AUTHOR: CHARLES C. VERHAREN/DEPARTMENT OF PHILOSOPHY/

HOWARD UNIVERSITY

EXCERPT FROM AUTHORS' ACCEPTED VERSION OF "INTRODUCING SURVIVAL ETHICS INTO ENGINEERING EDUCATION AND PRACTICE," *SCIENCE AND ENGINEERING ETHICS*. AUTHORS: VERHAREN, CHARLES C; THARAKAN, JOHN; MIDDENDORF, GEORGE; CASTRO-SITIRICHE, MARCEL; KADODA, GADA. DOI 10.1007/s11948-011-9332-9, RECEIVED: 22 JUNE 2011 / ACCEPTED: 24 NOVEMBER 2011

SURVIVAL ETHICS THEORY: TO BE GOOD IS FIRST TO BE

Ethical systems specify life's basic values and appropriate means to achieve them. Haidt (2007) claimed that although ethical systems vary culturally, they all include a set of basic values: fairness, loyalty, respect for authority and spiritual purity. While agreeing on the importance of these values, we suggest an alternative approach that recognizes a more fundamental set of values justified by their direct survival utility. Renowned thinkers have singled out these values, and cultures through the ages have exhibited dependence on them. Principles like Haidt's fairness and loyalty may be derived from this foundational set.

There are two basic values in this *survival ethics system*. The first is survival itself: *To be good is first to be*—both for individuals and the communities to which they belong. All other values follow from this first principle because no other values exist in the absence of life itself. The second value is flourishing, inasmuch as survival is better achieved when life flourishes. Values such as rationality, community bonding, pleasure, freedom, and introspection or

meditation define flourishing.

The fact that survival is the pre-condition for all other values does not mean that survival of self is the most important value. Revered figures like Socrates, Christ, Gandhi and King sacrificed their lives for the sake of duty, love and freedom—and the survival of other members of their communities (Ridley 1998; Axelrod 2006). However, analyzing values in the light of survival can help bridge the differences between competing ethical systems. And focusing on the preconditions for survival presents a model for objectivity in ethics.

Human survival is itself dependent upon five unassailable goods: clean air, temperature control through clothing and shelter, potable water, nutritious food, basic healthcare and education in descending order of immediacy. The ranking order is operative for all human societies. That objective fact cannot change, regardless of cultural orientations.

Beyond the bare facts of survival, however, is the contentious nature of ethics. Philosophers like Hume trace the failure to achieve objective consensus in ethics to the distinction between facts and values. The conditions for survival are matters for scientific discovery. Whether other values should take precedence over survival, and whether all humans have a right to survival are matters for ethical decision.

However, just as Newton demolished the distinction between celestial and terrestrial motion with laws of universal gravitation, ethical theorists like Joyce (2001) and Harris (2010) attempt to collapse the distinction between the "is" and the "ought." Values like survival, freedom, love spring from desires. Desires are facts. How desires arise and whether desires are appropriate for achieving desired ends are matters for scientific investigation (Lekka-Kowalik 2010). Joyce (2006) collapses ethics into the neurobiological and psychological sciences in an effort to explain the origins and development of ethics by means of evolutionary theory. The

mainspring of this kind of explanation is genetic change and natural selection.

More traditional philosophers like Appiah (2008) admit that ethics has always been an experimental discipline. However, Appiah insists that scientific generalizations cannot have the force of ethical prescriptions. The fundamental values that set the course of our lives are matters for choice rather scientific delineation.

In this essay we claim that choices and reasons for choices are themselves subject to empirical investigation. Human choices of basic values have changed dramatically over time. We propose generalized explanations for significant changes in ethical systems. The essay's method is philosophical rather than empirical. It furnishes guidelines for empirical research rather than specific claims. More importantly, it proposes a method for achieving consensus on urgent ethical decisions confronting global engineering communities.

I The Structure of Revolutions in Ethics: Defining What is Good

There are at least two kinds of revolutions in ethics: one focused on defining what is good and the other on defining populations covered by ethical systems. Thinkers across Africa and Eurasia outlined the first kind of revolution over two thousand years ago. While those same thinkers sketched proposals for the second kind of revolution at the same time, their proposals are only beginning to be acted on in recent times.

The term *ethics* has acquired the sense of a field distinct from morals. For the purposes of this essay, the term *morals* refers to behavior that is customary or acceptable in a given society. *Ethics* means the study of morals and more deeply the study of value itself (Haws 2004). What is valuable is what is desired or, more strictly, what is desirable given some set of

fundamental assumptions.

At its most basic level, ethics considers appropriate mechanisms for choosing principles or values to guide our lives. The history of African and Eurasian ethics presents a medley of sometimes conflicting goods. Early African and Asian primary values appear to be commonsensical and grounded in the conditions necessary for human survival and flourishing. The oldest written philosophy, that of ancient Egypt starting around 2800 BCE, presents *maat* as the highest good. *Maat* is variously translated as harmony, order, peace, justice, tranquility (Hornung 1971/1982).

Other African cultures like the Oromo in Ethiopia emphasize a similar overriding ethical principle. The principal ethical good of the Borana, the Oromo group in the southernmost part of Ethiopia bordering on Kenya, is *nagaa*, translated as peace or harmony. The Oromo ensure a community-wide harmony among themselves, their neighbors, and the environment through a democratic system called *gaada* (Verharen 2008a).

The ancient Chinese philosophy of Taoism, canonized by Lao-Tzu and Chuang-Tzu around 600 BCE, enjoins the ethical principle of *wu-wei*, translated as passive non-doing. The Taoists, as their name suggests, believe that the universe is comprised of a single principle, the *Tao*, which is a balance of complementary principles striving for harmony. As the *Tao* or nature seeks its balance, humans live well if they follow nature's guiding principle of harmony rather than forcefully imposing an artificial system of control on nature (Chan 1963).

The common-sense principles of *maat, naaga,* and *wu-wei* contrast sharply with the ethical maxims of other ancient traditions. Hindu philosophy enjoins a value of *moksha* or liberation from our common-sense conviction that this life we live daily is real rather than a dream (*maya*). The primary ethical practice of this tradition is meditation, known through the

practices of yoga, or the union of self (*Atman*) with god (*Brahman*). Buddhism dispenses with the metaphysical presuppositions of Hinduism to focus on a single practical problem—how to eliminate suffering or achieve *nirvana*. Like Hinduism, however, Buddhism focuses on meditation as the instrument of liberation from suffering (Radhakrishnan, Moore 1967).

Plato's concept of the good is the very idea of good itself. For Plato, the whole point of life is to contemplate the perfect model of all that is good. Plato stands out among Greek ethicists for making the contemplation of the good by an immortal soul the overarching end of humanity. Other Greek ethicists are much more down to earth. The hedonists notoriously make pleasure the end of all ends.

Aristotle rejects pleasure and substitutes *eudaimonia* or happiness. He defines happiness as activity in accord with excellence (Harris 2008). Excellence is a function of the nature of an organism. As rational beings, our highest activity is thinking, and the greatest kind of thinking is thinking about thinking itself, defined by Aristotle as contemplation or philosophy.

Augustine carries on the theoretical Christian tradition of universal, unconditional love as the primary ethical principle. However, this principle, first enunciated by the now little known Chinese philosopher Mo Di (also Mozi, Mo Tzu) in the fifth century BCE, is honored more in the breach than in the observance.

Subsequent ethicists in the European tradition subscribe to more common-sense ethical principles: pleasure for Bentham and Mill; duty expressed through universalization for Kant; freedom for Hegel, Marx, and the existentialists; and the return to the basics of survival and flourishing by American pragmatists like James, Dewey, and Rorty.

These apparently quite diverse and seemingly random ethical goods can be reduced to a basket of seven fundamental values. The basic values are survival, flourishing, rationality,

community bonding, pleasure, freedom, and introspection or meditation. They cut across African, Asian, and European traditions, and they are associated with the most illustrious philosophers in the traditions of these continents. The common key values are the following: survival for Darwinists, pragmatists, Taoists, and ancient Africans; pleasure for hedonists, Bentham, and Mill; rationality for Plato, Spinoza and Kant; love or caring for Christians, Mohists, and feminists; happiness for Aristotle; freedom for Marx; and introspection or meditation for Hindus, Buddhists, and many Judaic, Christian, and Muslim sects.

Other important values like Haidt's loyalty and obedience to authority, Nietzsche's will to power, or Rawl's justice as fairness may be reduced to survival ethics' seven core values. Loyalty and obedience to authority are aspects of community bonding. Power is justified through its links to survival and freedom. Justice derives from the universal generalizations of rationality (e.g., Kant's categorical imperative) and community bonding buttressed by empathy.

Our reduction is provisional and contingent upon further empirical research (Appiah 2008; Haidt 2007; Hauser 2006; Greene *et al.* 2001; Greene 2003; Joyce 2001; Miller 2008; Harris 2010; Vogel 2004). Its purpose is twofold. First, it serves as a heuristic device for cross-cultural research aiming toward global consensus on values. Second, it serves as a provisional standard for ethical judgments that must be made in advance of consensual research findings.

Can these disparate values be ranked or does each hold an independent status? Survival may under certain circumstances trump all other values—particularly for communities or for the whole earth population when survival is at risk. To be good, we repeat, is first to be. If survival is not an issue, however, it may deserve little consideration in choosing the fundamental values that are to serve as guidelines for one's life.

Nonetheless, the seven selected values may be given an explanation through evolutionary

considerations. Rationality is defined here as selecting appropriate means to achieved desired ends. Rationality is based on the human capacity for reasoning, the ability to form generalizations that allow us to predict and thereby control our circumstances. Rationality is a primary instrument of human survival.

Pleasure is a stimulus for behaviors necessary for the survival of the species—breathing, temperature control, hydration, eating, reproduction, and the like (Varner 2008). Love is indispensable for human survival, given the long maturation period of humans and the need for community bonding for group survival. Variation is key to survival, and the value of freedom or creativity promotes variation (Martin 2006). Introspection or meditation may seem to be quite disconnected from the immediate concerns of survival. However, the primary focus of meditation is the control of the attention. Ordinarily, random environmental circumstances dictate the attention's direction. Survival under this condition is a matter of luck. Meditation gives the individual rational control of her attention.

Survival ethics' values have at least three justifications. The first proceeds from Darwin's hypothesis that ethics can be given an evolutionary explanation. Haidt (2007), Hauser (2006), and others' research into the homogeneity of ethics across cultures relies on the heuristic that innate principles genetically conveyed allow us to get along in ways that move us from a mere handful in the "African Eve" group to 6.5 billion strong.

A second justification is the fact that the primary ethical values listed above have served as "mission statements" for billions of humans over five thousand years of recorded history. A third justification for a globally shared set of values is the consensus on human rights expressed in United Nations declarations (1948 *et al.*).

The fact that basic human values may be grounded in considerations of survival does not

confer a privileged status on survival. In fact, we may deliberately choose to dismiss survival as a ground value. We may very well be the kind of species that sets up the "ethical" conditions for our own extinction. Powerful historical slogans point in this direction: "Live free or die!" "Give me liberty or give me death!" "*Patria o muerte*!" Religions like Hinduism, Buddhism, Judaism, Christianity, and Islam proclaim that this life is merely a test. "Real" life starts only after death or transcendence of life.

However, the fact that the survival of the species may be at risk in the future makes survival an issue of overriding contemporary concern. The key question is whether enough humans believe that a primary mission of our lives is pass life on to our successors in better condition than we have received this gift. If this proves to be the case, we need a new "technology" to furnish the grounds for continuing life. This technology must synthesize four disciplines: ethics or philosophy, science, engineering and technology itself. The technology must find a common ground for a "whole earth" ethics that the majority of humans, regardless of their individual cultures and religious beliefs, can subscribe to. This new ethics must have as its primary focus the survival of the species.

Can a "survival ethics" help to reduce the wrangling that notoriously characterizes the history of ethics? Survival ethics recognizes the merits of virtually all classical ethical systems (Bouville 2008). As Aldous Huxley points out, the brain is a "reducing valve" that attempts to categorize all phenomena under single concepts. Classical ethicists' quests to reduce all values to a single ground value mirror the efforts of contemporary physicists to reduce the laws describing gravitational, electromagnetic, and nuclear weak and strong forces to a grand unifying theory or theory of everything.

Survival ethics insists that reduction of ethics to a single value is a gross

oversimplification. Survival is not a value that trumps all other values. It is merely the precondition for the exercise of other values. These values may in fact have sprung from genetic mutations and natural selection in an evolutionary process, but that is merely a heuristic or speculative principle guiding further research. In the best of all possible ethical worlds, survival would be so well assured that it would not merit reflection. By way of analogy, consider how we do not think about taking our next breath—except in the most pressing circumstances or in a meditation exercise. We should strive to reduce the role that survival plays in ethical reflection, but our circumstances do not permit that liberty now.

In the interest of achieving global consensus in ethics, survival ethics makes no claims about supernatural, spiritual, or genetic justifications of ethical principles. Kant proposed a "categorical imperative" that could serve as the ground for all ethical obligations. Survival ethics proposes only hypothetical imperatives: If you wish to survive, then you should strive to flourish. If you wish to flourish, you must choose the appropriate balance among five values: rationality, community bonding, pleasure, freedom, and introspection. That balance cannot be specified in advance, as it depends on environmental and cultural circumstances. Variation in choices among those five goods contributes to the variety that is not simply the spice of life but the stuff of life.

II The Structure of Revolutions in Ethics: Expanding our Sense of Ethical Community

Are we becoming more ethical over time? Wrangham (2004) makes the startling claim that intraspecies kill rates among humans have declined over the past 10,000 years—in spite of the genocide and global wars of the last century. Humans in hunting/gathering or proto-

agricultural groups exhibited intraspecies kill rates comparable to those of wolves and chimpanzees. The three species occupy a territory, patrol its perimeter, and invade neighboring territories. What has changed for humans over time are the bonding principles and sizes of our groups. Those two factors drive revolutions in ethics. Other things being equal, the larger the group and the stronger its bonding principles, the better the group's chances of survival and flourishing. Empathy is key to group bonding. Empathy's targets expand as expanding groups increase their control over their environmental circumstances.

Early humans lived in small, genetically and linguistically bonded groups. Diamond (1999) claims that the first ethical revolution with respect to community definition was the realization that it was not always necessary to kill strangers. The second revolution was the theoretical conviction expressed in the period before the contemporary era that all humans constitute a single group with identical ethical rights and obligations. The third revolution was the conviction expressed by Locke (1991), first African American Rhodes scholar and PhD in philosophy from Harvard, that the greatest bonding principle of human communities should be the fact of our cultural differences. Variation is indispensable to survival.

The evolution of an expanded sense of ethical communities displays itself in four distinct stages. The first stage is *egocentrism*. This stage precipitates the social contract theories developed by Hobbes, Rousseau and Locke. Infants and infantile cultures recognize moral obligations to others only insofar as those others are useful to them.

The second stage is *ethnocentrism*. Here individuals merge seamlessly with their groups. Ethnocentrism is the condition of the bulk of humanity from its origins to the present as a result of isolated groups' inability to control their circumstances.

The third stage is *anthropocentrism*. Revolutionary thinkers like Mo Di, Crates (a Greek

Stoic philosopher), Christ and Nagarjuna (a Hindu philosopher) claimed that all humans constitute a single group. Their idea subverts the hypothesis that groups necessarily compete against one another and that only the fittest survive. Their implicit wisdom is to recognize that survival is a function of group size and bonding power. Christ made the extraordinary claim that the bonding power of the entire group of humans should be universal and unconditional love. The extreme manifestation of that love is giving up one's own life for the sake of one's enemy—Christ dying for the sake of those who have acted against him (Eisenbarth, Van Treuren 2004).

Some two thousand years after these revolutionary philosophers proposed their "unnatural" ethics, the world has recognized that all humans do indeed constitute a single group. However, the universal ethics codes enunciated in United Nations declarations of universal human, indigenous peoples, and children's rights are not always honored. The very existence of these codes is contingent upon the UN member nations' confidence in their ability to control their circumstances.

The fourth stage of ethical revolutions, *acentrism,* is still on the horizon. It is the product of empathy's expanding range. This stage recognizes the moral standing of non-human entities. Its precursors are biocentrism, the ethical ideal that life forms have moral standing, and ecocentrism, the idea that even the inorganic features of the planet have moral standing. United Nations delegations from the Global South are now lobbying for biocentric and ecocentric provisions to supplement the universal declarations of human rights. Acentrism's advent as an ethical revolution is made possible by the fact that humans are beginning to exercise control over the whole-earth environment. Such control enables an increase of our capacity for empathy. This revolutionary potential calls for an ethics aimed at the species' survival.

We must be ethical to survive—whether our ethics are those of egocentrism,

ethnocentrism, anthropocentrism or acentrism. As egocentrists, we must respect all the organisms constituting the macro-organism we call our bodies, ourselves. As ethnocentrists, we must respect the other selves that form the tightly bonded communities that make our survival possible. As anthropocentrists with Mo Di and Christ, we realize the importance of forming the largest, most tightly bonded group to multiply our chances of survival. As acentrists, we realize that we are not isolated organisms, but simply constituent parts of an organic whole we call earth or *Gaia.*

Our progression from egocentrism through ethnocentrism and anthropocentrism to acentrism is made possible by our increasing power to control our circumstances, our environment. (De-centering is a hallmark of rationality. Progression from centrism to acentrism in ethics is analogous to the movement from geocentrism to heliocentrism, galactocentrism and acentrism in physics.) As we approach unprecedented control over our environment, we begin to uncouple ourselves from the natural philosophical constraints imposed on us by evolution.

Four great fears have helped drive our philosophical speculations. Millions of years of evolution have implanted in us the drive to survive, the fear of death. From earliest to our own times, the most popular religions dispel that fear with the claim that this life is only a test. Our *real* lives begin only after death.

Our vulnerability to death is a function of our ignorance. The greatest peril to our survival is ignorance. In the face of intractable ignorance, we displace our fear of ignorance through philosophical or religious systems that give us the wisdom to know god(s) as our point of origin and our souls as our guarantee of immortality.

Our third fear is loss of control. Unlike our fellow animals, we survive by our wits rather than through instinct and natural weapons like claws and jaws, muscles and speed, keen senses.

To lose control is to risk death. Where we cannot control our circumstances through our own rational efforts, we hope that we can petition god(s) through acts of prayer, sacrifice, and other behavior. When there is no apparent response to our prayers, we assume that the will of god is always for the best.

Our fourth fear is loss of community. We cannot survive without our community bonds. Historically our religions have been the greatest bonding powers of our groups. Until quite recently, even nationalism has been grounded in religion.

These four basic human fears help generate philosophical or religious beliefs in immortality, a supernatural creator, the power of prayer, and communities bonded by religious conviction. As human groups acquire greater control of their circumstances, the perceived necessity of such beliefs may diminish. Such control acts as a counterforce to the four fears.

Increasing control of the whole-earth environment sets the stage for atheistic ethics envisioned by Marx and expressed in varying degrees in the Soviet Union, China, Vietnam and Cuba. In atheistic ethics, being ethical requires no motive beyond itself, whereas in theistic ethics, immortality and morality are intertwined. Communists are ethically obliged to sacrifice their lives for the sake of the universal freedom conferred by universal revolution. For them, death is final. Christians are obliged to sacrifice their lives for the sake of universal love. However, that self-sacrifice is rewarded with the eternal bliss of being face to face with god for eternity.

As humans through their technologies begin to develop a sense of control over destiny, the need to conjoin morality and immortality may diminish. Whether such diminution is provident is beyond the scope of survival ethics. Survival ethics remains silent in the face of metaphysical speculation. Nonetheless, the human sense of control may accelerate should we

acquire greater power to alter life on earth. Synthetic biology may supplant natural selection with intensified artificial or human selection. We developed our household pets, our domesticated grains and animals over a period of thousands of years. Our capacity for genetic engineering presents ethical dilemmas that must be solved in a much briefer span of time.

For the foreseeable future, ethics must take survival as its precondition. A fusion of science and ethics will work out the rules for deploying supporting values and their enabling actions. As the Senegalese historian Diop said, "ecology, defending the environment," must become a "foundation" for a new ethics "because of the one fact that the future of humanity is at stake." Ethical commands issue from what the "science of the epoch" discovers to be "harmful to the whole group" (Diop 1991, 375).

Philosophers assign hierarchies to the abstract values of traditional ethics depending on local and global circumstances. Scientists must translate abstractions into descriptive generalizations or laws. A philosopher might propose a course of action to achieve an ethical end. A scientist will have to judge the theoretical merits of the action. An engineer must judge the practical merits of the action. No single individual is competent to judge whether proposed means will produce desired ends. Only a multidisciplinary approach can judge the ethicality of proposed technologies.

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