

Heart in Hand

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The Philosophical, Moral, and Medical Importance of Compassion

*Compassion...an impersonal,
yet somehow natural love,
cementing the very atoms*
John Clellon Holmes
Go

I had a patient a number of years ago named George Crosby, the 101-year-old man that I mentioned in the Preface as one of the reasons that stimulated me to write this book. Up until a month before I saw him, he was still able to do his daily chores on his farm in Port Townsend, although with increasing difficulty, which included looking after some cattle, and tending a stand of fruit trees and a bean field. He was in a hospital intensive care unit when I met him, on oxygen, undergoing treatment for congestive heart failure. One of his heart valves, the aortic valve, had become thickened and scarred, blocking the flow of blood out of the heart into the body. He was now unable to breathe comfortably despite continuous oxygen and intravenous medications. I agreed to do open heart surgery on him, in spite of his age, and replace the valve. This was the only way

that he would be able to leave the hospital alive. To the surprise of some of my colleagues who argued that this patient was too old to withstand—or deserve—heart surgery, the indomitable centenarian came through it without any trouble. Two days after the operation he left the intensive care unit and started walking in the halls. When I asked him how he was feeling, he said simply, “I’m not tip top.” He went on and made a smooth, uncomplicated recovery and left the hospital eight days later. He was soon able to resume all of his chores on his farm with renewed vigor.

Awed and inspired by his incredible resilience and spirit, I asked George Crosby to please tell me, if he could, how he had done it. How had he been able to maintain such good health that would enable him to withstand major heart surgery at his age? Without hesitation, George told me that his philosophy of life was this: “Do unto others as you would have them do unto you—and do it first.” He accepted life as it is and was not given to judgmental thinking. He did not harbor regrets for the past or concerns about the future. He lived in the eternal present. He had wanted to be an engineer but was put out to work after the eighth grade. Instead, he worked contentedly at a lumber mill. He was quick to forgive but, as his wife told me, slow to forget. When his son was having difficulties in high school he pulled him out and put him to work logging their property. After a year of this backbreaking work, the boy gladly resumed his education. He graduated from college and had a career as a bank executive. (George’s son was 75 years old at the time of his father’s surgery, sitting with his mother in the surgical family area, waiting to hear how it turned out.) George Crosby possessed loving-kindness for all living things, as the photograph of him given to me by his wife, taken six months after his heart surgery and shortly before his 102nd birthday, showed. It was taken of him working out in the field, crouched over a trestle of vines, his arms outstretched, tending them with his hands. A friend of mine who saw the photograph described it well: She said, visibly stunned, “Those hands are hands of the earth. And the way he is holding them [the vines]. It is a celebration of life.”

George Crosby died two months after that photograph was taken, from complications suffered from a fall off the roof of his barn, one week before his 102nd birthday. He had climbed onto the roof to repair a leak. When Linda and I called upon

his widow at their farm in Port Townsend two and a half years later, she said, “George was doing so well after his surgery he would have lived for a good while if he hadn’t gone up and worked on the roof of that barn.” I asked her more questions about this remarkable man. She said he always kept busy. He never complained about anything and accepted life as it was. If they had a disagreement about something he would usually remove himself to the barn until the storm blew over and find things that needed to be done. He rarely watched television. She said he used to like to watch baseball games, but stopped doing that when the player’s desire for ever higher salaries seemed to overshadow their love of the sport. He didn’t complain about it and accepted it for what it was, he just preferred to now spend his time doing something else. She said that he was happiest when he was out in the field tending his crops and vines, or milking his cow. George Crosby lived a simple life that radiated compassion.

We hear a lot about compassion now in our daily life, particularly from our politicians, who espouse it in their political discourse. What is “compassion” and why do I think it has both philosophical and moral, and medical importance?

Compassion includes two cardinal virtues: *natural justice* and *loving-kindness*. Schopenhauer writes:

Whoever is filled with compassion will assuredly injure no one, do harm to no one, encroach on no man’s rights; he will rather have regard for everyone, forgive everyone as far as he can, and all his actions will bear the stamp of justice and loving-kindness.¹

This impulse to act justly and to embrace other creatures with loving-kindness is heartfelt and entirely unselfish. Compassion moves a person to come to the aide of another creature, especially one who has experienced misfortune and is in distress, *without any self-serving considerations at all*. A sympathetic sharing of the sufferings of another is combined with an effort to promote his or her welfare. This feeling is directed not just to other human beings but to all living things. Compassion is unconditional love, in its broadest sense.

Schopenhauer's philosophy is grounded in the view that this irrational force is a manifestation of the innermost reality of life. It is not derived from any rational concepts of duty, laws, or social morality. He writes:

Compassion is an undeniable fact of human consciousness, is an essential part of it, and does not depend on assumptions, conceptions, religions, dogmas, myths, training, and education. On the contrary, it is original and immediate, and lies in human nature itself.²

The natural justice that compassion embodies is distinct from justice that is framed in laws and enforced by penalties. The fundamental principle of natural justice is *do harm to no one*. A corollary principle is *take from none his own*. Our innate compassionate feeling of natural justice counterbalances our self-serving and malicious motives; it keeps us from bringing harm or inflicting injury on another person, or on his or her property or possessions. We live in a world, however, where the competing motives of self-interest and malice present formidable obstacles to the full expression of compassionate natural justice. So societies have derived a practical form of justice based on legal ordinances and the compulsion of law to maintain peaceful intercourse among competing, self-seeking individuals. The natural justice that arises from compassion, in contrast, is "original and immediate."

The motive of self-interest also can compel a person to engage in just and legal actions, if such actions make a person look good in the eyes of his peers. Just and legal actions of human beings are also based, as Schopenhauer notes, on the self-interested, recognized need of possessing civil honor and a good name in order to advance in the world.

Loving-kindness, the other cardinal virtue of compassion, manifests the deep-seated kinship that each of us has with all fellow creatures. The fundamental principle of loving-kindness is this: *help all people as far as lies in your power*. This impulse makes a person capable of rising to nobleness and magnanimity, where one *suffers with* another person. This selfless helping of others, Schopenhauer observed, is a mysterious thing. He writes:

For it is one which Reason can give no direct account of, and its causes lie outside the field of experience. And yet it is of daily occurrence. Everyone has often felt its working within himself; even to the most hard-hearted and selfish it is not unknown. Each day that passes brings it before our eyes, in single acts, on a small scale; whenever a man, by direct impulse, without much reflection, helps a fellow-creature and comes to his aid, sometimes even exposing himself to the most imminent peril for the sake of one he has never seen before, and this, without once thinking of anything but the fact that he witnesses another's great distress and danger.³

The loving-kindness of compassion is a central feature of the world's great religions, especially in Hinduism, Buddhism, and Christianity. Schopenhauer says that the great and distinguishing merit of Christianity is that it theoretically formulates and advances *loving-kindness* as the queen of all virtues, which should extend even to one's enemies. Prior to the advent of Christianity the ancient Greek philosophers, most notably Plato, considered *justice* to be the primary and essential cardinal virtue.

I am convinced that Woody Allen's film *Broadway Danny Rose* is one of his most important films, and I would strongly suggest that the reader see, or see again, this fine film. This film is important for our purposes here because it is an insightful study of compassion.

Danny Rose, played by Woody Allen, is a theatrical manager who handles a motley group of clients, such as a one legged tap dancer, a blind xylophone player, and an over-the-hill alcoholic Italian night club singer. He is very devoted to his clients and works tirelessly on their behalf. As one of Danny's colleagues puts it, "the man is a living legend." Danny's family of clients join him at his small apartment every Thanksgiving, where he serves them frozen turkey TV dinners. As Danny puts it:

You know I gotta get involved. Like, like my...Herbie Jayson, my bird act. The cat ate the, the lead bird. So, I gotta leap right into the breach, you know. Or my Puerto Rican ventriloquist. The kid's a wonder, he's got everything you need to make it big, but he's a dope addict. So I, you know, I gotta get in there and help.

But when Danny's clients get a little success, like the Italian nightclub singer, they leave him. Nevertheless, Danny harbors no bitterness and continues to work hard to see that his other less successful clients do well. He is tolerant and has a willingness to give. He

sums up his philosophy of life, which he learned from his late Uncle Sidney, in three words: “Acceptance, forgiveness, and love.”

Given the inherent self-interest of all living things, Schopenhauer asks how is it possible that another’s well being and suffering should directly affect me? Why do I directly desire another creature’s well-being just as habitually and immediately as I do for myself and suffer with that person (or other creature) in the same way as I feel my own woe? He writes:

For this to be possible I must in some way or other be *identified* with him; that is, the *difference* between myself and him, which is the precise reason for being of my egoism, must be *removed*, at least to a certain extent....When once compassion is stirred within me, by another’s pain, then his well-being and woe go straight to my heart, exactly in the same way, if not always in the same degree, as otherwise I felt my own. Consequently, the difference between him and myself is no longer an absolute one.⁴

The essential point is that a person who feels compassion “draws less distinction between himself and others than is usually done.” Thomas Merton (1915-68), the American Trappist monk, religious writer, and poet puts it this way, “The whole idea of compassion is based on a keen awareness of the interdependence of all these living beings, which are all part of one another and all involved in one another.” Or to put it another way: *Compassion arises from our intuitive perception that there is a metaphysical identity and oneness of all beings.* It is an automatic, unconscious impulse that springs from the ultimate reality of all living things. Compassion penetrates the apparent distinction between oneself and others and enables us to dimly perceive the true nature of the world. The central core of Schopenhauer’s philosophy, which is derived in large part from his analysis of compassion, boils down to this: the essential reality underlying all things is *that we are all one and the same entity.* The great Albert Einstein writes:

A human being is part of the whole, called by us “Universe;” a part limited in time and space. He experiences himself, his thoughts and feelings as something separated from the rest—a kind of optical delusion of his consciousness. This delusion is a kind of prison for us, restricting us to our personal desires and to affection for a few persons nearest us. Our task must be to free ourselves from this prison by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty.

Schopenhauer postulates that the underlying reality of the world—the Noumenon—is something like a unified, undifferentiated, insatiable, primal *force*. We are in the throes of this insatiable root force, and we intuitively sense it, when we have sex. We experience its unified, undifferentiated nature through compassion. It therefore follows that just as space-time, as our brains are biologically programmed to conceive them, are foreign to the rock bottom reality underlying the cosmos, *so also must multiplicity be*. Schopenhauer writes:

Individuation is merely an appearance, born of Space and Time; the latter being nothing else than the forms under which the external world necessarily manifests itself to me, conditioned as they are by my brain's faculty of perception. Hence also the plurality and difference of individuals is but a *phenomenon*, that is, exists only as my mental picture. My true inmost being subsists in every living thing, just as really, as directly as in my own consciousness it is evidenced only to myself.

So, following Schopenhauer's line of thought regarding the philosophical importance of compassion, we come, like the Hindus and Buddhists do from a somewhat different approach, to this inescapable conclusion: An undifferentiated singularity underpins the world that we perceive with our biologically constructed intellect and sensory apparatus. All beings and things in the universe are entwined in a *cosmic oneness*, to use a popular New Age term for this state. Woody Allen puts it this way, through Boris in *Love and Death*: "We all relate universally to a great oneness."

The phenomenal world that we perceive and measure, with its 100 billion galaxies, is certainly different than the Schopenhauerian/Hindu-Buddhist noumenal world that has no space, time, or multiplicity. Our planet in our perceived and measured world is located, with its sun, two-thirds of the way out in one of the spiral arms of a galaxy that contains more than *100 billion* suns. Light, traveling at 186,000 miles per second, takes 27,000 years to get to our solar system from the center of our Milky Way galaxy. Astrophysicists picture our universe as a kind of huge, rapidly expanding bubble where all the stars and galaxies are positioned on its surface, and they are rapidly moving away from each other as the bubble expands. If astronauts were to travel across the observable

universe at the speed of light it would take them more than 125 billion years to traverse it, and they would travel in a giant circle and ultimately wind up back where they started!⁵

Despite the incredible expanse and multiplicity of the perceived and measurable universe, nuclear physics provides us with a different, more profound perspective on the world, more akin to the Schopenhauerian/Hindu-Buddhist view of the Numenon—of ultimate reality. Physicists have determined that all matter in the universe, vast and complex as it is, is composed of two types of subatomic particles. Everything—stars, planets, oceans, rocks, bacteria, plants and animals—consists of leptons and quarks. Matter is constructed with one kind of lepton—an electron—and two kinds of quarks, termed up (*u*) and down (*d*) quarks. These subatomic particles are the constituents of atoms, the fundamental structural unit for all matter in the universe.

An atom has a tiny centrally placed nucleus that is composed of quarks, which is surrounded by a shell of one or more electrons. The quarks in the atom's nucleus are bound tightly together in groups of three to form either protons, which have one *d* and two *u* quarks, or neutrons, which have one *u* and two *d* quarks. The diameter of an atom's nucleus is more than ten thousand times smaller than the diameter of the atom's relatively spherical electron shell, but since electrons possess negligible mass almost all of the weight of an atom is contained in its nucleus. As a result, atoms, even those that make up the heaviest elements, such as gold (which has a total of 591 quarks in its nucleus along with 79 electrons in its outer shell), *consist almost entirely of empty space*. If the nucleus of an atom in a bar of gold were blown up to the size of a grain of sand, its electron shell would be the diameter of a domed football stadium, which, as one physicist puts it, would look like a thin zone of insubstantial heat lightning.⁶

An averaged-sized human being is made up of 7.0×10^{28} *u* quarks (7 with 28 zeros after it), 6.5×10^{28} *d* quarks, and 2.5×10^{28} electrons. By sharing electrons with each other, atoms combine to form molecules. And strung together in complex ways, molecules make up the structural components a cell, the basic building block of life.

To tie everything up together even more, the leptons and quarks that make up all things, including all living things, are very old. Physicists believe, with good evidence to support their theory, that a gigantic explosion occurred 15 to 20 billion years ago, known

as the Big Bang, which produced all the leptons and quarks that make up the universe. They have determined that the universe is rapidly expanding, and all the galaxies in it are hurtling apart from each other. This finding suggests that at some point in the past there was a gigantic explosion that initiated this process.

Before the Big Bang, physicists theorize, the universe existed in a quantum state of virtually zero size, and what there was of it was immeasurably hot. In the first infinitesimal fraction of a second after the explosion occurred, the universe was still so small that it could have fit inside a hen's egg. The four fundamental forces present in the world—gravity, electromagnetism, and the strong nuclear and weak nuclear forces—where then one unified force. During the first 1/100th of a second after the explosion only unbound quarks existed in the universe. As it rapidly expanded and cooled, quarks came under the influence of the now separate and distinct strong nuclear force. They began to stick together, in groups of three, to form protons and neutrons.

By the end of the first second, so the theory goes, the universe had cooled down to a temperature of 10 billion degrees Centigrade, a temperature equivalent to that generated by a hydrogen bomb explosion. Then, during the next few hundred thousand years the universe cooled sufficiently to permit electrons to combine with protons and neutrons to form atoms of hydrogen and helium. Several billion years later, hydrogen atoms coalesced to form stars.⁷

The first stars that formed in the expanding universe generated all of the carbon, oxygen, and nitrogen that, along with hydrogen, make up the proteins in living things, and they also forged the ionic inorganic elements that are present in our bodies, such as sodium, calcium, and chlorine. A star is basically a gigantic thermonuclear furnace—it burns and releases energy by fusing hydrogen atoms into helium, like a hydrogen bomb. Our sun fuses some 4.5 million tons of hydrogen into helium every second, and we perceive the energy it releases as heat and light. It has been doing this for some five billion years and physicists calculate that it will continue to do so for another five billion years and then burn out. Stars use atoms of hydrogen and helium to forge heavier atoms, from carbon, which is made with three helium atoms, to iron, the heaviest element that a star can make from the energy that is released by the thermonuclear reaction.

The trace elements that are present in our bodies, such as cobalt, copper, and zinc, were formed by the immense energy that is generated when a large star collapses upon itself and explodes, a process astronomers term a *supernova*. Large stars undergo an explosive collapse after approximately 10 percent of its hydrogen atoms are fused into helium atoms, as a result of the increased gravitational pull that results from the presence of heavier helium atom.

Our sun is a second-generation star, formed, along with the planets in its solar system, from the dust and residue of a large first-generation star that exploded in this region of our Milky Way galaxy around six billion years ago. This supernova provided all of the constituents necessary to generate life, matter which is more than six billion years old, with some of it, like hydrogen, more than 15 billion years old.

Given this most remarkable, incredible history, we can see that life on earth is at its very essence an expression of the energy of the universe, a direct result of two unimaginably violent energy-producing explosions—one that created the universe 15 to 20 billion years ago and then another one in this region of our galaxy 6 billion years ago that created our solar system and all of the matter necessary for life to form.

Unaware in the 19th century of what the universe was like before the Big Bang, Schopenhauer, from his philosophical musings, reached the conclusion that “force and substance are inseparable for at bottom they are one.”

Likewise, Einstein, in this century, determined that an object’s mass is equivalent to a specified amount of energy. And he showed us that at sufficiently high temperatures matter and energy are completely interchangeable. The equivalence of mass and energy is explained in Einstein’s Special Theory of Relativity. His General Theory of Relativity interweaves space, time, and gravitation into a single unit. It shows that space and time are indivisible from matter. Indeed, the structure of space and time *depends* on the presence and motion of matter.

Recent discoveries in molecular biology also lend support to the Schopenhauerian/Hindu-Buddhist metaphysical insight that there is an underlying unity of being. Consider this: All species of living things use the same chemically coded DNA language to express the genetic instructions that determine the structure and activity

of their respective cells. A DNA molecule is like a very long strand of ticker tape, with a length that is more than 700,000 times greater than its width. The information contained in the DNA molecule is written with an alphabet consisting of four “letters,” represented by the nitrogenous bases adenine, guanine, thymine, and cytosine respectively.

This “alphabet” has a vocabulary of 64 “words,” each one of which is three letters long. Many thousands of these three letter words are lined up one after another on the long DNA strand.

Molecular biologists have now found that all living things speak the same DNA language, be it a tubercle bacillus, an oak tree, or a human being. The basic instructions that regulate a cell’s activity, such as processing energy to maintain its living state, are all remarkably similar for all types of earthly life. Cells metabolize sugar as their main source of immediate energy. With rare exception, plants and photosynthetic bacteria make these sugars from the energy that is provided by sunlight. (The exception is bacteria in the depths of the sea, called chemolithotrops. Two miles deep in the ocean, where there is no sunlight, these bacteria make sugars with energy derived from the oxidation of inorganic sulfur-containing compounds that are spewed forth from deep hydrothermal vents.)

All of the many millions of species that live on this planet, including we human beings, obtain energy in a usable chemical form (as ATP, adenosine triphosphate) the same way our ancient bacterial ancestors obtained it billions of years ago.

Life not only shares an underlying unity of structure and function—there are many other examples which I won’t go into here—but there are also fascinating examples of cooperative, that is to say altruistic, behavior among living things. Consider this example, which as a heart surgeon, trying to prevent infections in my patients, I find particularly interesting: Bacteria engage in altruistic behavior by making and giving specially produced genes to each other. Such genes carry instructions designed to enhance the survival of a given strain of bacteria, genes that provide a vulnerable bacteria, like Staphylococci, with a new recipe for making an enzyme that is capable of neutralizing antibiotics like penicillin that can kill them. This is how bacteria become resistant to various antibiotics. Until recently doctors and microbiologists have been

baffled over how bacteria in widely distant locations, from Tokyo to New York to Paris, all of a sudden develop strains that are resistant to the destructive effects of a particular antibiotic. We now know that such resistance is conferred to vulnerable bacteria in these various locations by genetic messengers that are carried worldwide by sea currents, rivers, wind, and people riding on airplanes. Bacteria that possess such genes will produce copies of them encased in a virus-like protective protein coat. The bacterium that produces them ruptures and dies. These virus-like genetic messengers (termed *temperate phages*) are then disseminated widely to other bacteria whose survival will be enhanced due to the genetic instructions that these unique messengers carry. In a relatively short period of time bacteria in hospitals all around the world acquire this new gene and become resistant to a particular antibiotic. Bacteria associate not only with those adjacent to each other in the same strain but also as a global community. It has been shown that strains of otherwise harmless soil bacteria will deliver genes to different strains of pathogenic bacteria that confer resistance to penicillin. By shuffling genetic information between each other with temperate phages (and by other means as well) bacteria, practicing a kind of cellular altruism, promote the welfare of other bacteria all around the planet.⁸

In contrast to compassion, altruism, at both the cellular and the societal level, is always inherently self-serving. A seemingly selfless, altruistic concern for the welfare of others is found, on closer examination, to be based on either *kin selection* or *reciprocity*. A self-sacrificing concern for the well being of one's immediate family is a prominent feature of animal behavior, both in human and nonhuman animals. Risking one's life to ward off predators that threaten one's family has a self-interested aspect to it. An individual's closest relatives—parents, siblings, and children—carry 50 percent of one's genes; nephews, nieces, and grandchildren share 25 percent; and first cousins contain 12.5 percent of one's genes. Behavior that benefits such relations to the detriment of oneself serves the self-interest of one's genes. Sacrificing oneself to ensure the well being of one's family makes it possible for *these* individuals with their genes, which in some measure are the same as the altruist's genes, to survive. Altruistic behavior directed towards one's kin is a genetically wired evolutionary phenomenon. At the cellular level,

in bacteria, the “altruistic” self-destructive production of temperate phages by selected bacteria benefits the entire global community of the same genetic strains of bacteria and helps to ensure their survival against a destructive predator chemical like penicillin. Humans and other primates also look after each other’s welfare on a reciprocal basis, like a monkey cleaning a parasite off of another monkey’s back. An individual does something nice for someone else with the expectation that the favor will be returned. In contrast to compassion, altruism, tempered as it is by kin selection and reciprocity, is qualitatively different. Although altruism and compassion share a common concern for the welfare of others, compassion arises from a deeper realm. It does not come, like altruism, from the everyday world of genetically programmed, self-directed individuals.

In Allen’s film *Manhattan*, Ike brings up this hypothetical situation:

Listen to this example I’m gonna give. If the four of us are walking home over the bridge and then there was a person drowning in the water, would we have the nerve, would one of us have the nerve to dive into the icy water and save the person from drowning? Because...that’s a key question. You know, I, of course, can’t swim, so I never have to face it.

What would make a person, one who can swim that is, dive into an icy river to save a total stranger—a total stranger, not a relative, and with no expectation that the favor will be returned? Compassion drives a person to do it, regardless of the risk to one’s own welfare. In *The Power of Myth*, Joseph Campbell recalls an event that occurred on a wind-swept ridge in Hawaii, known as the Pali, where some people go to commit suicide:

One day, two policemen were driving up the Pali road when they saw, just beyond the railing that keeps the cars from rolling over, a young man preparing to jump. The police car stopped, and the policeman on the right jumped out to grab the man but caught him just as he jumped, and he was himself being pulled over when the second cop arrived in time and pulled the two of them back.... Later, a newspaper reporter asked him, “Why didn’t you let go? You would have been killed.” And his reported answer was, “I couldn’t let go. If I had let that young man go, I couldn’t have lived another day of my life.”

What happened to this policeman who was suddenly willing to sacrifice his life and his

duty to his family and his job in an attempt to save this unrelated, unknown man?

Campbell, an admirer of Schopenhauer, provides this explanation:

Schopenhauer's answer is that such a psychological crisis represents the breakthrough of a metaphysical realization, which is that you and that other are one, that you are two aspects of the one life, and that your apparent separateness is but an effect of the way we experience forms under the conditions of space and time. Our true reality is in our identity and unity with all life. This is a metaphysical truth which may become spontaneously realized under circumstances of crisis. For it is, according to Schopenhauer, the truth of your life.

The policeman's action was not a form of altruism, with the action based, to some degree, on kin selection or reciprocity. It was motivated by compassion—that deep-rooted irrational impulse that arises directly out of the innermost reality of things as they are in themselves (or to state it more accurately, out of the thing-in-itself, since there is no multiplicity in the Noumenon).

Our myths and legends agree with Schopenhauer. Perhaps the most important mythological revelation about compassion is to be found in the legend of Parsifal. As told by the 12th century German poet Wolfram von Eschenbach, Parsifal is a knightly servant of the Holy Grail. In its Christianized version, the Grail is alternatively an emerald from the devil's crown or the cup that Jesus used at his Last Supper. It is a wellspring of life-giving nourishment, of joy and celebration. In both its Christian and pre-Christian aspect, the Holy Grail is a mystical symbol of a magical at-one-ment. A group of knights guard the Grail in a remote castle where "space and time are one," as Richard Wagner puts it in his opera/music drama, *Parsifal* (first performed in 1882). The leader of the knights that guard the Grail is suffering from a festering wound in his groin, which he received in a moment of lust. The wound will not heal, and the leader lies on a litter in constant agony. He longs for the "*innocent fool enlightened by pity*" who, according to the prophecy of the Grail, can heal the wound and relieve his suffering. Parsifal is basically what one might call a simpleton, a weak-minded, naive knight who is unlearned in the affairs of life, who doesn't even know his own name—in short, a fool. His nickname is *Perfect Fool*. After a botched first visit to the castle, and after many

travails, he undergoes a spiritual awakening. Made wise by pity, this “guileless fool,” with considerable difficulty, finds his way back to the castle and *suffers with* the leader of the Grail knights. With love, acceptance, and forgiveness, Parsifal redeems him and heals his wound.

The French name for Parsifal (*Perceval*) means, “pierce-through-the-heart.” Compassion is an elemental force that, indeed, pierces one’s heart. It is not derived from worldly knowledge, a heightened self-awareness, or a well-honed faculty of reason. The Parsifal legend confirms this basic truth. It says that the person who can most strongly feel compassion is one who is *not* encumbered by the trappings of culture, intellect, and a heightened self-awareness, namely, a fool. Parsifal is not a fool in the pejorative sense that the word is often used, but rather a weak-minded person who lacks worldly knowledge and sophistication. He is naive and sincere, and, thereby, not given to deception and pretense.

Danny, in *Broadway Danny Rose*, has similar qualities. Danny Rose is a 20th century caring fool. Instead of celebrating the Holy Grail with a court of knights, he celebrates Thanksgiving with a group of luckless performers. Like the legendary Parsifal, Danny Rose is described by one of his colleagues a “living legend.” Looking around his apartment, Tina accuses Danny of “living like a loser.” He loses his successful clients to other managers, and he naively assumes that people are always being straight with him. When Tina tells Danny that her late husband was a juice man for the mob, Danny replies, “He made juice for the mob?” When she says some guys shot him in the eyes, Danny replies, shocked, “Really? He’s blind?” We learn from the Parsifal legend, and from *Broadway Danny Rose* as well, that it is the simple-minded, innocent, sincere fool who can most easily feel compassion. The fool can more readily suspend his ego and submerge his identity than the rest of us. He is able, as Schopenhauer puts it, to “draw less distinction between himself and others than is usually done.” Lacking the egoism of ordinary individuals (and the deceit of politicians who profess similar feelings), a “fool” can more completely identify with people who are suffering and share their pain, as if it were one’s own.

As the Parsifal legend makes clear, compassion enlightened by pity is a powerful force (originating, as it does, from the Noumenon). Milan Kundera, in *The Unbearable Lightness of Being*, gives a moving description of this noumenally-derived force. Tomas, the main character in the novel, is a sophisticated, womanizing neurosurgeon who thinks that he is immune to compassion. Then his wife, Tereza, fed up with his numerous extramarital affairs, leaves him. Shortly thereafter, sick at the thought of her sitting disconsolate, her hands trembling, feeling abandoned, Tomas realizes that she has infected him with compassion. Kundera writes:

He was hit by a weight the likes of which he had never known...For there is nothing heavier than compassion. Not even one's own pain weighs so heavy as the pain one feels with someone, for someone, a pain intensified by the imagination and prolonged by a hundred echoes.

We have seen how Schopenhauer's philosophy is grounded in the view that this strong irrational force is a direct manifestation of the innermost reality of life. Now we need to understand how Schopenhauer's ethics considers compassion to lie at the root of what we consider to be morally right and good behavior. Another aspect of Schopenhauer's great insight into the philosophical importance of compassion is this: Compassion is the sole source of all truly moral actions. People in different societies hold widely varying views about what constitutes good and bad behavior and right or wrong conduct. Is polygamy (which exists, as we have seen, in most human societies that anthropologists have studied) or female infanticide (in the Kangra District of Northwest India) good or right? People who do such things must think so, but others look upon such practices as an anathema. What constitutes *morally* right or good behavior in such matters? Is abortion morally right or wrong? Can there be any objectively valid moral principles of right and wrong or good and bad?

Schopenhauer argues that trafficking in empty, essentially meaningless abstract ideas and concepts like "The Good," or "Justice," or "Perfection of Being" cannot establish the validity of moral principles. Furthermore, the justification for moral principles cannot be established by appealing to some higher authority, either religious or secular. How can one prove *which* religious or state codes of moral behavior are the

most valid? We must appeal to the facts and testimony of experience if we wish to obtain an *objective proof* of anything, including codes of moral behavior. A sound system of Ethics, Schopenhauer tells us, and I think he is right, must employ an observational, empirical approach. We need to examine carefully the psychological underpinnings that determine human actions to see what constitutes a moral right or a morally wrong action.

Schopenhauer approached the study of human behavior like a modern-day social psychologist, without any preconceptions about what one *ought* to do. He examined choices and decisions that people make, and the actions that they take. The two most important findings from his observation of human behavior are these: 1) human behavior is directed by three principal motives. These are *self-interest*, *malice*, and *compassion*. And 2) the keystone of morality lies within human nature itself, in compassion. Self-interest is the most prevalent motive of the three, by far. It drives all living things. Malice seems to be confined to our species and, fortunately, it is not very evident in most people. Compassion, while not all that common either, is nevertheless very important from a philosophical and moral standpoint.

People approve of actions as right or good from a moral standpoint when they involve some degree of compassion. Actions driven by malice unaccompanied by any self-interest are morally wrong or bad. In *Broadway Danny Rose* Tina says, "You gotta do what you gotta do, you know? Life is short. You don't get any medals for being a Boy Scout." Danny replies, "My father...would say maturity, a little tolerance, a willingness to give." And when Lou confesses that he has a mistress, Danny quotes his Aunt Rose, who said, "You can't ride two horses with one behind." Schopenhauer would argue that Tina's dog-eat-dog approach to life and the fact that Lou has committed adultery and has a mistress are neither morally right nor morally wrong. Actions taken to satisfy one's needs and wants, even if others happened to be injured as a result, are a natural consequence of the living state and are not by themselves "immoral" in an ethical sense. Since Tina and Lou are simply acting in accordance with the dictates of their own self-interest, their actions are not subject to moral approval or condemnation. And Aunt Rose's statement is not a moral judgement. She is simply giving wise advice. In our society maintaining a mistress while one is legally married to another woman involves a

degree of deception and deceit that, among other things, can, in time, damage one's health (I speak from personal experience on this.). We regard choices, decisions, and actions approvingly as *moral* in so far as they rest on motives that are not based on self-interest and are concerned only with the well being of others. Schopenhauer would agree that Danny's father, in advocating tolerance and a willingness to give, has a morally praiseworthy approach to life. Such behavior evidences a selfless concern for the welfare of others; it reflects a sense of compassion, and consequently it receives our moral approval.

Moral behavior is grounded in compassion. Conversely, all truly *immoral* acts are generated by malice—the wanton impulse to harm others and to see others suffer without any compensation to one's self. Schopenhauer writes:

Nothing shocks our moral feelings so deeply as cruelty does. We can forgive every other crime, but not cruelty. The reason for this is that it is the very opposite of compassion. When we obtain information of a very cruel deed, as, for example... the case, just reported from Algiers, where, after a casual dispute and fight between a Spaniard and an Algerian, the latter, as the stronger, tore away the whole of the lower jawbone of the former, and carried it off as a trophy, leaving the other man still alive; when we hear of such things, we are seized with horror and exclaim: "How is it possible to do such a thing?"... The sense of that question is certainly only this: How is it possible to be so utterly bereft of compassion? Thus it is the greatest lack of compassion that stamps a deed with the deepest moral depravity and atrocity. Consequently, compassion is the real moral incentive.

Adherence to the tenets of an organized religion, such as the Ten Commandments in the Judeo-Christian tradition, does not necessarily constitute morally praiseworthy behavior, even though these Commandments embody elements of compassion. Most people are not singularly motivated by compassion to follow such rules. Self-serving considerations also compel a person to adhere to religious codes of conduct. These include a fear of punishment, hope of reward (either in this world or the next), and a desire for the security conferred by acceptance of authority. With some religions, like Roman Catholicism for example, a person makes a relatively modest investment—by adhering to the creed and code of that religion and participating in its religious

observances—in what one hopes will eventually result in a big payoff, notably, everlasting life in heaven. *Conscience* is the internalization of such rules, both religious and secular. As Schopenhauer puts it, “Religious people of every faith frequently understand by conscience nothing but the dogmas and commandments of their religion, and the self-scrutiny undertaken with reference to them.” Noncompliance with one’s conscience fosters guilt, another motivating factor that promotes socially and religiously acceptable behavior.

So is abortion, to take the matter head on, in light of what I discuss here, morally right or wrong? It is not morally right, certainly, but neither is it morally wrong, in most cases. It is a matter of (self-interested) choice. The unmarried teenage girl, with no means of support, sacrifices the life of her fetus so that she can complete her education and obtain a good job, and not have to raise a child in impoverished circumstances. Or, recognizing for whatever reason that she cannot raise a child herself, a woman does not want to bring one to term and put it out for adoption for fear of being haunted throughout her life with the irrevocable connection that she will have with this person. Or she fears that the child, once adopted, will fall into bad hands and be molested. On the other hand, a woman who develops a growing dislike for her husband and aborts their fetus in order to spite him commits a morally wrong act. Willfully sacrificing the life of her gestating child for that reason, which is grounded in malice rather than self-interest, is morally wrong.

The question of whether the growing fetus has a “right to life,” contentious as it is, is not a moral issue. This question cannot be answered from the standpoint of morality.

A woman ovulates a maximum of 400 ova during her reproductive years. There is certainly no shortage of sperm available from multiple sources eager to fertilize them. Does each ovum that escapes from its ruptured Graafian follicle and make it to the uterus have a right to life?

There is one other important aspect of compassion, in addition to its metaphysical and ethical significance that I want to mention before moving on. It is this: The presence, or absence, of compassion plays a critical role in one’s health.

At first glance, the all-pervasive motive of self-interest would appear to overshadow the less prevalent motive of compassion. But compassion, as we have seen, is the more important force. As the Grail knight, with his festering wound, discovered, compassion also has a strong healing quality. Schopenhauer says that “compassion is to anger as water to fire”—that “compassion is the true antidote to anger.” In Woody Allen’s *Manhattan*, Mary breaks up with Ike soon after they have started living together, to go back with her old boyfriend. Ike is stunned and hurt. Mary encourages him to go ahead and get angry so that they can have it out and get it over with. He replies:

Well, I don’t get angry, okay? I mean, I have a tendency to internalize. I can’t express anger. That’s one of the problems I have. I grow a tumor instead.

With this concise statement on the etiology of cancer, Woody Allen demonstrates a better insight into the causes of this illness than do many physicians. Indeed, medical scientists have only recently discovered how mental states and emotions can determine the onset and outcome of disease. Witch doctors, shamans, and health care givers in a variety of cultures have known for centuries that a person’s mental state has a profound effect on the body’s susceptibility to disease. The Greek physician Galen noted more than 2000 years ago that melancholic women developed breast cancer more often than cheerful, contented women. But the belief that disease is a consequence of a spiritual or psychic imbalance fell into disrepute in the 19th century with the advent of germ-centered, cellular-based scientific medicine. Being unable to establish any biochemical or anatomical connection between such emotions as contentment, unconditional love, repressed anger, and despair with such diseases as pneumonia, cancer, or coronary artery disease, Western medical scientists discounted or ignored the importance of such emotions in these diseases. This is no longer the case.

Scientists now know that an intricate network of chemical and nerve pathways connect the brain—the hard-wired site of one’s thoughts, feelings, and emotions—with the immune system. Brain cells secrete a variety of chemicals that carry messages directly to cells in the immune system. Signals are carried through a network of nerves that go directly from the brain into the thymus gland, the “boot camp” for the cellular

soldiers in the defending immune system “army.” These nerves are part of the *autonomic nervous system*. Other autonomic nerve fibers from the brain go to the bone marrow, where the soldiers in this army are produced, and to the spleen and lymph nodes, where they are housed. Messages can also be sent indirectly by way of the endocrine system, especially via the adrenal glands, to cells in the immune system. A particular emotional state can provoke brain cells to send signals through either, or both, of these chemical and nerve pathways.

Such messages from the brain can cause the immune system to malfunction in two ways: it can over-react, to external agents, and even the body’s own cells; or it can under-react. Signals from the brain that suppress the immune system (or bring about its exhaustion) can render a person susceptible to infections caused by germs that invade our bodies, such as viruses that cause the common cold or bacteria that can produce pneumonia. Our one trillion cell immune system exercises a constant surveillance over the other 99 trillion cells that make up our body; and it destroys ones that, from time to time, run amuck and have the potential for becoming cancerous. An under-reactive immune system renders a person more susceptible to cancer by not removing aberrant cells before they develop into dangerous tumors. When the brain sends signals to the immune system that causes it to over-react, in this case, to external agents, allergies like bronchial asthma can result. Such signals, exacerbated by altered emotional states, can also so disorient the immune system that it will turn on itself and destroy the body’s own tissues. Such self-destructive actions are known as *autoimmune* diseases. Rheumatoid arthritis is such a disease.

The immune system also plays an important role in coronary artery disease, a subject dear to my heart. Cells in the immune system, the macrophages, are intimately involved in the formation of the atherosclerotic plaques in coronary artery disease. Fatty streaks are the first changes that occur in the coronary arterial wall in this disease. These streaks consist of foam cells—macrophages that have engorged themselves by ingesting oxidized cholesterol bound to low-density lipoproteins. These bloated macrophages secrete substances that damage the arterial wall and cause underlying smooth muscle cells to proliferate. The smooth muscle cells pile up on top of each other to form an

obstructing plaque.⁹ A better understanding of the role that the immune system plays in a great variety of diseases, including coronary artery disease, and the recognition of the important influence of one's mental state on the functioning of this system has ushered in a new branch of scientific inquiry known as *psychoneuroimmunology*.¹⁰

Repressed anger is perhaps the most important emotion that renders a person susceptible to disease. Compassion is the antidote to anger. Repressed anger breeds resentment and hostility. These emotions, when they fester and linger, destabilize the immune system. Instead of expressing one's true feelings, a person so affected "grows a tumor instead." Death rates are 4 to 7 times higher among people who harbor hostile attitudes, according to one study. Coronary heart disease and cancer are the two leading causes of death in our society. I am convinced that Type A behavior is an important risk factor for developing coronary disease. The Type A person engages in a continuous struggle to try and do too many things in too short a time. Failing to accomplish this, such people become irritated, aggravated, and impatient. These feelings breed *hostility*. It is this feature of the Type A personality—a free-floating hostility—that places such people at risk for developing coronary disease, not their sense of time urgency, or hyperaggressiveness, or insecurity of status, or need for control. Inwardly directed hostility wreaks havoc on one's coronary arteries.¹¹

Unlike my patient George Crosby, I have patients in their 40s, 50s, and 60s with severe coronary disease who are like a grenade waiting to go off. They are angry at the world, annoyed with their spouse, irritated with their health care providers when everything isn't done exactly to their satisfaction, impatient, and demanding. Their free-floating hostility is almost palpable. During their surgery I get to see their coronary arteries in living color. Roughened hard yellow plaques, like boulders in a stream, block them. Sometimes a kind of yellow, slightly gritty toothpaste-like material oozes out from the artery when it is opened in preparation for stitching on a new bypass graft. Some unfortunate people are consigned to rust out and obliterate their coronary arteries at a young age because they are genetically prone to do so, no matter what they do—they wear the wrong pair of "genes"—but others, I am convinced, do so largely because of all the hostility that they harbor within them. Through a variety of physiologic mechanisms,

which includes a pivotal role played by the immune system, some of that hostility gets directed inward and sets off an inflammatory response, like a kind of brush fire, that burns out the arteries, leaving scarred debris that gradually builds up and pinches off the artery.

Individuals who are Type B are defined as those people who lack the Type A characteristics. They are more laid back and are more likely not to wear a watch. One study showed, however, that Type B individuals who have high hostility scores on the Minnesota Multiphasic Personality Index are more likely to have coronary artery disease than are low-hostility Type A individuals who are trying to do too many things in too short a time.¹²

Type C behavior is said to be a risk factor for cancer. Suppression of emotional responses, especially anger, is the hallmark of the Type C cancer-prone personality type. These people have a desire for social acceptance and are described as patient, compliant, and unassertive. They are “nice.” The single common denominator in both the Type A and C personality types is *anger*. In the Type C person, the anger is vigorously suppressed, more so than in the Type A person. Such a large investment of psychic energy is necessary to keep it under wraps, and to support a nice, unassertive demeanor, that insufficient energy is left to maintain the immune system in good estate. As the immune system becomes depressed, weakened, and under-reactive, the stage is set for a wayward cancerous cell to escape undetected through the immune system’s defenses and grow into a full-blown cancer.¹³

Compassionate loving-kindness, *for one’s self*, as well as for others, extinguishes the fire of anger. It douses the negative emotions of resentment and hostility that smolder in one’s psyche. Bernie Siegel, in his book *Love, Medicine, and Miracles: Lessons Learned About Self-Healing from a Surgeon’s Experience with Exceptional Patients*, says, “All disease is ultimately related to a lack of love, or to love that is only conditional.” This is probably true, up to a point, with the caveat that no amount of love can reverse an inborn genetic predisposition for disease, as a child suffering from hemophilia will attest. Dr. Siegel writes:

I view the force behind creation as a loving, intelligent energy. For some, this is labeled God, for others it can be seen simply as a source of healing... Spirituality means the ability to find peace and happiness in an imperfect world, and to feel that one's own personality is imperfect but acceptable. From this peaceful state of mind come both creativity and the ability to love unselfishly, which go hand in hand. Acceptance, faith, forgiveness, peace and love are the traits that define spirituality for me. These characteristics *always* appear in those who achieve unexpected healing of serious illness.

Dr. Siegel's spiritual viewpoint is similar to the philosophy of life that Uncle Sidney advocates in *Broadway Danny Rose*, one of *acceptance, forgiveness, and love*.

The medical significance of compassion, I think, boils down to this: one must have acceptance, forgiveness, and love for one's self as well as for others in order to achieve the degree of inner peace and contentment necessary for maintaining good health.

All of us, to a varying degree, experience compassion. In some people, like the policeman in Hawaii, it comes seemingly from out of nowhere, suddenly, and with great force. In others, like George Crosby, it is quietly and simply manifested as a life-long state of being. And in a rare few, like St. Francis of Assisi and Mother Teresa, it manifests itself with an earth-shaking intensity.

Compassion is good for one's health. It is the basis on which we form moral judgements. And it has metaphysical significance. Our connection with the universality of all things lies within the core of our being, in compassion. But this important feature of the inner landscape of our psyches is usually overshadowed and obscured by the egocentric crust of our self-serving intellect. Individuals who have a relatively thin layer of this self-serving, intellectual crust, namely, the innocent, simple-minded *fools* of the world, are the ones who can best lead us on the path that can uncover the secrets that lie within each human soul. Fools like Parsifal and Broadway Danny Rose can best show us the way into the castle that holds the answers to the meaning of life and the nature of the universe. Schopenhauer recalls this passage from Diderot's *Jacques le Fataliste* that could well serve as an appropriate statement to place on a placard over the entrance to this metaphorical castle:

I belong to no one, and I belong to all the world; you were in it before you entered it, and you will still be in it when you have gone out of it.

I am persuaded that Schopenhauer is right in saying that the natural justice and loving-kindness of compassion are the keys that unlock the door to the castle that contains the innermost realities of life. The loving-kindness of compassion is unconditional love in its broadest sense. In the finale of the musical rendition of Victor Hugo's *Les Misérables*, the company sings, "To love another person is to see the face of God." Does compassionate loving-kindness manifested as the Christian love of *agape*, or, for that matter, passionate sexual love enable us to indeed obtain a fleeting glimpse of the face of God? Do these emanations from the rock bottom reality of things come from God? Where does a *God* fit into the ultimate reality of things?

¹ From *On the Basis of Morality*, page 213.

² From *On the Basis of Morality*, page, 177.

³ From *On the Basis of Morality*, page 206.

⁴ From *On the Basis of Morality*, page 170.

⁵ See Timothy Ferris, *Coming of Age in the Milky Way* (William Morrow and Company, New York, 1988) page 383.

⁶ The smallest and by far the most prevalent of the 90 different kinds of atoms that are found in the universe is hydrogen. It contains one proton in its nucleus and one electron in its outer electron shell. The atoms that make up a human being are predominately carbon, oxygen, nitrogen, and hydrogen. Approximately 65% of our body weight consists of molecules of water, which consist of two hydrogen atoms joined together with one oxygen atom through their shared electrons. The proteins in our bodies (which are the main molecular constituents of the cells of all living things) contain approximately 54% carbon, 23% oxygen, 16% nitrogen, and 7% hydrogen. Small percentages of the inorganic elements of sodium, potassium, calcium, magnesium, chlorine, sulfur, and phosphorus are present in our bodies in ionic form; and our tissues also contain trace elements such as cobalt, copper, and zinc.

⁷ See Timothy Ferris' book cited above for a very readable general introduction to this subject. See also Stephen W. Hawking, *A Brief History of Time: From the Big Bang to Black Holes* (Bantam Books, New York, 1988); Heinz R. Pagels, *Perfect Symmetry: The Search for the Beginning of Time* (Simon and Schuster, New York, 1985); James Trefil, *The Dark Side of the Universe: A Scientist Explores the Mysteries of the Cosmos* (Charles Scribner's Sons, New York, 1988); and Steven Weinberg, *The First Three Minutes: A Modern View of the Origin of the Universe* (Updated Edition) (Basic Books, New York, 1988).

⁸ See Sorin Sonea, "The Global Organism: A New View of Bacteria", *The Sciences*, July/August 1988, page 38.

⁹ The findings that I have briefly mentioned on the role of macrophages in the etiology of coronary artery disease comes from Dr. Michael Brown's laboratory at the University of Texas SW Medical Center in Dallas, and were first reported in the Tuesday, October 25, 1988 issue of the *The New York Times*.

¹⁰ The field of psychoneuroimmunology was inaugurated by Robert Ader with the publication of *Psychoneuroimmunology*, in 1981, by Academic Press, Inc. See, more recently, Berczi, Istvan and Szelenyi, Judith (Eds.), *Advances in Psychoneuroimmunology* (New York, Plenum, 1994) and Paul, R. Martin, *The Healing Mind: The Vital Link Between Brain and Behavior, Immunity and Disease* (Dunne Books, 1998)

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- ¹¹ See Meyer Friedman, *Type A Behavior: Its Diagnosis and Treatment* (Plenum, New York, 1996)
- ¹² For the correlation of hostility with coronary disease in Type A and B individuals see Julius, M, etal, "Anger-coping types, blood pressure, and all-cause mortality: A follow-up in Tecumseh, Michigan (1971-1983)," *American Journal of Epidemiology* 124: 220-233, 1986.
- ¹³ For literature on the Type C personality pattern see Baltrusch, H.J. F., etal, "Cancer from the biobehavioral perspective: the type C pattern," *Activ. Nerv. Sup. (Praha)*, 30: 18-20, 1988; and Temoshok, Lydia, "Personality, coping style, emotion and cancer: towards an integrative model," *Cancer Surveys* 6: 545-567, 1987.