Ross, to take Carrie to the senior prom. Carrie is tentative at first, thinking it all a big joke when Tommy asks her to accompany him, but she can't resist an offer to fit in and be part of the crowd, to finally be treated as if she matters just a little. So Carrie, thrilled at her great fortune, accepts Tommy's invitation. Of course, she must battle her mother just to wear a dress or go to the dance, but she persists, thinking it may be her one chance to lead a normal life, if only for one night.

Things do not go well, to put it mildly.

Chris Hargenson, one of the most popular and beautiful girls in the school, and one of Carrie's main tormentors, arranges for a bucket of pig's blood to drop on Carrie the very moment Carrie is falsely crowned prom queen. As Carrie stands on the stage, smiling and happy with the crown perched on her head, the bucket looms above her, ready to drop in a moment. And so it does drop, drenching Carrie in blood.

Carrie snaps. She telekinetically locks all the doors leading from the school. She uses her mind to turn on killer sprinkler systems, as well as to launch killer fires. She destroys everything and anything, yet never moves an inch from the stage. Her mind does all the work for her.

With nearly everyone dead and the high school in flames, Carrie finally walks home and washes the pig's blood from her face, neck, arms, and body. Her mother greets her with, "Thou shalt not suffer a witch to live," and then lunges with a knife in hopes of killing her evil, sinful daughter. Carrie crucifies her mother with kitchen utensils, then destroys the house.

Carrie's supernatural powers are no longer dormant. She has learned to use and control her powers to get what she wants and, most important, to get people to leave her alone. In this way, *Carrie* is similar to the 1973 film *The Exorcist*, in which a young girl's body is possessed by a force she cannot understand or control. Carrie is also possessed by powers she cannot understand or control. In both *The Exorcist* and *Carrie*, the young girl is both a victim and a monster.

The film *Carrie* was a huge hit when it was released in 1976. The sale of the paperback rights for the book enabled Stephen King to give up his previous jobs and concentrate completely on writing. It was one of those rare instances where one book hitting it big changed the author's entire life. Its success spawned a horde of imitators, movies with similar plots but without the same emotional punch that King's book provided. Still, *Carrie* relied heavily on that which had come before. It was not the first book, fiction or nonfiction, that dealt with psi-talents, nor would it be the last. In the next few sections, we'll take a brief but in-depth look at some of *Carrie*'s ancestors and see how they might have provided inspiration for King's masterwork.

## Carrie's Ancestors in Fact

Parapsychology is the study of the evidence of mental awareness or influence of external objects without interaction from known physical means. Most objects of study fall within the realm of "mind-to-mind" influence (such as extrasensory perception and telepathy), "mind-to-environment" influence (such as psychokinesis), and "environment-to-mind" activities (such as hauntings). Collectively, these three categories of abilities are often referred to as psionics.

Needless to say, the scientific validity of parapsychology research is a matter of frequent dispute and criticism. Among scientists, such fields are known as pseudoscience, which, by definition, has been refuted by numerous rigorous scientific studies. Anecdotal reports of psychic phenomena have appeared in every culture since the dawn of history up to the present day. Historically, the existence of such phenomena was commonly accepted even among the highly intelligent. Many early scientists expressed interest in such phenomena.

With the advent of the scientific revolution in the beginning of the nineteenth century, and led by the British Royal Society, a distinction came to be made between "natural philosophers" (later to be termed *scientists* in 1834) and other philosophers. Many of the natural philosophers, including Newton, believed in various types of Renaissance magic, such as alchemy.

Following the scientific revolution was a period known as the Enlightenment. This movement advocated rationality as a means to establish an authoritative system of ethics, aesthetics, and knowledge. During this period, it was proposed for the first time that life should be ruled by reason as opposed to dogma or tradition. The basic view of the world was that the universe worked as a mechanistic, deterministic system that could be studied until everything about it was known through calculation, reason, and observation. Because of this belief, the existence or the activity of deities or supernatural agents was ignored. The Enlightenment was the beginning of the verbal war between people who believed in psychic phenomena and those who thought it was all nonsense.

#### Mesmerism

Franz Anton Mesmer (1734–1815), a Viennese physician, considered himself a man of the Enlightenment. At the time, electricity and magnetism were thought of as invisible "fluids." Mesmer believed that he had discovered a third type of natural fluid, which he called animal magnetism. Mesmer believed that animal magnetism, if used properly, could heal various ailments without healers resorting to the supernatural. He developed a technique that he termed *mesmerism*. This technique, which produced an altered state of mind, we now call hypnotism. One important discovery that Mesmer made was that during mesmerism, a few people exhibited what he called "higher phenomena," such as apparent clairvoyance.

The most famous person who exhibited this talent was the psychic Edgar Cayce, who entered trances in which he could communicate "in his mind" with an individual anywhere in the world.

Mesmerism never caught on with scientists. In 1784, two studies were authorized by the French Royal Society of Medicine and the French Academy of Sciences. Both groups investigated mesmerism and issued negative reports. One scientist who was associated with mesmerism, Baron Carl Reichenbach (he became famous for his discovery of paraffin fuels), developed a vitalist theory of the Odic force (a vital spark or "soul" radiating from all life) to explain parapsychological phenomena.

#### Mediums

By the 1850s, mesmerism had run its course. Due in part to changing attitudes in religion, however, the feats of people in mesmeric trances continued to generate a lot of attention. Mesmerism became the foundation for mediums of the newly started spiritualist movement, whose followers claimed to contact the spirits of the dead. By the end of the era, mediums were flourishing throughout all the major cities of Europe.

Unfortunately, most accounts of mediums and psychics left much to be desired. Take, for example, the case of Daniel Dunglas Home, one of the most famous physical mediums of the nineteenth century.

According to popular accounts of Home's life, he was born in Edinburgh, Scotland, in 1833. In 1842, he moved with his family to the United States. As a teenager living with an aunt, he discovered that he possessed the gift to move furniture in the house with just his mind. After being reassured by ministers that his mental powers were a gift to be shared, Home began holding séances. According to people who attended these events, knocking noises were heard, furniture levitated, and an accordion locked in a cabinet played by itself.

In 1852, Home became famous for levitating himself at his séances. In 1855, he returned to England and later toured Europe and Russia. Reports at the time say that he was able to levitate tables

so high in the air that he was able to walk under them. Home was accused by many skeptics of being a fraud, but according to newspaper stories of the time, no one ever proved that his psychic gifts weren't real. The same stories reported that while many scientists claimed that Home was merely an excellent stage illusionist, no one could demonstrate how he performed his psychic feats. He died from tuberculosis in 1886.

Home's incredible feats, if true, would classify him as a real-life Carrie. But, as pointed out by the psychic debunker James Randi, Home's claims were merely embellished lies told to a naive public and newspapers looking for sensational headlines. As a teenager, Home was thrown out of school for "demonstrating poltergeist activity" to his fellow students. His séances were performed only to believing audiences, and, despite reports to the contrary, he was exposed as faking illusions numerous times. Most likely, the mysterious accordion music was in reality the sound of a harmonica hidden in Home's mouth.<sup>1</sup>

Fraudulent psychics like Home flourished in Europe and the United States during the nineteenth century. Faced with a world swiftly being explained by science, many religious people clung to any supernatural aspect of life that seemed possible—until science invaded the psychic world.

## Using Science to Validate Psychic Phenomena

The basic concept for a learned, scientific society to study psychic phenomena began with the spiritualist E. Dawson Rogers, who hoped to gain a new kind of respectability for spiritualism. The Society for Psychical Research (SPR) was founded in London in 1882. By 1887, eight members of the British Royal Society served on its council. Many spiritualists left the SPR soon after its founding, however, due to differing priorities and skeptical attitudes within the SPR toward mediums. Nevertheless, the SPR continued to research psychic events, publishing its findings in its yearly proceedings. Similar societies were soon started in most other countries in Europe, as well as the American SPR in the United States. The British SPR remained the most respected and skeptical of all these societies.

Most early SPR research involved testing famous mediums and others who claimed to control psychic "gifts." The society also performed some experiments involving cards and dice. Still, the field of psychic research did not gain a measure of respectability until R. A. Fisher and other scientists developed statistical methods for studying psychic events. It was around that time that the name *parapsychology* replaced *psychic research*.

Perhaps the best-known parapsychology experiments were conducted by J. B. Rhine and his associates at Duke University, beginning in 1927. Rhine used the distinctive ESP cards of Karl Zener. The Rhine tests involved much more systematic experiments than those conducted by the SPR. Also, Rhine used average, ordinary people instead of mediums or people who claimed to have gifted abilities, and he used statistical methods to analyze his results.

Rhine published the story of his experiments and their results in his book *Extra Sensory Perception* (1934), which popularized the term ESP. Equally influential was Rhine's second book on the Duke experiments, *New Frontiers of the Mind* (1937). Rhine helped to form the first long-term university laboratory devoted to parapsychology in the Duke University Laboratory. It later became the independent Rhine Research Center. He also helped to found the *Journal of Parapsychology* in 1937, which remains one of the most respected journals in the field today.

Inspired at least in part by Rhine's experiments, the U.S. government has conducted a number of investigations into parapsychology. Perhaps the most famous of these is Project Stargate, conducted by the CIA and the Defense Department in the late 1970s and early 1980s. These experiments involved the ESP talent known as "remote viewing," where the test subject can telepathically see a scene from hundreds of miles away. As of yet, none of these government projects has yielded any significant results—at least, none that have ever been made public. We introduce the idea of using humans with psi powers as secret government agents later in this chapter when discussing Stephen King's novel Firestarter.

#### Carrie's Ancestors in Fiction

The belief that some people are gifted with more than five senses is thousands of years old. Long before there were books, there were tales and legends of people with "second sight," or the ability to tell the future. Perhaps the first such story was that of Cassandra, from the *Iliad* and the *Odyssey*. Cassandra is cursed by Apollo to prophesy the truth but never be believed. Thus, she warns her father, Priam, the king of Troy, that the city will be conquered by Greeks, but he doesn't listen to her. Shakespeare used prophecies in his plays: Caesar is warned to "beware the Ides of March," while Macbeth is hailed by the third witch with, "Thou shalt be king hereafter."

#### Lost Races and Superhumans

The inspiration for *Carrie* and the entire genre of psychic-powersrun-amok novels that followed it came from the thriller and horror novels of the late nineteenth century. Inspired at least in part by the famous mediums and the formation of the Society for Psychical Research in 1882, these novels often featured women in peril who found their salvation through psychic means. Also extremely popular were lost-race novels describing hidden tribes that possessed mental powers far beyond those of ordinary men. Some of the most famous lost-race novels of the period portrayed characters with ESP powers. These books include She by H. Rider Haggard (1887), Thyra—of the Polar Pit by Robert Ames Bennett (1900), and Eric of the Strong Heart by Victor Rousseau (1914). Sax Rohmer's tales of evil Asian villains often depicted good and evil characters with psychic powers, beginning with the most famous of all "yellow peril" novels, The Insidious Dr. Fu Manchu (1914). Olaf Stapledon's The Last and First Men (1930) describes the future of mankind for the next several billion years and includes numerous mutations of humanity into beings with tremendous psychic powers.

Stapledon further explored the theme of superhumans in his 1936 novel *Odd John*. The book deals with a mutant who has extraordinary mental powers, including telepathy, from his earliest youth to his death at age twenty-three. While hailed by many

critics as a classic, *Odd John* portrays its lead character as an amoral and selfish superman. In one episode, John kills a policeman who catches him stealing; he reasons that normal humans are so far beneath him that killing them is no more a crime than is executing a dumb animal. Published during the Nazi rise to power in the 1930s, *Odd John* served as a grim statement of the danger of power without morality.

#### Science Fiction and ESP

It was in the science-fiction magazines of the 1930s and 1940s that ESP powers got their biggest boost. In numerous interviews, Stephen King has acknowledged his debt to the science-fiction and fantasy publications of that period.<sup>2</sup> Early stories such as Edmond Hamilton's "The Man Who Saw the Future" (1930) and "The Mind-Master" (1930) are cautionary tales that warn of the perils of psychic powers. By the late 1930s, though, readers had grown tired of stories that dealt with the dangers of scientific research. In September 1937, E. E. Smith's serial novel Galactic Patrol introduced the character Kimball Kinneson of the Lensmen, a legion of telepathic guardsmen who fight for the peace of the galaxy. Kinneson is only one of a number of heroes using ESP powers against evil space overlords known as Boskone, who are out to rule the universe. Kinneson starred in four novels over the next ten years—Galactic Patrol, Gray Lensman, Second Stage Lensman, and Children of the Lens. He is aided by telepathic members of dozens of alien races in his efforts to defeat the Boskone in a cosmic battle much bigger than he ever imagined.

In 1940, science-fiction fans hailed *Slan* by A. E. van Vogt, serialized in *Astounding Stories* from September to December, as the best story of the year and one of the best of the previous decade. Van Vogt wrote *Slan* partly because the editor of *Astounding Stories*, John W. Campbell, said that it would be impossible for a normal person to write a novel about a superhuman being. After buying *Slan* for the magazine, Campbell admitted that van Vogt had proved him wrong.

Slan tells the story of mutants, called slans, living on Earth in the future, who have the power to read minds. Normal people, fearing that the slans are the next step in evolution, hate the mutants and try to kill them all. Slan describes how one young mutant supergenius, Jommy Cross, discovers a way to end the human-mutant war. One of the most popular science-fiction novels of the 1940s, Slan helped to popularize stories of mutants with superhuman mental powers.

Equally entertaining, though much darker than *Slan*, is Norvell Page's short novel *But without Horns* (*Unknown*, June 1940). Page took Campbell's claim that no one could write a believable novel about a superman and turned it upside down. The story of a man with such strong telepathic powers he can project illusions and take control of men's minds, *But without Horns* is a superman novel in which the superman never appears. The villain of the novel remains offstage during the entire novel. It is the ultimate paranoia novel, and Campbell was once again forced to admit he was wrong about superman novels.

Written in a much more subtle and subdued style was the In Hiding series, authored by the schoolteacher Wilmar Shiras and published in *Astounding SF* from 1948 through 1951. The stories, dealing with children who have superhuman intelligence and ESP powers and their attempts to remain in hiding among ordinary students, were collected in book form as *Children of the Atom* (1954). *Children of the Atom* was one of the most influential science-fiction novels ever published, as it was read by thousands of baby boomers who felt a strong kinship with the heroes and the heroines of the novel. It was the book that helped to make science fiction the literature of the 1980s onward.

The 1950s, with its worries about the atomic bomb, fallout, and mutant children, saw a rise in the number of stories dealing with ESP powers. Among the best were the novels *The Power* (1956) by Frank Robinson, *Highways in Hiding* (1955) by George O. Smith, and *Jack of Eagles* by James Blish (1952). One of the most interesting novels of the period was *The Demolished Man* (Shasta, 1953) by

Alfred Bester, in which all the people of the future possess the power of telepathy and one man schemes to commit murder. Bester came back a few years later to top his first book with *The Stars My Destination*, where future society is centered around the ability to teleport. Many science-fiction critics considered the second Bester novel the top science-fiction novel ever written.

Another fascinating novel based on ESP powers was Philip K. Dick's *The World Jones Made* (1956). In the story, Jones possesses the ability to see into the future one entire year. He is thus able to engineer his takeover of the world. But there is no joy in Jones's life because soon after he accomplishes his mission, he foresees his own death taking place a year later. No matter what he does, he always knows that he will die.

One of the funniest series of science-fiction novels ever written were the three Mark Phillips novels dealing with ESP powers, published in *Astounding SF* from 1959 to 1961. Phillips was the pen name for Randall Garrett and Laurence M. Janifer. The trio of novels depict an FBI agent named Malone who is assigned to capture crooks who use psi powers to commit crimes. In *That Sweet Little Old Lady*, Malone discovers that a foreign spy is reading the minds of important government officials, so he sets out to find a telepath of his own to discover the mind reader. Unfortunately, the only telepath he can locate is a loony old lady who thinks she is Queen Elizabeth I.

In the second novel of the series, *Out Like a Light*, Agent Malone is sent out to find an auto-theft ring that steals cars by teleporting them away. How to stop a criminal who can transport his body somewhere else just as you are about to put handcuffs on his wrists is another challenge for Malone's cunning. A third novel, *Occasion for Disaster*, has Malone trying to prevent a global disaster brought about by rogue ESP users.

Another writer who specialized in stories dealing with ESP powers was Theodore Sturgeon. His classic novel *More Than Human* (1953) describes how three lonely, isolated people meld their minds to form a single powerful telepathic entity.

John Wyndham's classic science-fiction horror novel *The Midwich Cuckoos* is a masterful tale of a weird alien invasion, which was made into an effective film called *Village of the Damned* (first in 1960, then in 1995). In the story, women at one particular village are struck down by a mysterious signal from outer space. When they recover, they discover that they are all pregnant. When the children are born, it turns out that they possess telepathic powers and seem to have been born to fulfill a certain mission on Earth. The weirdness of telepathic children thinking the same thoughts and controlling other people in the village is handled effectively in the film. The climactic scene, in which the hero has smuggled a bomb into the village to kill the children and the children attempt to break down his mental barriers before the bomb explodes, makes for gripping suspense.

#### Carrie Battles the Bullies

With *Carrie*, Stephen King took a conventional story of teen alienation and despair and turned it into a shocking horror epic. There were many reasons *Carrie* was a success as a movie, but near the top of any list of explanations has to be "Payback is a bitch." In no uncertain terms, *Carrie* proved this, as did all the other novels and movies that followed in the same footsteps.

# **Defining Carrie's Powers**

The word *psychokinesis* is the more modern term for what is generally known as *telekinesis*. The two words have similar meanings, with *psychokinesis* being defined as "mind movement" and *telekinesis* defined as "distant movement." Whether we call the ability psychokinesis or telekinesis, we're basically talking about what Carrie does: move objects using her mind. She has what is known as a "psi" ability to alter matter simply by thinking that she wants to alter it.

Psi has to do with parapsychology, or the study of mental abilities that enable people to influence objects and people without their physically doing or saying anything. The psi form of mind-to-mind influence includes mental telepathy, which we'll talk about later in

this chapter, and ESP. The psi form of mind-to-matter influence includes psychokinesis or telekinesis.

This book focuses on the supernatural science of Stephen King. We can't think of psi, also known as psionics, as an actual science. There's no proof that psychokinesis or ESP exists, for example. Most of what Stephen King writes about is pseudoscience, which refers to knowledge and practices that are incorrectly deemed science. It's not to say that a pseudoscience may not someday become a science. Rather, nothing has been proven conclusively yet, and, hence, a pseudoscience cannot be taken seriously as a field of science.

Of course, parapsychologists, who study phenomena such as Carrie's supernatural abilities, believe that there is evidence of psionic power. Jessica Utts, a statistics professor at the University of California-Davis, works extensively in parapsychology. She claims that psychic power has indeed been proven by statistical studies. She also claims that there are no methodological flaws in the studies. Dr. Utts teaches courses such as "Integrated Studies: Testing Psychic Claims." On her collegiate Web site (http://anson.ucdavis.edu/~utts/), she lists links to parapsychology research papers and labs. One such link (www.parapsych.org/faq\_file1.html)—to an FAQ about parapsychology—defines the "basic parapsychological phenomena," among them:

- ESP—obtaining information about events beyond the reach of the normal senses; includes mental telepathy, clairvoyance, and precognition
- Mental telepathy—communication between two minds
- Clairvoyance—obtaining information about events in remote locations, well beyond the reach of the normal senses
- Precognition—knowing the future, having premonitions; includes having dreams about things that haven't happened yet

There are many other types of basic parapsychological phenomena, such as reincarnation, hauntings, and near-death experiences.

The parapsychology FAQ points out that scientists traditionally think in materialistic ways, considering human consciousness to be the intertwined physical functioning of the nervous system, the brain, and the body. They believe that mental functioning cannot possibly include foretelling the future, moving objects, and so forth—it is physically impossible. Yet psychic phenomena have been reported in every culture throughout all of known history. Hence, concludes the FAQ, there is something more to human consciousness than the physical connections among the nervous system, the body, and the brain. In short, we have souls. And, possibly, these souls are responsible for the sort of power possessed by Carrie.

While the FAQ does not delve into the notions of collective consciousness among all human beings and why our souls can give someone like Carrie extraordinary powers, other great thinkers throughout history have explored these ideas. If somehow we are all linked in a cosmic way through our consciousness or souls, then possibly we can manipulate objects, transfer thoughts, and make things happen at far distances. Clearly, these ideas remain unproven, but let's look at the broad strokes behind them to see whether they might have merit.

# Consciousness and the Soul: Philosophers Weigh In

It was René Descartes who first wrote the famous line "I think, therefore I am." His immortal statement had to do with the fact that people consider themselves to be separate entities from one another, distinct individuals. We think of ourselves as being individual selves with individual souls. Somewhere in the mix are our minds. Is the soul part of the mind? Is the ability to be a conscious entity, or a self, also part of the mind? Philosophers, scientists, and others have long pondered what these terms mean: *self*, *soul*, and *mind*.

Plato claimed that the gods put our souls into our bodies. These souls were "of another nature," and inside the digestive system was "the part of the soul which desires meats and drinks and the other things of which it has need by reason of the bodily nature." 4

According to Aristotle, all objects consist of matter, and as the matter changes, the objects change as well. If, for example, a garment is made of cloth, and you rip the cloth into shreds, then the garment no longer looks the same. If you bake a cake and put icing on the top, then scrape off the icing, the cake will have a different form.

Aristotle took this notion one step further. He considered the soul to be an object, or a form made up of the matter from which a person is created. If a person's matter changes, so does his or her soul. If a person gets sick, the soul may suffer. As a person grows older, so does the soul.

To Aristotle, the soul is the person's caretaker. It handles everything that we require to remain alive. Animals, as well as humans, have souls, and each type of animal has a different type of soul that is suited to its particular animal nature. A different set of conditions from those of a human is required to keep a tiger alive, for example. Aristotle felt that only the human soul has reason and will. Animal souls are not rational, he claimed, and do not have foresight and consciousness. This idea has been debated for centuries. We would argue, for example, that a dog that loves its master and protects him has a soul and consciousness. Is consciousness the same as the self and the mind?

To look for the souls and analyze them, Aristotle dissected many animals, though he didn't go so far as to dissect humans. He guessed that souls live inside our hearts. These souls affect our entire bodies. Yet when he dissected animals, he could not find the souls inside their hearts.

During Aristotle's time, people basically knew nothing about the nervous system. Aristotle believed that our eyes and ears are connected to blood vessels that, in turn, are connected to the heart, where the soul lives. He did not guess that the eyes and the ears are connected to the brain, which is part of the nervous system. Because blood vessels are, of course, connected to the heart, he figured that the heart controls our senses, as well as all movement.

The nervous system was discovered in 322 B.C. by the Greek

anatomists Herophilus and Erasistratus, who dissected human corpses. They discovered that in addition to the system controlled by the heart, people have another system inside their bodies, one that controls what happens in the spine and the skull.

Picking up the theories about the soul from where Aristotle left off, Herophilus and Erasistratus merged their new information about the nervous system into the medical knowledge of the time and came up with their own hypotheses about the human soul. It was their guess that the soul entered the body every time a person took a breath. Somehow, the soul existed outside the person, in a cosmic "everywhere" form, and a person could literally breathe his or her own soul into the body—repeatedly.

If indeed people believe this idea, then it makes sense that they might also conclude that all of our souls are outside our bodies in this cosmic everywhere form, and that we can transfer thoughts and ideas, and we can move things at great distances, simply by willing it to be so. Let's assume that my mind is connected to my soul and that my soul is floating around next to everyone else's soul and that all of these souls are interconnected somehow. Given all these conditions, I should be able to have my soul or consciousness connect with all the others and impart information to, say, your soul or consciousness. This would be called mental telepathy. We see evidence of mental telepathy in King's *The Dead Zone*, which we talk about later in this chapter, and in his recent book *Cell*, in which people are able to communicate telepathically after being infected by their cell phones.

According to Herophilus and Erasistratus, after the soul enters a person's body it flows into the heart. From the heart, the soul flows throughout the body using the arteries and the veins. Along the way, of course, the soul flows into the brain.

Oddly, Herophilus and Erasistratus guessed (rather incorrectly) that the mind is inside the heart. They didn't guess that the mind is inside the brain. So they incorrectly assumed that the mind flows from the heart to the muscles and the brain, and the brain itself has no control over the body.

#### Galen's Theories of Consciousness

Medical research always progresses, and four hundred years later, in A.D. 150, a doctor named Galen decided to continue the research started by Herophilus and Erasistratus. Galen went to Alexandria, where he served as the medical doctor to gladiators and emperors. While healing these elite patients, Galen also dissected animals every day, and over time he combined all the soul, mind, and consciousness ideas postulated by Aristotle, Plato, Herophilus, Erasistratus, and Hippocrates into new theories.<sup>5</sup>

Galen deduced that each organ in the body has a special role and purifies substances for use by other organs. For example, he said, the stomach attracts all of the food we eat, and it turns the food into chyle. This chyle flows into the intestines and the liver. Galen thought that the liver then transforms the chyle into blood, which flows into the heart.

Inside the liver, after the chyle is changed into blood, the lungs suck all the impurities out of the new blood. From the liver, the purified blood flows into the veins en route to the heart. Inside the heart, the blood mixes with air from the lungs. The air contains vital spirits aka the soul and the collective consciousness. Once again, we see that the ancients supplied medical theories that backed up the notions of mental telepathy and other paranormal capabilities.

Continuing Galen's hypothesis, the blood containing the vital spirits courses throughout the body, including the brain. Before entering the brain, right at the base of the skull, the blood is purified again and turns into what Galen called animal spirits.

These animal spirits are responsible for our thoughts and sensory experiences, and they are also the force that enables us to move our bodies. The vital spirits might suck the cosmic consciousness and raw souls into our bodies, but the resulting animal spirits are the actual individual souls.

Galen taught that the brain is a pump at the top of the body. The mind itself is not part of the brain but, rather, is stuffed into the skull in the empty spaces. The mind, in its cosmic consciousness form, also exists in outer space: in the sun, the moon, and the stars, all of which possess vast intelligence far beyond any intelligence known to man.

Clearly, with such a vast intelligence linking us all together in the way that Galen believed, mental telepathy and other paranormal abilities become more than vague notions. They become possible—if you believe what Galen taught.

# Early Christians and Visionary Mavericks

After Galen's time, Christianity eventually absorbed many of his medical theories. The early Christians were particularly interested in Galen's ideas about the mind, the soul, and the collective cosmic consciousness.<sup>6</sup>

In the Old Testament of the bible, the soul is a living entity in our blood, preferring to dwell most often in our hearts and livers. When people die, their souls die with them.

In the New Testament, the soul is immortal and invisible. It lives nowhere and everywhere at the same time, and it imparts special capabilities and feelings inside the skull. When a person dies, his or her soul goes either to heaven or to hell. Either way, it's still hanging around in the vast cosmic consciousness, and by tapping into it, knowledge could be transferred, clairvoyance and speaking to the dead could take place, and other forms of paranormal experiences could happen.

The church, however, didn't believe everything taught by Galen. It still believed some of the things that Aristotle taught, such as the idea that the soul lives inside the heart. So while the church believed in an immortal, invisible soul that is everywhere and nowhere at the same time, with special focus in the skull, it also believed that the soul resides chiefly inside one's heart. It's not incredibly logical to believe all of these things simultaneously, but many medical discoveries were unknown at that time and people made the best guesses they could, based on what little information they had.

It wasn't until much later, for example, that atoms were discovered. With this new discovery came new theories about the soul and the cosmic consciousness.

#### **Epicurus**

The Greek philosopher Epicurus suggested that the world consists of invisible particles that control nearly everything. These particles

are of the utmost importance. Epicurus suggested further that the gods of his world probably didn't care about human souls at all. Their only concern was with the particles.

As for the soul, Epicurus postulated that it consists of atoms inside the chest. These atoms are constantly seeping from our bodies. As we breathe, we suck the atoms of our souls back inside ourselves, hence restoring our mental and physical balance. So you see, Epicurus was another believer in cosmic consciousness, the very thing that could give Carrie her powers.

According to Epicurus, the soul is exactly that: a cosmic property. Remember that the soul atoms continually seep from the body. When people can no longer breathe enough soul back into their bodies to replenish the soul atoms that they've lost, they die.

Of course, religious people back then did not agree—at all—that when a man dies, his soul dies with him. After all, the church taught that the soul is immortal and either goes to heaven or hell. Famous for his depictions of hell, Dante went so far as to put Epicurus into hell.

#### Thomas Aquinas

In the thirteenth century, Thomas Aquinas delved into all of the ideas about souls and cosmic consciousness that came before him. Being a theologian and a very smart man, he dismissed Epicurus's claim that we're all part of a cosmic soul made up of the atoms that seep from our bodies. He dismissed the idea that when we die, our souls die with us.

Instead, Thomas Aquinas supported the theory that all good souls go to heaven, and he added that the stars are a twinkling of this beautiful heavenly place. Aquinas agreed with Aristotle that the soul lives in the heart. He agreed that the soul is the form of the matter that constitutes our bodies. It is the form of all life.

Other than simply reverting to what Aristotle taught long ago, Aquinas pushed things a little further. He suggested, for example, that the soul's facilities are in the skull. And while he believed that animals have souls, he also believed that only human souls survive death and live forever in either an immortal bliss or hell.

Aquinas set the stage for natural philosophy in universities. His ideas weren't medical; rather, they were rooted in philosophy and religion.

In the meantime, medical doctors continued to teach Galen's anatomy, dissecting humans and animals to learn more about the body, the brain, the mind, and the soul. Doctors taught medical students that the soul resides in the heart, the liver, and the skull. They also taught that invisible spirits, in the form of the immortal soul, are constantly traversing the entire human body along visible pathways—arteries, the nervous system, and the digestive system.

#### Andreas Vesalius

At the University of Padua in 1537, the head of surgery and anatomy was a man named Andreas Vesalius. He regularly had students dissect human cadavers, and he started making detailed charts of the human body. He began to think that Galen's medical theories were based on animal dissections rather than on human dissections. He analyzed all that had come before and rethought—yet once again—the ideas about the brain, the soul, animal spirits, vital spirits, and cosmic consciousness.

Vesalius created the first detailed atlas of human anatomy; it was called *De humani corporis fabrica libri septem*, or *Seven Books on the Structure of the Human Body*. It was an amazing tome and was the first of its kind, even including drawings of dissected human brains.

Vesalius delicately suggested that perhaps the brain is where the mind lives, and perhaps the soul is part of the mind. This was a radical theory for the time.

Afraid of causing an uproar, Vesalius was careful not to push his ideas on anyone. Privately, though, he concluded that the soul doesn't emanate from the heart, trickle into the skull, and derive its facilities from the brain.

# Demons, Witches, and Astrology

Only a few hundred years ago, in 1600, most people still believed that the soul was immortal, invisible, and nowhere and everywhere at the same time. (In fact, many people still believe these ideas today; they remain common notions of many religions.)

But in 1600, most people also thought that the heart controls the brain, the soul, the mind, and the entire body. They still believed that each of us is linked to the four elements of earth, water, fire, and air. And they believed in the cosmic consciousness, a vast collective entity made up of souls, stars, the moon, and the sun. They also figured that demons could make men go mad.

Keep in mind that these ideas were widespread only a few hundred years ago. It is easy to see how people who believe in cosmic consciousness and breathing in souls that live forever might also believe in demons, as well as witches, ghosts, and ghouls—and psychokinesis and mental telepathy. It's all connected in the cosmic consciousness, the vast intelligence far beyond anything we can imagine. Even today, people still believe these ideas because they want to feel connected to one another and to the universe. They feel healed and nurtured by thinking they are part of the vast machinery called the universe. Regardless of what science tells us, people will always want to feel connected to one another, to a higher being, to the entire universe. We want to find aliens on other planets. We do not want to be alone.

In the 1600s, doctors cured the sick by using astrology to figure out when they should flush the bad spirits from their patients. Doctors also relied heavily on laxatives, vomiting, and bleeding, all in an effort to flush the demons from the sick patients. It was a common practice for medical doctors to try and restore the natural balance of the four elements in the body, and to do so, they used horoscopes, charms, amulets, religious sermons, and prayers.

# Gaia and Natural Magic

Things got even stranger. People started thinking more and more about religion, philosophy, and the soul. In fact, fairly recently they came up with a new philosophy, in which the entire world is a living thing called Gaia. According to the Gaia theory, first proposed by the research scientist James Lovelock in the 1960s, the human

soul is simply part of a vast cosmic soul. The cosmic soul runs everything: it makes some people happy, and ruins other people's lives, it makes children sick, it cures the elderly, it raises the dead, it gives people ideas, and it influences both major and minor events. This new philosophy was called natural magic.

As you might guess, the official church really didn't like natural magic, which it felt was tainted with pagan religion and witchery. The church maintained that the soul is immortal, invisible, and unique in each person. The church also maintained that God is an omniscient presence with infinite knowledge. There are people who believe that we do not determine our own fates, that all is determined for us prior to our births by this infinite and vast presence. There are others, of course, who believe that we do indeed control our own destinies, and there are even some who believe in a combination of the two.

# **The Mind-Body Connection**

It's quite possible that our physical brains are the same as our minds and our thoughts. The soul may simply be a part of the physical brain. The neurocircuitry in the brain may combine in highly intricate ways to form our thoughts; another entity, a spiritual mind, a soul, may not enter into the picture at all. As with most everything, there are people who believe that the brain and the mind are one, and there are others who believe the opposite.

Regardless, it is clear that our thoughts are intimately connected to our brains and bodies. If we touch a hot stove, our minds feel pain. If we jump into a freezing lake, our minds feel cold. If our physical senses detect anything through smell, touch, flavor, hearing, and so on, our minds instantly know what we're feeling. Our minds receive steady information from our senses, and we continually modify our thoughts based on these senses.

For example, let's suppose that you're sitting on your back patio, reading this book. The sun is warm, you're half asleep (but not from reading this book), and suddenly, you hear a loud crash from the road in front of your house. It sounds as if a trash can has fallen over. Your senses are jarred. You feel a chill rather than the heat of the sun. You're no longer half asleep. The physical world outside your body has affected your senses (hearing, in this case), thus causing your mind to consider new thoughts.

Obviously, this entire scenario can go in reverse, and your mind can affect your physical environment. Let's say, for example, that you get up from the lounge chair, put down this excellent book, shake your head to clear your senses, and walk around the house to investigate the loud noise. You move quickly out of fear that someone might be hurt and need your help. Your mind has affected your physical body, as well as your environment. Your arms and legs are moving rapidly, your head is turning, your eyes are looking for evidence of the loud noise, and the ground beneath you is being trampled by your feet. The grass is being pressed down, possibly killed; insects are being smashed; birds are flying away. And in the backyard on your patio, dew drops on this fine book and splotches the print.

Is it too far of a stretch to think of our minds affecting physical reality in more dramatic ways, such as the ways demonstrated by Carrie? When does matter act upon our minds, and when do our minds act upon matter?

Let's continue our patio scenario. A loud crash occurs and sends sound waves into your ear drum. Your ear drum starts vibrating, and it sends information into a fluid in your inner ear. This fluid triggers some electrical impulses to zoom down your auditory nerves into your brain. It is at this point that your brain registers that you have heard a loud sound. You are thinking about the loud sound, wondering what caused it, whether people are hurt, whether a truck's about to explode. You're thinking about possible consequences—can you call the fire department quickly enough, can you get the ambulances there on time? Your mind, which was half asleep only a moment earlier, is now grinding at top speed. It starts making decisions, such as forcing you to run around the house to investigate the noise. Emotions start to gurgle in your mind. You're worried that someone is hurt, possibly a good friend and neighbor who is very dear to you. You start to feel sad. Your feet pick up the pace. You must get to the front of the house more quickly, for if your friend is hurt or dies, the guilt will consume you. Your conscience is in play, your soul.

We each would reach this scenario in slightly different ways. Our consciences may differ, our ability to empathize, to react quickly, to consider the possible outcomes of the noise. Our souls might react differently. A lazy and self-indulgent bum, for example, wouldn't care if his friend has been crushed by a fallen helicopter. An insane lunatic would be thrilled to think that a truck has turned over on top of the little old lady across the street; he might toss back a beer while sauntering around front to check out the bloody gore.

To a material scientist, only the hardwiring of the brain, the neurochemistry, determines whether you react as you would, as the lazy and self-indulgent bum would, or as the insane lunatic would. Give the bum psychiatric drugs, and he might conform to what we consider normal. Give the insane lunatic lots of psychiatric drugs, and he might turn into a lazy and self-indulgent bum. Who knows? What the material scientist might maintain is that everything we do boils down to neurotransmissions. There is no mind, no self, no thought process that can't be explained by physics.

## Free Will versus Fate

We prefer to think that we have some control over ourselves. If all we are is a pile of circuits, then what's the point of even trying to become better people? Our fates don't belong to us. Most of us therefore believe that we have free will, which enables us to decide whether and how we respond to a loud crash. Our souls—our minds—require free will to operate.

Certainly, Carrie uses free will to decide whether and how to respond to the cruelty inflicted upon her by her classmates at the prom. She consciously decides to destroy the place and kill everyone. Sure, their fates are in her hands, but if you think long enough about it, had they done things differently long before the prom, their fates would have been quite different and under their control.

If everything in the universe is linked by cosmic consciousness and Carrie is able to set fires and kill people simply by wishing it so, then her free will enables her to unleash this cosmic power when she needs it. If matter can act upon her mind, then her mind can act upon matter.

How does free will function within the framework of physics, which has rigid deterministic laws? If neurotransmissions are responsible for everything we think and do, then how do we influence our own thoughts and actions using free will? At what point do we take over, with the neurocircuitry responding to our every wish and desire? And if free will is not part of the physical circuitry, then just what part is the *we*?

Circuits supposedly operate in fixed ways: if x happens, do y; if y happens, trigger z and stop a from working. Is it possible that our minds plumb the depths of brain cells and nerves to create the neurotransmissions that enable us to create new ideas, to make decisions based on personal morals and private memories? Is the mental truly part of the physical brain, or does the mental operate in conjunction with—but separate from—the physical brain?

If free will is our ability to be individual selves with individual souls, we might assume that free will is an aspect of what is thought of as consciousness. It is generally assumed that animals do not possess this consciousness. Basically, nobody knows whether monkeys are conscious and whether we're torturing them in laboratories, and whether worms, artificially intelligent computers, and dogs are conscious. An artificial intelligence, for example, might possess consciousness and the ability to know right from wrong, to realize that it is an entity, an individual, a self. The fully sentient computer might realize, "I think, therefore I am." The debate about abortion may center on issues of consciousness: just when is a baby considered conscious, an individual self with an individual soul? Possibly, a human baby is conscious six months before birth, or maybe two months before birth, or maybe only minutes before birth. Maybe the human baby is conscious only during and after birth. Nobody knows for sure. And who's to say that our dogs and cats aren't conscious and operating with free will? It's possible that consciousness formed a long time ago in the evolving brain.

# The Dualistic Theory

Remember that in early times and as recently as the 1600s, people believed that the soul is a life force that exists in the lungs, the heart, the liver, or the blood. This life force is literally what gives us breath and lets us move and think. In the New Testament, the soul is very much the same thing as the self and the mind, with the *Catholic Encyclopedia* stating that the soul is "the source of thought activity." In short, the soul is an entity. This entire notion is the dualist theory of the body and the mind (soul) initially developed by Descartes.

The dualist theory tells us that we actually consist of two parts, a soul or mind, and a physical body. The soul/mind lives inside the body, which serves as a host receptacle. Descartes pondered that the soul might reside in the brain's pineal gland, where the ephemeral mind would then interact with the physical body.

The dualist theory leads spiritual people to believe that they can release their souls from their physical bodies, hence releasing their souls from physical constraints or prisons. This is a major reason that shamans and other spiritual seekers study, starve, and pray—to release their souls from the prisons of their bodies. Death is the ultimate release of the soul, whereby the soul returns to cosmic consciousness and ultimate freedom.

If all of the previous is true, then we could conclude that the soul can reside outside the body. Now if the soul can reside outside the body, then who's to say it can't hang out near someone else and give that person's soul a few thoughts, as in mental telepathy?

While the soul can reside outside the brain (but, while we're living, hopefully not outside the body), it is connected to the body through the brain. Some modern philosophers refer to our bodies as machines or engines, and they think of the invisible and weightless soul as the force behind the engines. If the human body is a machine, the soul is "the ghost in the machine."

If the soul is an invisible ghost, we're left to wonder where it is. How does the air around us contain the billions of souls that were once attached to live humans? Where are our souls before we're born? Does the soul exist, or does it come into being the moment a human is born?

# Early Roots of Neuroscience

After Descartes, a doctor named Thomas Willis started working on theories about the brain, the nerves, and the soul, among other things. Willis was one of the founders of neuroscience, and, like Vesalius, he dissected the brain repeatedly to learn more about what was inside the skull. Willis figured that blood enters the brain, where the natural spirits are distilled from it. Remember, earlier doctors also believed that vital spirits turned into animal spirits at the base of the brain, and then these animal spirits flowed into the mind. Willis added to this theory. He said that once inside the brain, the animal spirits traveled through the neurocircuits and escaped from the body as vapor.

Willis was the fellow who discovered that the human brain consists of regions. At the base of the brain is marrow, where the spinal cord connects to the brain. We now call this part of the brain the medulla oblongata. Willis noted a ball shape above the medulla oblongata, and this ball structure is the cerebellum. Above both the medulla oblongata and the cerebellum is the cerebrum, which has two hemispheres. Willis continued exploring the parts of the brain by completing more detailed dissections.

By 1663, Willis and his team completed their research. Willis coined the term *neurologie*, which meant "doctrine of the nerves." He devised additional theories about animal spirits and how they move through brains and nerves, and he and his team created new brain anatomy diagrams.

The new diagrams were included in a book called *The Anatomy of the Brain and Nerves*, and Willis had to ask the church for permission to publish his research. His book was far more than a map of the brain or a series of drawings. It had far-reaching consequences. It affected religion, philosophy, and everything mankind thought about itself. In addition, the book basically started what later would be called the science of neurology.

Despite Willis's tremendous achievements in science, including the founding of neurology (no small feat), he still believed that the soul consists of animal spirits that flow around the brain and the nervous system. He further believed that nonhuman animals have souls as well, and that their souls are based on the sizes and the structures of their different brains. The animal spirits of a tiger make it move and act differently from the animal spirits of a monkey. Willis further adhered to the notion that only human souls have sensitivity, rationality, and consciousness. He did not think that the soul consists of matter. In fact, he felt that while people sleep, their souls must rest and recharge by withdrawing from their brains.

As for when babies get souls—before, during, or after birth—Willis said that God places a soul into the baby's brain before birth. As the church taught, the soul is immortal and exists after a person dies.

Then Willis expanded on the more philosophical ideas surrounding the soul. He decided that there is a rational soul and a sensitive soul. It's possible that he maintained certain church-related beliefs in parallel to his scientific research because he felt compelled to protect himself, his team, and his work from public outcries. Or maybe he really believed what he claimed about the soul; one can only guess.

At any rate, Willis asserted that the invisible, immortal rational soul lives in the part of the brain called the corpus callosum. This is the soul that lives after a person dies.

As for the other soul, the sensitive soul, Willis said that it consists of matter. It is not invisible. It controls details about everything that is unrelated to our senses.

The sensitive soul obtains impressions and images, and it relays this information to the rational soul. It is the rational soul that gives a person free will, reason, wisdom, compassion, and ideas. The rational soul rules the body. The sensitive soul operates the body and makes sure that all the animal spirits are flowing around correctly.

Willis further believed that the two souls bicker for power inside the brain. Every now and then, they bicker so much that the brain gets sick.

Let's say your sensitive soul gets tired of being bossed around by your rational soul. The sensitive soul gets depressed. You get depressed. (Imagine a modern psychotherapist trying to deal with depression under these circumstances.)

The rational soul continues to browbeat your sensitive soul, which becomes increasingly depressed to the point of wanting death. The acute illness of the sensitive soul starts to affect your rational soul, which becomes sick, too. If your rational soul gets sick, it's over, pal: you go insane, with your rational soul producing hallucinations and delusions. Willis penned a second book of neuroscience, this one devoted to what might be thought of as early psychiatry. His second book, which described his theories about the soul, was called *Two Discourses Concerning the Soul of Brutes*.

#### Modern Neuroscience

Neuroscientists today no longer refer to vital spirits and animal spirits. Instead, they call electrical impulses that course through our brains *chemically based neurotransmissions*. These neurotransmissions pass signals among the neurons, or brain cells.

While neuroscientists are still trying to map what happens from neuron to neuron as we see objects and think about what to do when we hear loud explosions, little is known about the human brain. There's a lot more to learn, and we've barely figured out what makes us tick.

Even today, the idea of consciousness or self remains elusive. The Consciousness Research Institute (visit www.deanradin.com/CRL.htm for more information), in California performs research into psychic powers and the role of consciousness in the material world. Studies focus on psychic powers similar to those experienced by Carrie—mind-matter interactions—as well as on clairvoyance, precognition, and distant healing.

A common parapsychologist argument is the following: we don't know that psychokinesis isn't science until we can prove that it isn't science. This is an inverted sort of argument, that just because we can't prove x doesn't mean that this particular x isn't a

scientific truth. Just because we can't prove that 5,239 gods exist doesn't mean it isn't scientifically accurate to state that they do indeed exist. Just because we can't prove that elephants think in English doesn't mean that it isn't scientifically accurate to state that they do think in English. And so forth.

These arguments about psychokinesis are not particularly convincing. Nonetheless, many of us think that there are many things we don't know about the human mind and the world around us, and one of those things might be that the mind is capable of psychic powers. Someday, a Carrie may come along whose thoughts can collapse buildings and start fires.

#### Carrie and Charlie: A Combustible Duo

Similar to Carrie, Firestarter (1980) features a young girl, Charlie McGee, who has pyrokinetic abilities, which means that her thoughts can start fires. (Like Carrie, Firestarter was also made into a movie, with Charlie McGee portrayed by Drew Barrymore, in 1984.) In each case—Carrie and Firestarter—the control of the psychic powers is based on hormonal cycles. For Carrie, the hormones in question are directly related to the onset of her menstrual cycle. For Charlie, the powers are associated with the development of her pituitary gland. For each girl, home life is abnormal: Carrie's mother is a religious maniac, and Charlie's parents are no longer with her. For Charlie, an intrusive government eventually kills her mother, leaving her with only her father to watch out for her. Because Carrie's mother is insane and the adults at her school don't intervene to help save her from abusive and violent bullies, she is eventually forced to use her supernatural powers to save herself in the only way she knows how.

Before Charlie McGee was born, the government used her parents in secret drug experiments called Lot Six. The government gave her mother and father powerful hallucinogens, and by the time they conceived Charlie, their genetic makeups had been altered by the drugs. Charlie's pyrokinetic powers were the result of genetic mutation.

A covert government agency called the Shop, which we assume is like the CIA, wants to use Charlie and her powers, and hence they will pursue her no matter what the cost, even killing her parents to get to her. The government thinks that when Charlie becomes a teenager she will be able to destroy the planet simply by wishing it so. She will be able to destroy whomever and whatever the Shop wants her to destroy. Her pyrokinetic abilities are worth anything and everything to the covert Shop.

After being captured, Charlie undergoes pyrokinetic experiments at the Shop's compound in Virginia. Her father is with her, as is a pseudo–Native American named John Rainbird, a psychopath who wants Charlie's powers for his own use. Rainbird does everything he can to pry Charlie from the government, as he hopes to obtain her pyrokinetic powers, elevating himself to the afterlife of a god. He also wants to watch her die. Basically, he is yet another psychotic adult in Charlie's life. In the end, to save her own life, Charlie burns down the compound and escapes.

As with Carrie's telekinetic powers, Charlie's pyrokinetic powers are vaguely possible in real life, but they remain unproven. Parapsychologists explain pyrokinetic powers as the ability to excite an object's atoms, generating sufficient energy within the object to fuel a flame. This is generally the stuff of comic books, such as the Human Torch (Marvel Comics), who can spontaneously ignite himself in flames that enable him to fly.

The psychic ability of pyrokinetics is related to the notion of spontaneous combustion, which usually refers to the self-ignition and burning of a person or an object. Suddenly the person or object bursts into flames for no apparent reason. This is possible to a degree because some substances actually do ignite when they hit air. Caesium, for example, is a soft silver-gold metal that is liquid at or near room temperature. When combined with water, it forms a solution of caesium hydroxide and hydrogen gas. This reaction is extremely exothermic and happens so quickly that if the caesium and the water are combined in a glass, the glass will explode. Not only does caesium cause fires when it is in contact with the air or water, its hydroxide dissolves flesh and bone.

Silane, a chemical compound of silicon and hydrogen, is a pyrophoric gas at room temperature, meaning that it spontaneously combusts in air at room temperature. Rubidium is also highly reactive, igniting spontaneously, its fire red violet, when in contact with air. So if a person like Charlie can release a substance such as these into the air at a distance, then she can cause explosions and fires. Without an electromechanical device or a wireless transmission to a device located at the place of the fire, it's hard to determine scientifically how the brain can trigger explosions from a distance.

# Johnny Smith: The Man Who Knew Too Much

Along with Carrie's telekinesis and Charlie's pyrokinetics is the ability that Johnny Smith of *The Dead Zone* has—to see the future. This novel differs from *Carrie* and *Firestarter*, in that Johnny is not a young girl on the brink of womanhood. Rather, he is an adult English teacher, who, after teaching a class about Edgar Allan Poe's "The Raven," is in a car accident that changes his life forever. Rather than being caused by hormones and glands, Johnny Smith's psychic awakening is due to a five-year coma.

When Johnny awakens from the coma, he has the power to foretell the future. Later, while teaching a young boy about "The Raven," Johnny is able to predict how the boy's life will unfold.

Johnny is normal in almost every way; even his name is that of the ordinary man. Before the accident, he is happy, in love with another teacher, and planning to get married. He is so contented with life, just as it is, that he even turns down an offer of sex made by his fiancée, Sarah, saying that he wants to wait for their wedding night. Then he drives into the night to go home. En route, his small car smashes into a milk tanker. (We won't comment on the obvious conclusion here that had Johnny had sex with Sarah that night, he never would have been on that road, and his small car never would have crashed into the tanker.)

When Johnny finally comes out of the coma, he is no longer ordinary in any way. His job as a teacher is over. His beloved Sarah has married someone else. But most important, Johnny Smith has a new ability: if he has physical contact with another person, he can instantly see that person's past and future intertwined.

As time passes, Johnny's life becomes a nightmare. After all, thousands upon thousands of people need his help. How can he not help a child? How can he not help Sarah, whom he never stops loving? How can he ignore anyone in need?

In the end, Johnny sacrifices his own life to save the world from an evil politician. He knows what the politician will do to people everywhere if he is allowed to gain power.

# Physics and Psi Powers

Is it possible to foretell the future, as Johnny Smith does? Here, we're returning to questions about parapsychology and physics as we know them today. For parapsychology and psychic phenomena to be true, we must prove conclusively that our current notions about the world are incomplete.

Some physicists claim that only a conscious entity, such as a human being, can make measurements; and because the existence of matter depends on measurement, then it follows that the existence of the universe depends on consciousness. This harks back to what we wrote earlier in this chapter about cosmic consciousness and all the arguments for and against the idea.

On the flip side, most people know that measurements occur without a conscious being taking the measurement. For example, a camera can measure distance and lighting, and it is not a conscious being.

In today's world, faith in spiritual aspects of life takes a back seat for most people to scientific materialism. Some people, however, including physicists, think otherwise.

For example, Dr. Amit Goswami, a professor of physics at the Institute of Theoretical Sciences at the University of Oregon, believes that our cosmic, collective consciousness is the backbone of reality. Indeed, he believes that cosmic consciousness is more important to reality than matter itself. He decided to ask other researchers, scientists, and authorities about cosmic consciousness.

Supposedly, the physicist Murray Gell-Mann told Dr. Goswami that physicists are brainwashed into thinking that all the fundamental aspects of quantum physics were discovered sixty years ago. <sup>10</sup> It was his feeling, apparently, that we have far more to discover about quantum physics than we think. Many physicists might agree with Gell-Mann, and his statement isn't proof—at all—that he believes in cosmic consciousness.

According to Goswami, the neurophysiologist Roger Sperry, the physical chemist Ilya Prigogine, and the physicist Carl Sagan all believe that everything is made of matter, that there is nothing else to consider and consciousness is a phenomenon of our brains. Finally, the philosopher Karl Popper holds the view, according to Dr. Goswami, that consciousness must be separate from the brain in order to affect it.<sup>11</sup>

From what Goswami reports (and he believes in cosmic consciousness), most scientists believe in physics and scientific materialism as we know them today. To give validity to quantum objects, we must be able to observe them. Because quantum objects have wave properties, they may be in more than one place at once and they may influence other objects that are far away. Without our observations of them, quantum objects would have no value. It is our consciousness that enables us to observe them.

#### The World as a Machine

In the seventeenth century, when René Descartes visited the palace in Versailles, he was fascinated by the "automata" in the palace gardens. As he watched the automata control the water coursing around the garden, as well as control the music, he thought that the world might be like a huge automata. Perhaps the world is like a machine. As noted earlier in this chapter, Descartes devised the famous theory of dualism, which divided the world into a domain of science and matter (materialism) and a domain of mind and religion.

While medical doctors were establishing the fields of neuroscience and surgery in the mid-1600s, Isaac Newton proposed theories that established Descartes' "world as machine" ideas as scientific truth. Newton created the principle of causal determinism. Simply stated, it means that given the laws of motion and the facts about where objects are before they move and how fast they're moving, we can predict the exact locations of the objects.

## Space-time and Material Monism

As we entered the nineteenth century, classical physics had two main principles: strong objectivity, or the separation of science from the mind, and causal determinism. Albert Einstein added the theory of relativity, which, among other things, suggested that the highest velocity in the universe is the speed of light, which is 300,000 kilometers (or 186,000 miles) per second. Einstein's theory further suggested that all interactions between objects in space-time must be local: objects travel one bit at a time with a finite velocity. This idea is often called locality.<sup>12</sup>

As scientists explored the separation of science and matter from the mind, they came up with the notion of material monism. This means that everything in the universe, including our minds and consciousness, is composed of matter. Because nobody knows how to prove the connections between mind, consciousness, and matter, scientists use the term *epiphenomenalism* to describe the derivation of consciousness from matter. In general terms, epiphenomenalism hypothesizes that consciousness is a series of properties of the brain, which is composed of matter.

All of this fascination with consciousness, the soul, the mind, and matter leads to notions about mental telepathy, pyrokinesis, healing the sick, raising the dead, and other paranormal abilities. Yet another offshoot of these scientific, philosophical, and religious suppositions is the idea that we can foretell the future, just as Johnny Smith is able to see what will happen before it occurs.

#### Ancient and Modern Oracles

The ability to see into the future and warn people about terrible events is something that mankind has believed in for thousands of years. People of all cultures believe in this psychic ability.

Consider this childhood toy: the Ouija board. The board displays all the letters of the alphabets along with words such as *yes*, *no*, and *maybe*, on it. To receive messages from the Ouija board, a

person puts his or her fingers on a three-legged device called a planchette. The person's friends may also place their fingers on the planchette, and then someone asks a question of the board. Everyone waits for some outside force to move the planchette, and then the planchette moves by itself and provides an answer, either by spelling it out or pointing to the words *yes*, *no*, or *maybe*.

In ancient Greece, people often asked oracles for answers to their problems. If you wanted to learn whether you were finally going to have a child, whether your brother survived a war, or whether your fiancé had a hideous disease, you could ask the famous oracle at Delphi. After giving offerings to the gods and begging priests and priestesses to help, you'd go away and wait. Eventually, the priests and the priestesses would consult the oracle and supply you with its answer.

Today's oracles are called fortunetellers, tarot card readers, and, more commonly, con artists. Nancy Reagan, the wife of President Ronald Reagan, had a private fortuneteller who regularly gave her advice, even about the country and its policies. The daily newspapers are full of horoscopes and astrology fortunes. At Chinese restaurants, you receive fortune cookies after your meal.

A potent and intricate method of seeing into the future is the Chinese method called the *I Ching*. It's been around for thousands of years and is also called *The Book of Changes* or the *Chou I*. The Confucians studied the *I Ching* during the last period of the Chou era, and at that time, with most books banned, the *I Ching* was one of the few books that the government allowed people to study. In fact, in 140 B.C., the imperial academy excluded all non-Confucian texts, and the *I Ching* became doctrine, with its own chair of study.

Over time, the *I Ching* became a volume of "sacred scriptures inspired by divine revelation. The reason seems to lie in the concentration of divine as well as temporal power in the person of the emperor, in China as well as in other oriental societies. The emperor was not only the sole source of political decisions, he was also the Son of Heaven, the representative of the deity among men."<sup>13</sup>

Similar to cosmic consciousness, the *I Ching* views the universe as a natural whole in which change is continual yet connected. This enables the *I Ching* to give advice and tell you what to do if you hear a loud noise, want to control your destiny, or want to see into the future. The *I Ching* is not a simple book to study; it takes many years of concentration to use it correctly in hopes of seeing into the future and guiding human thoughts and actions so that they are aligned with the cosmos.

The *I Ching* consists of symbols in the form of sixty-four hexagrams. Each hexagram is composed of six horizontal lines, some of which are solid, while others are dashed. Outer hexagrams form a circle around inner hexagrams that form a square. Each hexagram is made of a pair of three symbols, called trigrams. Each trigram has a special meaning, and to learn the meanings, a person studies the *I Ching*, which interprets all the meanings in a series of commentaries. Everything is intertwined, and careful interpretation is required of the commentaries of all trigrams in connection to one another.

Johnny Smith has a much easier time seeing into the future. He just suffers a lot, seeing into people's futures and minds, watching them feel pain and endure agony. If he had to consult a ouija board or the *I Ching*, he would turn away from foretelling the future in an instant. As it is, he considers his psychic ability to be a curse.

# Ted Brautigan: The Reluctant Good Samaritan

Like Johnny Smith in *The Dead Zone*, Ted Brautigan in *Hearts in Atlantis* (1999) can also see the future. Brautigan avoids touching people because he doesn't want to see into their minds and see their futures. Yet he helps children to the point where Bobby Garfield's mother, Liz, thinks he may be a pedophile. For example, when Ted tries to fix young Carol Gerber's dislocated shoulder, Liz thinks he is touching the girl far too much.

When Ted touches someone, he can sense what's happening to that person. He opens a window into their minds, but beyond that, he knows what will happen based on what they're thinking and what they will do. He possesses the gifts of mental telepathy and prophecy. In addition, when he opens the window into someone else's mind, he passes his psychic powers to that person—if only for a moment.

# Cell: The Ultimate in Groupthink

In King's book *Cell* (2006), mental telepathy and cosmic consciousness are once again the supernatural science themes. Here, cell phone towers are transmitting signals that wipe brains down to their primal instincts. It's never explained how the cell phone towers erase people's brains—possibly, terrorists have infiltrated cell phone transmissions. At any rate, along with the brain wiping, the cell phone signals give people the ability to transmit brain signals to one another. They have mental telepathy, in other words, which later binds them together into a Star Trek Borglike hive that King refers to as the Flock. There are huge Flocks all over the country in all major cities. These Flocks sleep in malls, stadiums, and other areas that are big enough to accommodate them. Members of the Flock sleep side by side, with music blasting from their open mouths, and as they sleep in this way, they communicate with one another using mental telepathy. Periodically, each person reboots his or her wiped brain using cell phone signals. When not rebooting their brains with cell phone signals and using mental telepathy to communicate with one another, members of the Flock savagely murder normal people. Remember, the most base instincts of the brain are the only parts of the brain left.

Members of the Flock are connected as if they are one organism. Because so many people these days use cell phones, nearly everyone becomes a Flock member, and eventually, the Phonies outnumber the people who weren't using their phones when the first signal was transmitted, or Normies. The Phonies are able to get into the Normies' dreams and brains using mental telepathy, and they get the Normies to speak words on the Phonies' behalf and to do things that favor the Phonies' lifestyle, if we can call this a lifestyle, over that of the Normies.

A computer worm infiltrates the cell phone signals—again, we're not sure how this happens or who instigates the worm. When the Phonies reprogram their brains at night, the worm keeps mutating, causing some of the Flock to want to be Normies again. In the end, it's the child Jordan who theorizes that if a person holds a cell phone to his ear and dials 911, the new signal will wipe the brain again. Just as a computer hard drive saves old programming as a survival instinct, or so Jordan explains, the wiped brain might have saved the old "programming" as a survival instinct. And because the worm wipes the brain in conjunction with a 911 call, the brain's original programming may kick in. The original minds of the Phonies may be restored.

We've already discussed psychokinetic powers, which include mental telepathy. We've suggested that a cosmic consciousness or a universal "oneness" may be responsible for these psychic powers. Some supporters of mental telepathy put forth quantum theory as a possible explanation of psychic power. We've previously touched on this idea, but let's return briefly with a focus on telepathy. If the human mind consists of quantum and electrical impulses, and if the mind can pick up on quantum fluctuations that are generated by other minds, then it's somewhat conceivable that minds can communicate directly.

On the other side of the debate are scientists, who point out that quantum mechanics deal with subnanometer entities, yet the brain deals with much larger entities and impulses.

In response to this opinion, people who believe in mental telepathy use the argument presented earlier, that it's possible because it hasn't been disproven and there may be entire areas of physics we now nothing about. As noted, this is a somewhat inverse argument and doesn't hold up as scientific proof of anything. Sure, anything's conceivable, and pigs may fly, but until repeatable proof exists for something like mental telepathy, it's hard to call it a science. We can call it a pseudoscience, and we can say that it's vaguely possible—for pretty much anything is possible.

# John Coffey: An Unlikely Healer

In *The Green Mile* (1996), a poor black man, John Coffey, is convicted of raping and killing two white girls. He stands well over seven feet tall and weighs 350 pounds. While he may be huge and scary to those who condemn him, he is an innocent man, wrongly accused and convicted.

While on death row, John displays the amazing ability to heal the sick, ease suffering, and punish evil that lurks in the hearts of bad men. For example, he cures the prison warden's wife of brain cancer. He also restores life to the dead pet mouse Mr. Jingles. John pulls the suffering from other people into himself, then expels their illness and misery from his own body in the form of a visible demonlike thing.

One of the prison guards, Paul Edgecomb, realizes that John is truly a nice man who is innocent of all crimes. Paul is helpless in the face of the system that has condemned John and actually must serve watch during John's execution.

Just as Johnny Smith in *The Dead Zone* realizes his powers when he comes into physical contact with other people, John Coffey in *The Green Mile* realizes his powers when he touches someone else. In the latter case, Coffey connects to human sin and evil when he touches another person. Like Smith, who is exhausted from requests for help and experiences of human misery, Coffey becomes fatigued from the human evil to which he is exposed day in and day out. Both men possess psychic gifts that let them help others, yet both men find their gifts to be excessive burdens. And like Smith, Coffey can transfer his visions to someone else during physical contact. He enables Paul to see the identity of the two girls' real murderer, and he lets Paul see the human sin and misery that he, Coffey, is forced to experience all the time.

In reality, cultures around the world have believed in faith healers and medicine men for thousands of years. The notion that one man can cure the sick and return life to the dead has been around for a very long time—since prehistoric times.

A shaman, for example, is a medicine man with magic-religious powers who cures human suffering by forming relationships with spiritual entities. The shaman goes into a trance, or spiritual state, and asks the spirits how to heal the sick, raise the dead, and save the tribe or the nation.

Medicine men and shamans have existed all over the world throughout history. The word *shamanism* comes from the Russian evolution of the Tungusic word *saman*. We could list many examples of medicine men and shamans in all cultures. One such example might be the Tatar people, who used the shaman for almost everything. For example, to cure a sick child, the shaman would hold a séance to try and bring back the soul of the child. The séance could last six hours, maybe more, during which the shaman would go into a trance, traveling to the lands of the spirits. The shaman would search for the sick child's undamaged soul and ask the spirits for a way to heal the child's illness.

In keeping with the universal ideas throughout history of cosmic consciousness and the interconnection of human souls, the shaman travels from one cosmic region to another for advice and help. He is able to communicate on a cosmic plane via the cosmic consciousness.

We can think of John Coffey as a modern-day medicine man or shaman. He heals the sick, and he can bring creatures back to life. Like the Tatar shaman, who cured sick children and brought creatures back to life, it's possible that John Coffey can do the same thing.

Yet there are no experiments or verifiable records of a shaman bringing people back to life. Whether this is truly possible is unknown, just as it's unknown whether a man like Johnny Smith can see into the future and possesses mental telepathy, whether a girl like Carrie can kill and destroy simply by thinking about the acts, whether a girl like Charlie can set fires using her mind, or whether people can connect to the cosmic consciousness as they do in *Cell*. This is one reason that reading Stephen King is so fascinating. In all of his books, he asks the universal question, What if?