HUMAN SALVATION IN AN EVOLUTIONARY WORLD VIEW: AN EXPLORATION IN CHRISTIAN NATURALISM

By Karl E. Peters July 2012

Abstract. In the context of an evolutionary world view, this essay proposes that humans need "salvation," understood as restoring and maintaining well-being or functioning well. Humans are embedded in, embodiments of, and emergent creative-creatures of the universe. We have evolved also as ambivalent creatures--capable of doing good, harm, and standing by while harm is being done. There are multiple factors, such as genetic, neurological, and child developmental factors, that lead to malfunctioning and harmful consequences. There are also multiple religious and secular approaches that help restore well-being. I will develop a view of Jesus as a "religious genius," an exemplar who, grounded in a direct experience of God, taught an alternative wisdom of undiscriminating love and engaged non-violent political activism against the primary domination system of his day, the Roman empire. Christians and others can follow Jesus by engaging in a set of meditative practices that facilitate well-well being out of which compassion for others and a passion for justice flows. Universal love rooted in Jesus is compatible with an evolutionary perspective that all humans on our planet are part of a natural family.

Keywords. Marcus Borg, brain, child development, Christianity, compassion, evolution, genes, human evil, internal family systems, Jesus, justice, Melvin Konner, naturalism, salvation, wellbeing, Walter Wink

Human beings are storytellers. For millennia we have told stories about ourselves, those related to us, and about how we should behave. Some stories are really big stories--about how we came to be as human beings, as a particular people, and why we have the problems we have in our lives.

A new story is emerging among those who are grounded in the natural and social sciences. It is called by many names such as "The Universe Story" (Swimme and Berry 1992), "The Epic of Creation" (Zygon Center for Religion and Science 2012), "Epic of Evolution" (Chaisson 2006), and "The Evolutionary Epic" (Genet 2009). Sometimes it is called "big history"—not history of a particular society or even of human beings and world civilizations, but the history of the entire universe from 14 billion years ago until the present (Brown 2008, Spier 2011).

This story has the potential to become "everybody's story," because it is grounded in contemporary science and because scientific understandings are not limited to any existing cultural or religious tradition. Many of the physical, life, and social sciences have contributed to this story. According to Loyal Rue in *Everybody's Story* (2000), "the unifying insight behind this integration of the sciences is that the entire universe is evolving. The universe is a single reality—one long, sweeping spectacular process of interconnected events. The universe is not a place

were evolution happens, *it is* the evolution happening. It is not a stage on which dramas unfold, *it* is the unfolding drama itself. If ever there was a candidate for a universal story, it must be this story of cosmic evolution" (Rue 2000, 42-43). Rue briefly summarizes this story:

Everybody's story is centered on a narration of the emergence of matter, life, and consciousness. In a nutshell the story goes as follows. As the universe evolved, matter emerged with properties enabling it to become organized into a staggering variety of complex patterns. The processes of life emerged out of these complex patterns. Living forms, too, came to be organized in various and complex species as the processes of life adapted to the conditions of changing environments. Among the many diverse forms of life are those endowed with a central nervous system, a structure from which emerged the realities of conscious experience, self-conscious behavior, and historical traditions (Rue 2000, 48-49).

One thing stories of evolution do not often do is to account for the emergence of human evil. Why do human beings do not only good things but also bad things--harming others and the planet? Why do many stand by and do nothing when they see harm being done? How can human evil behavior be prevented and overcome, and how can doing good be increased? In the past few decades, many scientists have been exploring the evolutionary, biological, developmental, and social conditions for human individual and communal evil behavior. The results of some of these explorations were given by presenters at the 2011 Summer Conference of the Institute on Religion in an Age of Science at the Chautauqua Institution in western New York state. In this essay I would like to relate some of their ideas to the Christian idea of human salvation and show how the idea of salvation can be expressed in the context of an evolutionary view of the world and human beings. My work here is an exploration in Christian naturalism. Christian naturalism attempts to understand the ideas, practices, and experiences of religion in terms of our life here and now. It is one way that theology might be conceived in relation to findings from the sciences, to more general lived experiences, and to some features of Christian thought suggested by contemporary biblical scholarship.

AN UNDERSTANDING OF "SALVATION"

What does the word "salvation" mean? According to New Testament scholar Marcus Borg, the biblical understanding of "salvation" is not primarily to a future life after death but a transformation in this life of both ourselves and the world. It is a transformation we yearn for--"for a fuller connection to what is, from liberation to all that keeps us in bondage, for sight, for wholeness, for the healing of the wounds of existence, . . . for a world that is a better place," a world of social justice and peace (Borg 2011, 54).

The English term "salvation" is from the Latin *salus*, which means health, safety, and well-being. Well-being can be understood as the functioning of the various parts of an organism in concert, able to adapt to ever changing circumstances. Because all things are constantly changing, the well-functioning of an organism is dynamic over time. Often there is functioning

within a normal range of variation, as with the body's regulation of its temperature or of pursuing food and drink with mechanisms felt as hunger, thirst, and the satiation of these. Below we will see that the same can be applied to emotions that give rise to behavior: some are "negative" emotions of avoidance or protection, and others are positive emotions of reaching out to realize opportunities for relationship with the wider world. Well-being or well-functioning is a process of dynamic harmony, like the flow of themes and movements in music and dance.

Evil is impaired well-being, impaired functioning in which dynamic harmony is disrupted and an organism does not optimally flourish. Some examples of impaired functioning are a person experiencing ongoing, unresolved inner conflict ("divided self"), a person in an internal state of bondage in which a part takes excessive control and dominates other parts (an internal bondage of the will), a society oppressed and enslaved by another society, a society in civil war, and a perversion of an individual or social system in a way that some parts of the system are destroyed or incapacitated while others benefit.

Doing evil is to destroy, disrupt, or impair the dynamic, harmonious functioning of other individuals, social systems, and natural systems. Being a passive bystander, doing nothing and permitting harm to others to occur when one could do something about it, is also "doing evil."

Salvation may involve preventing evil by saving an individual, group, society, or even the planet from being disrupted, impaired, or destroyed. It also can be rescuing and restoring individuals and communities to well-being and well-functioning--healing after being disrupted or impaired. And it may also include maintaining individuals and communities in the restored dynamic harmony. In this paper I will suggest that one path to salvation, understood this way, is to become "centered in God." By being centered in God, people will have well-being and function well--all parts working together harmoniously to adapt to changing circumstances. Being centered in God gives rise to compassion for others, which leads to saving actions for the good of others out of a sense of justice for all. Some current New Testament scholarship holds that Jesus is an exemplar of being centered in God, showing compassion for all and seeking justice for all.

The following questions will provide the overall structure to this essay: 1) What are we as human beings? 2) How do we go wrong? 3) How can we be "saved"? 4) What can we become?

WHAT ARE WE AS HUMAN BEINGS?

Human Beings Are Relational Created Beings. In response to the first question and in terms of the current scientific world view, we are relational created beings. First, we are relational created beings in that we are embedded in the universe, dependent on the sun, dependent on the earth for food and breath and for taking care of our wastes. We are dependent on culture and society—family, education, and other social and political institutions. Second, we are relational created beings that are embodiments of the universe as it has evolved to the present. We embody the energy of the big bang. We embody atoms created in the dying of early stars. We embody a code of life, DNA, the ancestry of which goes back to the earliest replicating molecules. In particular,

we embody a DNA code that is similar to that of our animal cousins, the chimpanzees and bonobos (e.g., de Waal 2005). Third, we are emergent relational creatures with ever-changing ways of behaving, communicating, and relating. Two features of this emergence are that we are ambivalent creatures and that we are creatures of intelligence and culture.

Humans Are Ambivalent Created Beings. In the concluding chapter of The Inner Ape Frans de Waal writes that

human nature . . . is inherently multidimensional and the same applies to chimpanzee and bonobo nature. . . . Being both more systematically brutal than chimps and more empathic than bonobos, we are by far the most bipolar ape. Our societies are never completely peaceful, never completely competitive, never ruled by sheer selfishness, and never perfectly moral. Pure states are not nature's way. What's true for human society is also true for human nature. One can find both kindness and cruelty, nobility and vulgarity—sometimes in the same person. We're full of contradictions, but mostly tamed ones (de Waal 2005, 233).

De Waal suggests that the taming is shaped by our intelligence, which is another aspect of human emergence. We have emerged as creatures of intelligence and culture. In some continuity with other animals, we humans have have emerged with a variety of expanded and enhanced animal capacities. These include:

- 1) evolved complex circuitry between parts of the brain stem and neocortex via the thalamus that, according to Antonio Damasio, contribute to self consciousness (Damasio 2010, 250-52);
- 2) a highly developed neocortex that is capable of developing and using complex symbols--Terrence Deacon's "symbolic species" (Deacon 1997)--which allows us to think imaginatively and create culture (including art, music, science, political institutions, and religion), and technologies to change our environments, ourselves, and the future;
- 3) a "social brain network," including mirror neurons that contribute to a capacity for imagining other minds and for empathy (Shoemaker 2012);
- 4) a brain with which we not only make choices below the level of consciousness (Banaji 2012; Hardin and Banaji 2012) but also with which, utilizing our developed frontal lobes, we can consciously reflect on our decisions, anticipate the future effects of our actions, and evaluate those effects.

Because of developments such as these, we are not only created beings; we have also emerged to be self-aware creating beings.

However, we do not always use our intelligence constructively to guide our ambivalent desires, emotions, and thoughts. With our intelligence we are able to create cultures that are kind and noble, but we often create cultures that are dominated by competition and by oppression, injustice, abuse, torture, and murder. New Testament scholar Walter Wink calls social systems that are governed by competitive oppression "Domination Systems" (Wink 1998). Examples are the Roman Empire at the time of Jesus, South Africa under apartheid, contemporary dictatorships

or oligarchies that imprison, torture and kill political opponents, countries that invade and take over vulnerable peoples, corporations that are manipulated by top-level executives for their own gain at the expense of the company and its workers and investors, families ruled by a despotic, abusive parent, and religious organizations in which leaders manipulate their followers for their personal benefit.

Humans Have Evolved Positive and Negative Emotions. An interesting part of our ambivalence is our system of positive and negative emotions. "Emotions are . . . a set of body-rooted survival mechanisms that have evolved to turn us away from danger and propel us forward to things that may be of benefit" (Carter 2010, 81). Some emotions are positive in that they help us to actualize opportunities; others, sometimes called negative emotions, help us avoid threats and deal with loss. At appropriate times, under particular conditions, all emotions are good. "Specific emotions partially differentiated from more primal generic states because they improved ability to cope with specific kinds of threats and opportunities" as shown by the following tentative phylogeny of emotions developed by Randolf Nesse in Figure 1 (Nesse and Ellsworth 2009, 131).



FIGURE 1

Note. Reprinted from "Natural Selection and the Elusiveness of Happiness" by R. M. Nesse, 2004, Philosophical Transactions of the Royal Society of LondonSeries B, Biological Sciences, 359, p. 1341. Copyright 2004 by Royal Society Publishing.

We are a remarkable species that can knowingly engage in creativity and help bring much new good into being. But our intelligence and our creativity can also result in evil behavior. Our science and technology, our literature and art, and even our religion can contribute to the harm we do to one another. In the process of evolution we have emerged as ambivalent creatures.

Experiencing Ambivalence in Our Inner Systems. A model that helps me make sense of my own ambivalence has been developed by psychotherapist Richard C. Schwartz--an "internal family systems" model. This model suggests that each of us has an internal system containing sub-personalities or "parts" (Schwartz 1995; Davis 2008). Drawing on several years of counseling practice, Schwartz suggests we that we have three major kinds of parts that function in different ways as protectors in our inner system. He calls these parts "exiles," "managers," and "firefighters" (see Figure 2).

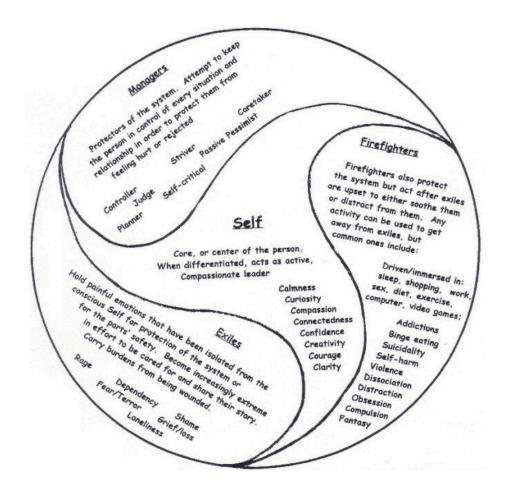


FIGURE 2
The Internal System
Graphic by Janet R. Mullen(Mullen 2001-2002)

Text adapted from Richard C. Schwartz, Internal Family Systems Theory (1995)

As with Nesse's understanding of emotions, all our internal parts are good insofar as they help us function well and deal with the circumstances of our lives

Exiles are the parts we experience when we are feeling afraid, sad, hurt, rejected, worthless, powerless, and ashamed, and when we are feeling hopeless, empty, and unlovable. These are the kind of feelings we don't like to feel—painful feelings. We want to hide them, to put them into "a closet." Hence, the name "exiles." Yet, if we can "listen" to them mindfully and compassionately, such feelings as fear and sadness can be warning signs that help us appropriately respond to a present situation and heal from previous painful experiences.

Managers are parts that, often in response to these painful feelings, try to keep order and control. Insofar as they do this in calm, creative ways, mangers are good in that they help us survive and flourish. However, sometime managers can become extreme in their behavior, going "overboard" as they assert themselves. Sometimes they do this by striving to be perfect or pleasing, and by excessive care-taking of others. Sometimes they are overly self-critical. Sometimes overly assertive managers become aggressive in a kind of dominating control over oneself and others.

However, when our managers can't keep control and exiled feelings come pouring out and threaten to overwhelm us, another kind of part steps in—a firefighter. Firefighters try to help the person regain control by extinguishing painful feelings or by disconnecting a person from them. Too much sleeping, rage and violence, clinical depression, and suicidal and homicidal thinking are examples of firefighters trying to numb unwanted feelings. Various kinds of excessive behavior may also be attempts to quell the stress of painful feelings—excessive drinking, eating, sex, and shopping.

Under normal conditions, it is good to eat, drink, have sex, and shop. In appropriate situations, it is good to express anger. Also, short-term depression may have health benefits and survival value (Nesse and Williams 1996, 215-221). Yet, often in response to the stress of frustration, deprivation, and trauma, our inner parts can be driven to extreme. They then take over control of our lives, and we are in bondage to them. When other parts, pushed to extremes, rise up and try to counter those parts holding us in bondage, the result is a conflicted, divided, and unhappy person--a person who is at war within. And when people succumb to cultural leaders who offer "false salvation" by scapegoating and demonizing others, they become bound to systems of domination. When the internal parts of people are out of control, they contribute to social systems that can engage in mass violence, warfare and genocide (See Staub 2012).

Along with the above kinds of sub personalities or parts, there is something else that is central and most important in a person. Schwartz calls this the "Self." In Schwartz's model, the Self is the core of a person. In various religious traditions this has been called such things as mind of Christ, Buddha nature, or Atman in Hinduism. I call it our sacred center, the divine, or God within. It is a state in which we are in the present moment, in which we are calm and centered, peaceful yet energized. We are confident, curious, creative and compassionate. In this state we are understanding and not judging. We are connecting and not disengaging, healing and

not hurting. This applies to our own inner parts and also to our relationships with others and their sub personalities. Schwartz describes this state in terms of his own experience in a counseling session:

Once you've attuned with your client, the session begins to flow, and there's an almost effortless quality to the work, as if something magical were unfolding almost by itself. I don't even think about what I'm going to say—the right words just come out, as if something were speaking through me. Afterward, I'm full of energy, as if I've been meditating for an hour rather than doing hard, demanding, clinical work. In a sense, of course, I've been in a state of meditation—a state of deep mindfulness, full-bodied attention, centered awareness, and inner calm. And even after all these years, I still have the sense of being witness to something awe inspiring, as if the client and I both were connected to something beyond us, much bigger than we are (Schwartz 2004, 43).

Later, I will suggest that growing in our sacred center or becoming centered in God is a way to salvation—to human well-being, to functioning well as individuals and motivated to include all in a circle of love and justice. Jesus can be regarded as a "religious genius," who is one exemplar of this way. But first, let us explore some factors that contribute to our doing evil?

HOW CAN WE GO WRONG?

If human beings are embedded in the universe, embodiments of the universe, and emergent creators in the universe, why do we get things so messed up? Why do we become, in Christian terms, "fallen" creatures? Why do we do things that are destructive to ourselves and to others? How is it that our creativity contributes to the rise of organizations and societies that are "systems of domination" that further mass violence, war, and oppression? Why are we so often "bystanders" when we see harm being done to individuals or groups of people--even whole societies?

In terms of salvation as human well-being and well functioning, things go wrong when our individual and communal systems become unbalanced, when the relationships within or between humans become distorted. We can identify a number of kinds of factors that influence such malfunctioning.

Multiple Causes. The factors are many, and they interact with one other. Melvin Konner, following Nikko Tinbergen, has developed a multicausal approach to human behavior. He suggests that there are nine kinds of causes arranged in three types. First, there are remote or evolutionary causes: 1) the phylogenetic constraints because the organism is of a particular type, 2) ecological/demographic causes resulting from an organism being adapted to a particular environment, and, 3) resulting from the first two causes, the individual's genome that falls within a certain spectrum of variation for its species. Second there are intermediate or developmental causes: 4) embryonic/maturational processes guided by the genome throughout life, 5) early environmental effects in critical or sensitive periods of development, for example in the first three years of life, 6) and ongoing environmental effects such as stress and various kinds of

social reinforcement that operate throughout life. Finally, there are more immediate causes: 7) longer-term physiological causes, such as hormones, that are outcomes of gene expression in response to environmental contingencies and that operate for minutes or days, 8) short-term physiological effects such as neural circuits and transmitters that operate from milliseconds to minutes and are the immediate internal causes of behavior, and 9) the immediate external causes that are elicitors or releasers that precipitate the behavior (Konner, 2010, 28-29; see also Peters 2008 where, following Konner 2002, I apply these to murderous rage).

Before going into more detail on four of the causes for harmful human behavior, here are a few brief examples of some of these factors. In the limbic system of the brain, specifically the hypothalamus, neurotransmitters such as serotonin (cause 8) help people exercise controlled aggression to vie for dominant status in organizations and societies. In men, the hormone testosterone (cause 7) contributes to aggressive behavior. The most noticeable increase in testosterone occurs at puberty when boys undergo a process of masculinization. However, there also is "masculinization" of the male fetal brain causing a greater number of connections to other cells, for example in parts of the hypothalamus (Konner 2002, 107). Also, during adolescence the frontal lobes are still becoming sheathed in myelin, which speeds up neurotransmission, so that frontal lobe areas that assess and control risk taking and aggression are not fully developed in both male and female "teenage brains" (cause 4) (Blakemore 2008). Further, as children grow up, our culture can reward aggressive behavior, especially in the military; and continual exposure to violence can desensitize people to the results of violence-whether in military training or through exposing children to violent TV and video games (cause 6). Finally, stress caused by physical and psychological pain, irritation, frustration, and fear can trigger aggression when one is threatened or rejected in a particular situation (remember Schwartz's exiles and firefighters) (cause 9). The situation itself can be a triggering environment for cruel and abusive behavior, exemplified in Philip Zimbardo's famous "Stanford Prison Experiment" and in the real-life situation of Abu Ghraib (Zimbardo 2007). However, in these cases, there may also have been personality factors (biological and environmental) among the volunteers for the experiment at Stanford or for prison guards at Abu Ghraib (Staub 2007).

Evolutionary, Genetic, Neurological, and Early-Childhood Environmental Factors. Now I will focus in more detail on four causes: evolutionary factors (causes 1,2), genetic factors (cause3), neurological (brain) factors (cause 8), and early childhood family causes (cause 5). Of the last three, no one factor is sufficient to cause someone to engage in violent behavior; however, together all three can be sufficient conditions, as we will see from what follows.

If we begin with evolutionary factors, we have to recognize that many genetic-neurological-behavioral developments were selected because they contributed to survival in particular environments than included natural resources and other species or groups in the same species, especially in primates including humans. Natural selection in part works on a human "in-group, out-group" system. Genetic and other biologically based potentials for behavior have developed through natural selection insofar as they encouraged in-group cooperation when there was out-

group competition for food, water, and land. In this way, one can understand two recent studies of oxytocin that concluded that this neuropeptide not only contributes to parental bonding and love between people close to us, but also "drives a 'tend and defend' response in that it promoted both in-group trust and cooperation, and defensive, but not offensive, aggression toward competing out-groups," which can be called "parochial altruism" (De Dreu et.al. 2010) or "ethnocentrism (De Drew et.al. 2011; see also Taylor 2006).

There are several genes that are associated with human violence. The most prominent one is the MAOA gene, which was discovered by Brunner and colleagues when they examined a Dutch family that had a high percentage of violent males (Morel 1993). The MAOA gene directs the formation of the enzyme monoaminoxidase, which functions to deactivate neurotransmitters such as serotonin in regions of the brain such as the amygdala. One variant of the MAOA gene produces a lower level of the enzyme than the other, normal variant. The lower amount is not as effective in deactivating the neurotransmitters, allowing them to build up (Viding and Frith 2006; Beaver et.al. 2009). As they increase, the individual person becomes more prone to anger, aggression, and violence, especially if they suffered adverse environmental factors while growing up. A recent study of 399 males from Christchurch New Zealand, confirms earlier findings of gene-environment interaction involving the MAOA gene, a range of adverse environmental and personal factors, and antisocial behavior across the life course. When individuals with the low-activity MAOA genotype suffered childhood maltreatment, they were more likely to engage in antisocial and criminal behavior during adolesence and young adulthood (Fergguson et. al. 2012).

Another factor that can contribute to human violence is abnormal brain structure and functioning, especially in the amygdala, which is part of the limbic system, and in a part of the prefrontal cortex that is called the orbital cortex, which located just above the eye sockets. James Fallon is Professor Emeritus of Anatomy and Neurobiology and Professor of Psychiatry and Human Behavior at the School of Medicine, University of California at Irvine. In a review article for lawyers, he explains that the orbital cortex has extensive ties to the amygdala, and they inhibit each others activity. Both send projections to other brain structures, including the nucleus accumbens, which governs motor output or behavior, and they compete with each other for the control of that behavior. "The amygdala stimulates appetitive behaviors such as sex, aggression, feeding, and eating; the orbital cortex inhibits these behaviors. The net balance of orbital cortex versus amygdala is a key to understanding regulation of behavior, especially those involving addiction, violence, sex, and the like" (Fallon 2006, 362; see Shoemaker 2012 for additional structures that are involved in what he calls the "social brain network," what Kiehl [2006] calls the "paralimbic system"). For lawyers and others dealing with people who consistently exhibit aggressive and violent behavior, Fallon writes that "the simplest explanation, and most common finding, for the biological basis of psychopathology especially associated with impulsive and violent behavior is that the individual has incurred significant damage to the orbital cortex and adjacent parts of the prefrontal and anterior temporal lobe" (Fallon 2006, 343).

The significance of this link between the brain and violence is illustrated by the following personal story about Fallon, which was part of a series on neurobiology and law on National Public Radio (Hagerty 2010), was written up in the Wall Street Journal (Naik 2009) and was posted in his school's on-line magazine (Bold 2010). As part of his research interest in the biological basis for behavior, Fallon had studied the brains of psychopaths for nearly 20 years, trying to understand how a "killers" brain differs from the brains of "normal" people. Because of his experience, he was able to identify correctly 30 killers out of 70 subjects in a double blind experiment by simply studying their brain scans (Bold 2010).

One evening at a family barbecue, his eighty-eight year old mother suggested that he might want to look at his own family. There were several killers on his father's side, including a direct ancestor Thomas Cornell, who was hanged in 1693 for murdering his mother, and a distant cousin Lizzie Borden, who was tried but acquitted of the hatchet murders of her father and step mother in 1892. So, Fallon decided to research his immediate family. In 2006 he had collected brain scans and DNA samples from himself and seven relatives to assess his family's risk of developing Alzheimer's disease. He reviewed the same data for evidence of genes and brain images for violence (Naik 2009). Only one person in the family had the variant of the MAOA gene associated with violent behavior and also an inactive orbital cortex like the murderers he had been studying. To his surprise, it was Fallon himself. Yet, he was not a murderer or even a violent man. What was different? He says that he was raised in a loving family. "I had a charmed childhood; I was never abused. No one's done anything bad enough to turn me into a killer," "It shows that your genes are not a jail sentence" (Bold 2010). Nurture is just as important.

Early Childhood Development. Early childhood development is an especially important factor that influences whether a person is prone to violent behavior. Unlike most other species, whose newborns are ready for life shortly after birth, human beings require a long childhood in a nurturing environment in order to develop well into adulthood (Pederson 2004). When children are loved and nurtured, sometimes even when they may be genetically and neurologically compromised (as in the case of Fallon), they can grow into to healthy adults. However, when children are neglected in the first three years of life, even the physical development of their brain is affected. Orphans adopted from Romania suffered "global neglect" (depravations in many forms of contact such as language, touch, and interaction with others). Studies show that their brains are significantly smaller than those of normal children with "fewer neuronal pathways for learning" (Child Welfare Information Gateway 2009, 8-9).

How do family and social environments affect brain development in children? Bruce D. Perry explains that a human brain actualizes its genetic potentials and organizes itself as a reflection of both good and bad experiences. The brain organizes itself sequentially from the brainstem to more complex limbic and cortical areas. This organization is influenced by a variety of neurotransmitters whose signals help cells "migrate, differentiate, sprout dendritic trees, and form synaptic connections."

Some of the most important of these signals come from the monoamine neural systems (i.e.,

norepinephrine, dopamine, and serotonin). . . . Due to their wide distribution throughout the brain, and their role in mediating and modulating a huge array of functions, impairment in the organization and functioning of these monoamine neurotransmitter systems can result in a cascade of dysfunction from lower regions (where these systems originate) up to all of the target areas higher in the brain [e.g. the amygdala and orbital cortex]. If the impairment occurs in utero (e.g., prenatal exposure to drugs or alcohol) or in early childhood (e.g., emotional neglect or trauma), this cascade of dysfunction can disrupt normal development (Perry 2009, 242).

If a child is subjected to continuous stress, called "toxic stress," that is, if a child "experiences strong, frequent, and/or prolonged adversity—such as physical or emotional abuse, chronic neglect, caregiver substance abuse or mental illness, exposure to violence, and/or the accumulated burdens of family economic hardship—without adequate adult support" the development of brain architecture and that of other organ systems can be disrupted (Center for the Developing Child 2012). This increases the risk of stress related diseases into adult years, of cognitive impairment, and of impulsive, aggressive, and violent behavior. Further, if a child has a gene variant that leads to the low production of the monooxidase enzyme, as discussed above, the child is at risk for becoming a psychopath, even a serial killer.

Most of us reading this essay are not psychopaths, which some estimate to be about 1% of the American population, about 25% of people in prison, and10% of people on Wall Street--a conservative estimate. Likewise, most of us are not "almost psychopaths" "or "subclinical psychopaths, estimated to be 15% of the general population (Schouten 2012). Almost psychopaths include spouses, coworkers, bosses, neighbors, and political leaders--people who possess charm, glibness, and a lack of empathy. "They exhibit some of the behaviors and attitudes of psychopathy but not to the extent that they meet the current formal criteria" (Schouten and Silver 2012, 10). Further, many of us have not suffered child abuse and neglect, although some of us may have. However, all of us are aware of violence within families, bullying at school, gang members who kill, and mass violence and genocide in places like Rwanda. Most of us are bystanders--those who know what is happening but do nothing. Why?

The Bystander Problem. The core of the bystander problem is that we humans have evolved to have self-protective emotions and behaviors as well as pro-social ones. As stated above, both self-protective and pro-social emotions were naturally selected because they helped humans live and reproduce in particular environments. They were selected in part because they facilitated ingroup cooperation against out-group competition.

A fundamental evolved emotion is fear--especially the fear of strangers. Children after six months show indications of fearing strangers, which works for their self protection. Such fear can also be awakened when we confront people who are obviously different from us. Research by Levine and colleagues shows that "bystanders are more likely to help victims who are described as in-group as opposed to out-group members" (Levine et al. 2002, see also Levine et al. 2010).

This kind of non-response to harm being done is not necessarily conscious and deliberate. It

most often is an unconscious response from parts of our brainstem and limbic system. However, this unconscious response to someone from an out-group can be encouraged by the beliefs and actions of a particular group, society, or culture. Mahzarin Banaji and others have studied such responses in "project implicit" (Banaji 2012, Banaji and Greenwald 2013). This involves a large battery of tests. Anyone can take as many as they would like. These tests usually ask you to pair rapidly words associated with general evaluative ideas (e.g., good or bad, joy or sorrow, healthy or sick) with descriptive concepts such as young or old, men or women, black or white, fat or thin, educated or uneducated, or with images of these kinds of people. Another part of each test is a questionnaire about conscious attitudes.

The test exposes implicit biases by detecting differences in reaction time that can occur when test takers are required to pair evaluative terms with descriptive words or faces. Subjects who report that consciously they have no negative feelings, for example, toward black Americans, the elderly, the uneducated, or the mentally ill are, nevertheless, likely to be slower to match words or faces depicting these kinds of people with positive words than with negative words. The difference in reaction time is a measure of the degree of bias.

When she demonstrated how this works at the 2011 conference of the Institute on Religion in an Age of Science, we learned that we all have unconscious stereotypes, biases, and prejudices that are developed as one grows up in a particular culture in which evaluative distinctions are consistently made. Banaji said that her own unconscious biases reveal themselves in the tests, no matter how many times she has taken them. So our immediate hesitation to come to the aid of someone different is not a conscious decision but a learned unconscious perception that has to be overcome by the conscious deliberative parts of our brain in the frontal cortex.

The bystander problem can occur when just one person is suffering harm. One parent may be a bystander in a family while the other abuses a child; students may be bystanders when a bully keeps picking on one of their fellow students who is different, perhaps of a different race or sexual orientation. Further, the bystander problem can be magnified when entire societies are in conflict in a "civil war" as in Rawanda, a foreign war as the United States was in with Japan during which American citizens of Japanese ancestry were rounded up and interred in camps, or the Holocaust in which many Germans and others stood by during the Nazi genocide of the Jews. In such cases, as Erwin Staub points out, an entire in-group creates an ideology that devaluates, demonizes, and scapegoats the out-group--blaming it for its own economic, social, and political problems. Many in the in-group become "internal bystanders," afraid to resist the leaders and other perpetrators of mass imprisonment, violence, and genocide. People in other countries become "external bystanders," because those suffering are "not one of us" and because leaders fear endangering "national security" (Staub 2011, 18, 195-207). "Nations have traditionally not seen themselves as moral agents. They have used national interest—defined as wealth, power, and influence—as their guiding value" (Staub 2012).

We have made an initial exploration of how humans can go wrong--why we do harm and allow harm to happen to others. We have considered some of the many kinds of causes of human behavior, which include biological and social factors interacting with each other. Because the causes are many and varied, one can imagine that there are also many ways of responding directly or indirectly as an "active bystander" (Staub 2012). Medicine, law, education, economics, politics, and art are some ways of responding. In our understanding of how salvation may occur, organized religion is one of many activities that can enable salvation. To religion we now turn as we continue our exploration of human salvation in an evolutionary world view.

HOW CAN WE BE SAVED?

In religious thinking done in the context of an evolutionary world view, salvation is not to some extra-worldly reality. Neither is it a form of ethical dualism that attempts to deny and eliminate self-protective tendencies in human beings that, in their extreme forms, can throw individuals, groups, or societies out of balance. Rather, it is a "here-and-now" set of ideas and activities that prevent disruption, restore well-functioning, and maintain dynamic harmony of whole systems, whether the system be an individual, a family, an organization, a nation, or the entire human community in relation to other creatures and the rest of the natural world. This is an evolutionary-ecological view, a naturalistic view, of what salvation means.

Paths to salvation are found in many traditional religions, for example in Confucian moral education to live in harmony with heaven and earth, the Buddhist path of right living and meditation, the Jewish path of loving God and neighbor in a just society. There also are contemporary philosophies of life that provide paths of salvation: humanism that strives to promote human dignity and justice for all, spirituality that is based on and facilitates the maintaining and development of the interconnected web of all life, and religious naturalism that, out of a sense of wonder at the universe revealed through the sciences and of gratitude for the gift of life, seeks to develop humane and just ways of living. These and other paths can help humans become well-functioning individuals who live in dynamic harmony with one another and the planet.

In what follows I offer an understanding of one path to salvation that highlights a naturalistic, non-exclusivist Christian perspective within an evolutionary scientific world view. Let us begin with a view of Jesus as a "religious genius," followed by some practices that bring us into what I call our "sacred center," and finally how this leads to compassion and justice for all.

Jesus: a religious genius. Psychologist Dean Keith Simonton has spent much of his professional life studying creativity and genius. Following Donald Campbell (1960), he takes a Darwinian approach and develops a blind variation, selection, retention (BVSR) model of creativity (Simonton 1999 26-27). A creative person is marked by bringing into being new products, solutions to problems, scientific theories, technological inventions, kinds of music, works of art, and ways of living that are both original and useful. There is everyday "little c" creativity, in which many engage, such as finding an original use for a piece of furniture, playing a catchy new tune, constructing an original bouquet of flowers or improvising a new recipe.

There also is "Big-C" Creativity where "originality is much more striking and the usefulness much more pervasive"; there is no precedent for the result, and it "revolutionizes a whole domain of achievement" so that a scientific idea (Einstein), mode of music (Bach), form of art (Picasso), kind of poetry (the sonnet) becomes an exemplar that inspires imitators, admirers, and disciples. In other words, the result is what Thomas Kuhn and others have called a "paradigm shift" (Kuhn 1996). "Big-C" creativity is creativity at the level of genius.

In his work Simonton considers geniuses in a wide variety of domains such as the sciences, arts, and politics. However he intentionally decides not to discuss religious genius as identified in an earlier work by Hart, who rated Mohammed, Isaac Newton, and Jesus as the top three most influential people in history (Hart 2000). Simonton thinks that the idea of genius would be demeaning for the prophet Mohamed or Jesus as the Son of God (Simonton 2009, 15). It seems to me that Simonton is thinking here in the context of traditional supernaturalism. If one takes an evolutionary perspective, as both Simonton and I do (Peters 1982), the idea that Jesus and other founders of religious movements are geniuses becomes worth exploring.

To see how Jesus is a religious genius, New Testament scholar Marcus Borg's analysis of Jesus in terms of comparative religions is helpful. After decades of work with others in the Jesus Seminar distinguishing the historical Jesus from later Christian thinking about Jesus Borg sees three dimensions to that which he calls the "pre-Easter Jesus": a spirit dimension, wisdom dimension, and political dimension. Together these lead to a vision of the Christian life with those same three dimensions. In the spirit dimension Borg says that Jesus was a Jewish mystic, comparable to mystics and shamans in a variety of societies around the world. He was one who was centered in God and had experiential knowledge of God, one in whom the sense of separation and distinction was replaced by a sense of union, of connection with "what is," one for whom the boundaries of the self had grown soft and the dome of the protective ego had fallen away (Borg 132-133.) This experiential connection guided Jesus' teachings (wisdom) and actions (politics).

Wisdom, in contrast to knowledge about the world and ourselves (from experience and science), is about how we should live. Wisdom teachers are found in all cultures. Some teach conventional wisdom: the social morality and mores in which people should be socialized. Others, like Buddha, Socrates, and Jesus teach an alternative wisdom that challenges existing norms. Through his teachings Jesus, for example, challenged an elaborate system of rewards and punishments that marginalized people (he declared that all are children of a loving God), the purity codes of his day (he ate with sinners and tax collectors), the egotistic striving to be first to get rewards and preserving one's life about all else ("the first shall be last," dying to self and being reborn leads to abundant life).

In the political dimension, according to Borg, Jesus was a "non-violent revolutionary," challenging the "domination system" of his day, the Roman Empire that had been accommodated by some Jewish leaders. This is illustrated by Jesus proclaiming that the Kingdom of God was occurring among the people he was with, his eating with and healing social outcasts, and his

telling stories that encouraged people to look at themselves and society in new ways, for example, parables of the Good Samaritan and the Prodigal Son. It also is illustrated by his developing for his day what New Testament scholar Walter Wink calls "Jesus' third way"--a path between submission (or being a passive bystander who does nothing in Ervin Staub's terms) or engaging in a violent response against evil that only furthers evil behavior (Wink 1998, 98-111). This is the way of non-violent resistance in the face of unjust systems of domination.

Jesus was an exemplar of this third way during his final week in Jerusalem. The Palm Sunday procession, the throwing the money changers out of the Temple, the debates with Jewish leaders, all are actions of a non-violent revolutionary designed to protest the domination system of his day on behalf of the poor and oppressed.

The opening act of this week is the Palm Sunday procession. It is important to recognize that this was not the only procession at that time. To guard against things getting out of hand among the Jews, the Roman governor Pilate "rode into the city from . . . the west, at the head of . . . imperial cavalry and foot soldiers arriving to reinforce the garrison on the Temple Mount. They did so each year at Passover, coming to Jerusalem from Maritima, the city on the Mediterranean coast from which the Roman governor administered Judea and Samaria." Jesus came into Jerusalem in another procession from the east. The biblical texts tell us that this was not accidental. It was a procession that Jesus planned. According to Borg, "his decision to enter the city as he did was what we could call a planned political demonstration, a counter-demonstration. The juxtaposition of these two processions embodies the central conflict of Jesus's last week: the kingdom of God or the kingdom of imperial domination two visions of life on earth" (Borg 2006, 232).

This brief description of Jesus suggests that, in Simonton's terms, Jesus is a "religious genius" in terms of originality. There were other healers, zealous advocates of resistance (violent resistance) against the Romans, and Jewish leaders who summarized the teachings of the Torah as loving God and neighbor as self. However, Jesus through his teachings and actions advocated his most important original contribution for his day: *a new ideal of universal non-discriminating love and justice for all people*. He himself was an exemplar of that love (Borg calls it "compassion) that led to a passion for justice.

This "just love," as Margaret Farley (2006) calls it, stands in contrast to people who are intelligent, charming, self-centered, non-empathetic, and in some cases cruel in their relations to others--those who are psychopaths or almost psychopaths. It stands in contrast to what Marjorie Davis (2008) calls "structures of evil," unjust, insensitive, manipulative, and abusive systems in families, schools, churches, businesses and cultures, the results of which are seen in people who come for therapeutic help such as pastoral counseling. It stands in contrast to societies of mass violence and genocide that in times of stress devalue and scapegoat others, and to passive bystanders within and outside of such societies, described by Ervin Staub and briefly summarized above (Staub 2012).

In contrast, Jesus exemplified a way of being centered in God, loving all, and engaging in

non-violent protests for justice. According to Borg, it was especially the political protesting that got him executed—crucified by the Roman authorities.

As we all know, Jesus' death was not the end. Besides what Borg calls the "pre-Easter Jesus" there is the "post-Easter Jesus," who in some way was experienced as a living presence by his follows. Borg suggests that the experiences of the resurrected Jesus and many other manifestations in Jesus' life can be understood as paranormal phenomena. Such phenomena could be included in an expanded naturalism that goes beyond classical empiricism and science, which is the perspective of this essay.

In keeping with a more everyday classical empiricism I turn to the view of Henry Nelson Wieman, namely that everything is an "event." An event is an interaction between various parts of any system: an atom, molecule, living organism, family, organization, and so on. Events are systems in internal and external dynamic relationships. The term "God" also refers to a kind of event--the "creative event" (Wieman 1946, 56-66, 70-78, 299-300).

One of the interesting things about New Testament reports of Jesus is that they do not describe what Jesus looked like or what kind of person he was. Instead, the reports are stories about events, about what Jesus did in relationship with others. Further, even though he gave instruction, often with aphorisms, Jesus also told stories in the form of parables. He related events that taught how people behave and should behave. We might conclude that all the stories about Jesus and the stories and teachings he told constituted a major event—a "Christ event" that was more than the individual Jesus, because it was a way of interacting with people.

In light of this, one can understand Wieman's view of resurrection. The resurrection of Jesus is an experience of the Christ-event, now divorced from the physical person, that continued to work among the followers of Jesus. John Cobb, Jr. summarizes Wieman's five-page development of this line of thinking (Cobb 1972). Writing to a Christian audience, Cobb says that

Our religious heritage centers in the events surrounding the life, ministry, and resurrection of Jesus Christ. In those events the creative event became present in history in a new way. Jesus' interchange with his disciples so transformed them that they became capable of having such interchange with one another. (Wieman 1946, 39-40.) With the death of Jesus this interchange seemed to cease, only to rise to new heights in the resurrection experience. Whereas during Jesus' life it had been restricted in scope to its Jewish context, with his death and resurrection it broke through this cultural limitation and became universal in its scope. (Wieman 1946, 41, 43-44, 278).

This kind of event continues as the unconditional, undiscriminating loving that Jesus practiced during his life. Contemporary people participate in the Christ event (which they may call by other names) whenever they expand their in-group with acts of compassion and justice for all.

A naturalistic Christianity is an event Christianity, a doing Christianity, that embodies in its beliefs and practices the universalizing of acting lovingly that is the genius of Jesus.

Following Jesus: the "Spirit Dimension". If Jesus is an exemplar how can his example be followed today? There are practices in Christianity that are described in terms of traditional

theology. I suggest that these practices can also be used with the naturalistic understanding of salvation presented in this essay. The theology may be different but it can be held that the experience resulting from the practice is the same kind of experience.

One practice is *hesychia*, which Orthodox Christians understand as a path to inner peace and union with God. Practiced first by desert monks alone in their cells, it became an interior practice of living in stillness and silence (Ware 2000, 89-96). To cultivate inner silence one finds a place with no distracting sounds. With eyes closed, one repeats "Lord Jesus" rhythmically, perhaps with the aid of a prayer rope or one's own breathing. This continues until one "let's go" of the multiplicity of disconnected and conflicting thoughts that arise from our conscious and unconscious minds (Ware 2000, 99-102). One finally reaches "true inner silence or *hesychia*," in which there is no internal speaking but instead listening. This "in the deepest sense is identical with the unceasing prayer of the Holy Spirit within us." It is entering "into the life and activity of God" (Ware 2000, 98).

Another practice is "centering prayer" in Roman Catholic Christianity--a method designed to turn off the ordinary flow of thoughts and open oneself to the presence of God. According to Trappist monk Thomas Keating, one should assume a comfortable position, close one's ideas, and choose a one or two syllable word. He calls this a "sacred word" because the "intention is to open yourself beyond thoughts, images, and emotions" (Keating 2002 [1986], 95). Introduce the sacred word very gently into your imagination, "as if you were laying a feather on a piece of cotton." When you become aware of any conscious perceptions, return to the sacred word. Then let yourself pass beyond the sacred word "into pure awareness," "into union with that to which the word points--the Ultimate Mystery, the Presence of God, beyond any perceptions that we can form. . . ." (Keating 2002 [1986], 96).

Similar practices may be secular, such as that employed by psychotherapist Richard C. Schwartz. Under a therapist's guidance, one can be transformed to experience and begin to live more easily from the center of one's being—in a state that Schwartz calls "being in Self." This is being in calm, compassionate awareness of all parts of one's inner ecology. It is also a state in which one is mindful of one's surroundings and can empathize with others.

The Buddhist monk Thich Nhat Hanh also offers a way that helps us to enter into a centered state called mindfulness. When we are mindful, we are fully present to ourselves and to others. He says "conscious breathing is the most basic Buddhist practice for touching peace" and he offers this short exercise. "Breathing in, I calm my body. Breathing out, I smile. Dwelling in the present moment, I know this is a wonderful moment." He then shortens this to: "As we breathe in, we say to ourselves 'Calming," And as we breathe out, we say 'Smiling.' As we breath in again, we say, 'Present moment," and as we breath out, 'Wonderful moment'" (Hanh 1997, 16, 17).

WHAT CAN WE BECOME?

For Christians, being in such a centered state is being in the spirit dimension of Jesus, or the "life

and activity of God." Out of this flow healing, wholeness and well-being, the wisdom of universal loving, and social-political action for justice.

Inner healing and listening love. When we are in a state of centered, mindful, silence, which I call "our sacred center," we become more aware of certain qualities of our inner life, qualities such as calmness, compassion, curiosity, and courage. In such a state one can engage one's inner parts and be a loving witness to all the feelings of fear and worthlessness that are our exiles, to the strivings to be in control that are our managers, to the eruptions that try to extinguish painful feelings with anger, aggression, and indulging. One can listen to them and their stories. One can let them know that they are appreciated for trying to help in their own ways. One can lead them into more positive roles in one's inner ecology so that inner healing can take place, so that we are restored to well-functioning.

With healing taking place within, one can better discern what is happening in the lives of others and in society as a whole. One can more clearly see people who are "broken" for one reason or another and no longer function well. One can more clearly see systems of domination in organizations and society that impair the well-being of their members and engage in destructive conflict with other social and political systems. And in a state of being in our sacred center one can be present to others in listening love. Thich Nhat Hanh writes: "When we are mindful, touching deeply the present moment, we can see and listen deeply, and the fruits are always understanding, acceptance, love, and the desire to relieve suffering and bring joy. When our beautiful child comes up to us and smiles, we are completely there for her" (Hanh 1997, 14). And when we are their for our children--nurturing them even in times of trauma--their brains and bodies will develop in healthy ways. When there is a loving, nurturing environment, healthy development is possible even when genetic factors and brain development predispose some to violence, as in the case of James Fallon.

The kind of theology suggested by this essay lends itself to scientific confirmation in that experiences in the spirit dimension are related to biological capacities for inner healing and outward compassion. Some research on meditation is related to human well-being and the reduction of anxiety and stress. An example is the relaxation response, which is the result of a kind of meditation (adapted from Transcendental Meditation) studied by Herbert Benson and his group, as well as others (Lazer 2000; Esch 2003). Other research explores transcending individual everyday experience to an experience of unity with all being. Brain imaging by Andrew Newberg at the University of Pennsylvania and by Mario Beauregard at the University of Montreal suggests that prayer and meditation are correlated with brain states that can be associated with an experience of unity, which can be interpreted as an experience of the Sacred (Newberg and Waldman 2010; Beauregard and Paquette 2006; and Newberg 2012 for SPET images). Such an experience may also lead to an increased identification with those who are not in their in-groups (Davis and Peters 2012).

However, as Jean Kristeller points out, such experiences do not necessarily lead to altruistic behavior, because they may only bring satisfaction to the individual meditator (Kristeller 2006).

To go further one needs to realign the human emotional spectrum from an overemphasis on negative, self-protective emotions, to increased emphasis on positive pro-social emotions, especially the emotion of empathy, which is part of our evolved neurological capacity. One study in the lab of Richard Davidson used fMRI imaging on experienced and novice meditators engaged in a loving-kindness-compassion meditation. They found that the presentation of emotional sounds of distress during this form of meditation enhanced the activation of brain areas associated with empathy and "theory of mind." The activation was greater in experienced than in novice meditators. (Lutz et al. 2008). Another study compared novices who did compassion meditation for two weeks at thirty minutes a day with a group that reframed suffering experiences with techniques of cognitive-behavioral therapy. From the brain imaging that followed, Davidson concluded that compassion meditation produced three changes in the brain. There was decreased activation of the amygdala and with this a decrease of personal distress. There also was increased activation in the dorsolateral prefrontal cortex associated with goal-directed behavior. And there was an increase in the "connectivity between the prefrontal cortex, the insula (where representations of the body occur), and the nucleus accumbens (where motivation and reward are processed). Rather than becoming depressed by suffering, people who are trained in compassion meditation develop a strong disposition to alleviate suffering and to wish others to be happy" (Davidson with Begley 2012, 223).

Expanding the circle of love and justice: Exemplars and Guides Today. Discernment of harmful human behavior and bystanding, as well as the cultivation of feelings of love, compassion, and a disposition to alleviate suffering, must be expanded to actual altruistic behavior, to loving and just behavior for the wider human community. At times one needs to become an active bystander--engaging in non-violent protest and resistance to uncaring, unjust systems, and facilitating their transformation to states of health in which all parts can function well.

One can do this more easily by becoming part of a group led by contemporary exemplars such as those in our own recent history: Mahatma Ghandi leading a non-violent movement of resistance that liberated the Indian people from the British Empire, Martin Luther King inspiring and guiding the American civil rights movement, and Aung San Suu Kyi leading nonviolently the pro-democracy movement agains the military junta in Myanmar since 1988 (Suu Kyi 2010). When political and economic powers threaten to dominate, oppress, and even exterminate others, we need more people to become affiliated with groups engaged in the Ghandi-King-Suu Kyi kind of nonviolent resistance and protest. We also need to work in existing groups, such as local religious organizations, to move some members (if not the entire organization) to become engaged.

We also need guidance and training in peace-making that transforms conflict into cooperation. Robert and Alice Evans, speakers at the IRAS 2011 conference, described how for thirty years they have trained local and national leaders in various parts of the world in conflict transformation (Evans and Evans 2012). Ervin Staub and Laurie Pearlman, also speakers at the

conference, have worked with leaders in Rwanda, helping them recover and heal from mass violence and genocide, and developing ways of changing the culture to help prevent further conflict (Staub 2011; 2012). Both the Evans and Staub and Perlman made use of stories. The Evans taught people how to listen to each others stories and to write up their stories as case studies to be used by groups being trained in conflict transformation. Staub and Perlman, working with a Dutch NGO (La Benevolencija), developed the radio drama "Musekeweya' ("New Dawn') "centered on a conflict between two villages, with all the elements of origins [of violence], and then, progressively, with elements of prevention and reconciliation infused in the story" (Staub 2012). Also, at the conference Cheryl Kirk-Duggan elegantly illustrated the importance of poetry, literature, film, and music in presenting stories of victimization and healing. Drawing on African-American experiences and womanist theology, Kirk-Duggan pointed out that anguished cries of separation can begin a process of healing people and communities who are broken: there is "hope in the holler" (Crawford 2002). Like the stories about Jesus, these contemporary stories can tell of events that can serve as models for healing, love, and justice after harm has occurred.

Support for inclusive religion from an Evolutionary World View. Moral exemplars and teachers provide guidance with their lives and with the stories they tell and are told about them. They encourage motivation among their followers--turning passive bystanders into active ones who work to expand the circle of love and justice to include a vulnerable child being bullied, an ethnic minority, a lower economic class, women, people with a different sexual orientation, or a country with a different political-economic system. This inclusive religious orientation modeled by Jesus can be supported by an evolutionary world view, grounded in science, that also shows that we all are included in the same human family.

In the first part of this essay, we considered the big-history of the evolution of the universe and how we are embedded in and embodiments of this history. We also are emergent creatures: with our complex brains working in the sciences and with knowledge from the sciences, we can create the "universe story." We can create and tell this story with powerful symbols--metaphors from our life experiences, literature, the arts, and religion. Such a scientific-symbolic story can help move us to act for good rather than harm.

In a scientifically grounded, naturalistic, evolutionary world view, a theme of our story is that each unique, individual human being is the creation of a fourteen-billion year history. If we could know enough, the history of each individual could be traced back to the origin of the universe, to the energy that was transformed into atoms of hydrogen and helium, into more complex atoms in exploding stars, into life forms on planet earth, and with humans into creatures that have emerged to reflect back on this whole process. Each individual is a particular stream of energy, matter, and life that flowed out of the original inflation called the big bang. Each of us is fourteen billion years old--all human beings. Each of us is embedded in the universe and in her or his own unique way embodies the universe. Each is a special "child" of the universe.

When we reflect on this we can realize how precious is each individual! How mysterious

and amazing the creativity that brought us all into being! And with this sense of the value of all things and the wonder of all of creation, we come to feel a heightened sense of responsibility for one another, especially for those whose well being is impaired by human activity. I suggest that a way of becoming more responsible is to engage in practices that lead us to our sacred centers, to express this centeredness by working with others in all aspects of life to help heal malfunctioning humans through medicine, education, politics, and other social institutions. Becoming responsible is speaking out and acting for inclusive love and justice, so that all humans in relationship to one another and the wider world may be whole and function well--salvation for humanity and the world.

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