

The Evolution of Ethics

The Evolution of Reason

The natural world gives human beings many reasons to undertake certain activities and avoid others. Some plants might be nourishing to eat, others quite deadly. Some large animals have the capacity to harm humans and are prudently avoided. Bones break under certain stresses, people bleed when cut and can die. Pain becomes a conscious "reason" to undertake certain activities or abstain from others altogether. Nature constantly reveals her many dangers to alert and conscious minds. A prudent person can easily observe the ability of plants and animals to inflict harm under certain conditions and from those observations make wise choices.

Not only do individual people want to avoid pain and suffering, they want their friends and family to avoid it as well. A primitive ethical system naturally evolves from the simple avoidance of pain, which has the added benefit of also promoting the longest life. When a rule system informally evolves in a society to assist choice-making, it is the beginning of an ethical system. People survive best when they share information about the hazards of the natural world. If generations of people observe that kicking tigers is not a healthy undertaking, this fact becomes known in the behavioral wisdom that people share with each other.

Nature provides information about the capacity of its creatures to inflict pain, the capacity of plants and animals to poison as well as to nourish the body, and about the dangers of natural phenomena such as lightning, windstorms, high seas, and hurricanes. Human beings have evolved with eyes, ears, and an analytic mind. They have been given the tools to survive, if they choose to do so. A person has a choice to stand up in a hurricane or seek cover. Choosing between alternative actions is a part of the ethical building process. In the natural world individual actions inspire consequent reactions from the environment and from other people, sometimes in significant ways, and sometimes not. Societies remember important things through the construction of their value systems, moral systems, and laws.

Human existence can be very dangerous under certain circumstances. Take for example driving a car. Driving is dangerous under certain circumstances. If people run through red lights and stop signs, their lives will be at risk. Many people use the same roadways. Rules are established to allow multiple use of the highways. In the same way that we share highways, we sometimes share environmental space. In a primitive setting, where tigers and humans shared the same space, one of the rules of tolerable coexistence would have been to refrain from provoking tigers. A better strategy would be to get out of the way altogether, in the same way a prudent person today would get out of the way of a truck barreling down a highway. Teaching successive generations

Chapters Listed Below

[The Evolution of Ethics](#)

[The Evolutionary Process](#)

[Seminal Social Catalysts](#)

[The Evolution of Reason](#)

[Moving From Ethics to Cybernetics](#)

[Cybernetic Ethics](#)

[Mathematical Concepts](#)

[Models of Ethical Evolution](#)

[Social Engineering](#)

[Preface](#)

[Foreword](#)

[Further Reading](#)

[Ethics Web Links](#)

[Notes on Related Material](#)

[Altruism](#)

[What Are Moral Standards](#)

[Visceral Morality](#)

[Science and Ethics](#)

[Static & Dynamic Systems](#)

[Kantian and Utilitarian Ethics](#)

[Wisdom, Ought and Should](#)

[Reason](#)

[Definitions](#)

[Defining Survival In an Ethical Context](#)

[The Integration of Science & Ethics](#)

[Quantum Considerations](#)

[PDF of the Chapter](#)

such hazards is delegated to systems of knowledge taught through laws, customs, ethics, and manners. People are the products of biological growth in a natural setting. People do not emerge from a factory all identical. Organic systems tend to diversify in order to evolve. There is a diversity of laws and ethical systems, and this protects the larger portion of the systems from failure if there is a serious defect in any one system.

The danger of tigers is obvious, but as life becomes more complex, life-threatening dangers reveal themselves in subtler shades. Danger becomes more difficult to explain as it becomes more abstract. As a civilization develops, the growth of reasoning moves from the tangible toward the intangible, or abstract. The desire for peace is a more abstract reason to modify behavior than the desire to run away from a hungry tiger. In both instances, however, the goal is essentially the same, the avoidance of pain and the promotion of personal survival in a hostile world. If pain is known to be an immediate consequence of an action, there arises a "reason" in the conscious mind to avoid it most of the time.

People can live about a hundred years. In a hundred years of life it is impossible to experience everything and learn the subtleties of all the dangers in the natural and social world. If people perceive that cooperation diminishes pain and suffering, "reasons" emerge to modify social behaviors to encourage cooperation instead of conflict. Early ethical systems were likely built on such perceptions. Since "reasons" were remembered in the cultural ethic, myth, and the like, people did not have to live a hundred years to learn many of the dangers of life.

In the beginning, formal or written laws prohibiting murder may not have existed, but certain environmental factors would have inhibited the practice. If there were no prohibitions against killing, the common perception might be that any person could kill any other person without any need to justify that action. In an environment where any person could kill another, then all individuals in that environment would be at risk. Since primitive man was most likely a creature of emotions and raw genetic expressions of behavior, considerable killing would have been evident in that early society. With no rules in place to restrict killing, life would have been experienced one tenuous moment at a time.

Kin would have close and meaningful bonds that would inhibit them from killing each other. But as civilization grew, many different families would be coming into closer proximity to one another. Intense relationships would not yet have been established so there would be no personal loss in killing a person of another family. If the killing could be done discreetly, without raising the suspicions of others, there would be no consequences. Everyone in the society would be party to the same rule of the jungle. In such an environment, stress would be high. Peace would be fragile and easily broken by the untempered nature of human emotions to provoke conflict and start a vicious circle of killing and retribution. As strangers became more dependent on each other for survival, in

the same way that close kin were, the killing of even strangers would begin to diminish the quality of life. There would be a natural tendency for a rule to emerge inhibiting the killing of strangers. More and more people would begin to realize the many mutually beneficial relationships that could be created through tolerance that would enhance the survival of all people. The world has perhaps evolved from kin consciousness, from there to tribal consciousness, and on to national and global consciousness.

There seem to be mechanisms in the design of human beings that prevent them from turning the full force of their predatory nature upon each other. In the beginning, people would have quickly torn each other apart if rules had not developed. Humans can sense meaning in higher forms of experience. That sense subtly influences how they behave over long periods of time. An increase in a spirit of give-and-take can demonstrably produce higher forms of cultural experience. Perhaps violence and killing gets boring and unexciting compared to other potentially enjoyable and safer undertakings. Like the first taste of some exotic food, higher forms of experience inspire a yearning in the hearts of men and women. People desire a knowledge of themselves to fill a void. There is a yearning to know where they have come from. Orderly socialization brings out that meaning in greater detail. Thus there may be a tendency for higher forms of socialization to begin to subordinate more primitive ways in that epic search for meaning.

People do not ordinarily act totally without reason, and they have a natural tendency to seek reason to explain their world. Sense is many times evident in the feelings of people but is difficult to explain logically. If the restraint of primitive urges to kill and create mayhem make the environment a safer and more meaningful place to live, people will naturally encourage the evolution of more sophisticated behaviors. Yet the higher influences upon human actions are not strong forces; they are weak. However, a weak force persistently working on the thoughts and feelings of people over thousands of years can have a profound influence. Ethical rule systems evolved very slowly. They are corrupted, then refined and enhanced as each generation takes the controls of society while trying to bend their logic toward selfish interests. But, like a spring, the essential wisdom of rule systems returns distorted logic to sensibility.

At the dawn of civilization people were probably much more violent than they are today. Even then, there must have been behavioral inhibitors that prevented human beings' predatory nature from turning on itself instead of some other food source such as plants and animals. For instance, with no government to enforce rules, a contemporary person might imagine that primitive people could do anything they pleased, such as kill other people for the slightest advantage. However, behavioral inhibitors would make such behavior more difficult than it might appear. Two things would immediately affect decision-making. First, primitive people had to concentrate intently on gathering enough food simply to survive. Second, any activity that had the potential to produce pain was

likely avoided. A person might not be killed outright, but might be injured and suffer a slow death. This would act to prevent a person from simply walking up to another person and starting a fight. Again, the consequence of pain would informally formulate a rationale for appropriate behavior.

An early rule of the jungle perhaps began to take form as humans figured out a working relationship with their environment. A practical rule of thumb prescribing appropriate behavior may have been: "If you do not want to feel pain, you have to be careful not to be involved in conflicts that could hurt you." It would have been known that ordinarily placid individuals could suddenly be provoked into rage intense enough to kill another person. The highly unpredictable nature of a provoked person would change the balance of power in a social environment. Even though early humans may not have been highly educated, the difference between a rational and irrational person would show itself in bursts of destructive rage. Learning what circumstances might trigger rage in a person was probably one of the early learning experiences of human beings.

Many forms of rage probably erupted over the division of property. If a hunter killed an animal and another person tried to take the animal away, the anger felt by the hunter would change the nature of his judgment concerning pain and injury to himself. The thief's life would hang in a precarious balance in the presence of an armed hunter whose emotions were powerfully charged. Except for a few thieves who were skilled fighters, the thief could not expect to survive very long stealing the prey of other hunters. "Unauthorized taking" in any generation would demonstrably provoke emotions. From repeated observation of human emotions, a cultural wisdom would naturally evolve confirming this phenomenon. Such knowledge could only add weight to the notion that stealing was morally wrong. As the moral knowledge of stealing built upon wizeden observation other fine points of its wrongness would be revealed. For instance, unauthorized taking inspires indignation, but more importantly it brings to life irrationality, and irrationality is very frightening to people. When a fragile peace is established, people begin to enjoy life. Opportunities unfurl and greater prosperity can follow. But until rules are set in place to clearly define property, the same war of emotional outrage will be fought time and time again until people do something about defining property.

Billions of people have lived in this world over thousands of years. Their experiences and social experimentations have helped formulate and refine rule systems and sensible moral attitudes and beliefs. There is another incentive for people to formulate rules in addition to suppressing outright violence. It is inherently efficient for a society to adopt rules against unauthorized taking. People compete with each other for scarce resources. Nations do the same. One of the most powerful strategies a nation or person can adopt is the optimization of energies and resources. For example, laws against theft free up energies that can be used elsewhere because

people no longer need to concentrate on protecting their possessions every moment of the day. Those freed-up energies can easily lead to the development of advanced weapons or commercial skills. In earlier times stealing may have been more accepted than it is now, but over time the most socially productive attitude toward killing would have the upper hand in effecting a change in the laws.

The disruptive effects of emotions are not the only reason for rules curbing theft and killing. The freedom to kill at will is counterbalanced by a person's desire to enjoy meaningful relationships. Human beings all experience a degree of epistemic loneliness that makes it a pleasure to be with other human beings. It is said: "People find their most meaningful emotions in other people." Socializing fills a need almost as essential as the need for food and water. Random killing obviously cuts off a rich source of meaningful experience.

In a primitive environment something prevents people from becoming too social too fast. There is a hierarchy of emotions that commands the behavior of people. As much as people are rewarded by social relationships, passions can drive them to take what is not theirs if they believe they can get away with theft. Killing can be inspired by overpowering selfishness or a true need to obtain food to survive.

If the evolving rule is that you can kill others for their food, or take their possessions at will, then everyone else in the vicinity can do the same. The logical result would be an increase in societal stress and a decrease in the enjoyment of life. Sensible people would likely recognize this relationship even in the most primitive of circumstances. Over long periods of social growth, the first rule tacitly acknowledging theft would be replaced by a more productive one restricting it. If people had the skill and energy to attack hunters and steal their prey, they would also have the energy and skill to hunt their own. This would be evident in an evolving community of people working toward a common goal. When people work hard for their possessions, it affects their attitudes. If such attitudes endure, they become integrated into legal and ethical systems. There is little incentive for hunters to hunt where there is a strong possibility someone will come along and take their prey. There is an economic disincentive for people to allow theft, and an economic incentive to prohibit it.

There would be chaos if theft were permitted through an absence of rules. Few would choose to live in a world where there was endless strife. Certain social conditions can create endless strife. When people experience this, their desire for peace increases. If people are bound by a common desire for peace, they are compelled to recognize that certain behaviors affect societal tranquility. Violence interspersed with times of peace forces people to think about their circumstances in an evolving way. In a rapidly evolving society, if the recognition of personal property is what it takes to diminish conflict, the desire for peace will lead society to formalize ownership of property. At the dawn of civilization, how could it be otherwise that a hunter's prey was not his own? In later societies

his prey might have belonged to his master; but, it was still his and not the property of an approaching stranger. In this cultural setting, there is likely to be no better and more efficient rule than one that gives property rights to those who have invested time and energy in tracking down an animal.

The idea of property soon evolved to a much higher level of abstraction in early societies. Since resources were scarcer, exchanging favors (that is, time and energy invested in the expectation of a return) would have improved the quality of life. But, like an urge to steal from the hunter, so might an urge have arisen in some people to default ("defect" in game theory) on their obligations. If they defaulted, they would come out ahead of those who did not. People barter in a world of scarce resources to optimize resource sharing, which in turn increases the prosperity of the entire society. However, if many people begin to default on their obligations, the barter system breaks down, resources become scarce again, and everyone suffers. If a person helping another gather food in the spring will need help in the fall to repair a shelter, a mutually beneficial relationship exists if labor is in fact exchanged. However, if the fall comes and help is not given in repayment, then a parasitic relationship exists instead of a mutually beneficial one. Obligations are many and difficult to define, but the notion of obligation does exist in the minds of those giving time and energy to other people.

In order to share resources under primitive conditions, trust must evolve between people. Trusting another to repay time, energy, or product increases the number and kinds of energies and resources that can be exchanged. More people who have goods and services can participate in commerce if a system of obligations and duties evolves to keep track of favors. As more people are able to participate in an economic system, the more dynamic and healthy it becomes, because skills and resources are employed on a highly productive level. If trust breaks down, the rule of commerce becomes "payment in full" for every transaction. Consequently, fewer people can exchange goods and services since they would have to be exchanged at the same time. Trading help in the spring for help in the fall would become risky business, and thus impractical.

The moral rule to honor obligations is affirmed by the positive effects that the rule has on the peace, prosperity, and productivity of a society. Allowing people to default on their obligations returns society to a more primitive state, only this time in an abstract sense. Instead of tacitly permitting the theft of a hunter's prey, allowing defaults on obligations results in the theft of a person's time and energy. In both instances, the taking of another person's time and energy is a parasitic action. When those producing become afflicted with parasitic elements, the prosperity of the entire system suffers. Since the health of social systems will suffer, subsequent ethical rules must evolve to define a duty to honor obligations. Considerations of systemic survival incessantly pervade the course of social development. It is not likely an inefficient

system can long endure.

Good rules create a perceivable social equilibrium that affirms the wisdom of good rules. Good rules endure because they work time and again. A better rule supplants an earlier rule tolerant of theft. The new rule now regards one's prey as one's property. The new rule that says "get your own food" commands others to be self-reliant rather than parasitic. It is a practical and productive wisdom. If a person bleeds the energies of another without giving something in return, the victim will be impoverished. If enough people are victims of social parasites, vital energies necessary for creative social growth are lost in sustaining people who do not produce but could if forced to do so. The vitality of a nation could be thought of as a measure of how many people are maximally contributing to the nation. Allowing theft of property, time, and energy as acceptable social behaviors would eventually lead society into poverty. The consequences of a system running down in this way are poverty and an inability to defend itself from more organized societies. People must make their own rules and honor them, or the ensuing disorganization will lead them into poverty or an imposition of the rules of a conquering nation.

If people could act as parasites without moral censure, few would be willing to work, and the entire society would cease to function. The idea that people must pay their fair share must emerge in a developing society for the simple reason that the society must be efficient enough to survive. Those who harmed or killed other humans in the process of taking their food would not have been highly regarded in an early society. Thievery that led to killing would deprive that society of potentially meaningful relationships. Allowing the thief to act parasitically would impoverish the society, particularly if many people were doing the same thing. With these things commonly known, it would be difficult for predatory people to survive in an increasingly hostile society. Their selfish actions would give a "reason" for others to act to restrain them, since it would diminish society's fear of random killing and allow their meaningful relationships to survive. Such ethical reasoning would encourage hard work by guaranteeing a state of peace in which the greatest number of people would enjoy the greatest peace, prosperity, and productivity.

Allowing people to experience reward for hard work is a powerful strategy to inspire people to create and add to civilization. In this respect, the idea of hard work integrates into the moral system as a held value worth rediscovering and affirming as true in each successive generation. But if hard work is to be recognized, so too would property have to be recognized. The evolution of ethical rules delineating conduct and property rights would be another benefit of allowing greater freedom and autonomy. Many things that would have never been created are brought into the world when a certain degree of personal freedom prevails and a state of peace can be guaranteed. The early idea that a man's prey was his own property or the property of his tribe reasonably evolves not only from reasoned actions, but also from the joy an increased state of

civilization equally brings to all people.

The larger the moral ecosystem grew in early society, the more evident it would have become that imprudent actions could eventually boomerang on a person and afflict them with unexpected suffering. As more people crowded into smaller spaces, people would have a need to cultivate their image. They also would have to be more sensitive about exhibiting imprudent behavior that could tarnish that image and inspire retaliation. Cultivating a good image would be helpful in maximizing cooperation from other people. The desire to have a good image thus acted to inhibit behaviors that would frighten or push people away. This is productive, since more opportunities for mutual benefit exist in a state of closeness. People who were left out of the loop of intimacy, or who were frightened by people they did not know, could rationalize a "reason" to retaliate when it assisted their schemes to survive politically or economically. There is a strong incentive in a developing world for people to protect their image. Defaulting on obligations repeatedly would tarnish that image and morally stigmatize those people as unreliable. This would deny them lucrative relationships with a broad spectrum of other people. Ethical systems in a society tend to categorize people in terms of their mutually beneficial characteristics. In knowing the rules, and following them, society would soon see what sorts of people were parasitic or tended to prematurely retaliate for imagined grievances.

Since people cannot be in two places at once, their property and unguarded families would be at risk while they were away. Crops could be destroyed and houses burned. People therefore had an interest in not provoking others. A way of systematically avoiding such incidents had to evolve. This inspired the emergence of manners in finer and finer detail. Being courteous evolved as a way of making sure one is not misunderstood to be predatory and aggressive. To act provoked or enraged is one of the oldest tricks of the jungle. Intense emotion tends to intimidate others into ceding property or resources. It is a double bind, since not ceding and calling the aggressor's bluff would give the aggressor a "reason" to retaliate. The most effective method of breaking the bind of intimidation has been the adoption of courteous ways to deny others an easy excuse for retaliation. Systems of ethics and manners informed people of what constituted default on obligations, and so in effect informed them of who to avoid. It also inspired methods of professionally coping with predatory attempts to extort resources. In this way, the higher evolution of thinking has slowly put primitive emotions at a distance.

Natural selection over a very long period of time favors prudent behaviors rather than hazardous behaviors. The excessively brazen who ignore good sense represent, perhaps, genetic combinations headed for extinction, as natural selection has likely favored the survival of intelligent and sensible humans rather than predatory, self-interested ones. A reasoning species would evolve where other types failed simply because it was able to assess its survival capabilities clearly and realistically.

At the birth of a civilization, several events would immediately occur to stabilize the tendency of human emotions to thwart cultural growth. Murder and mayhem would spontaneously arise, inspiring a vicious circle of killing. As the chaos intensified, the societal desire for peace would also increase since early humans would begin to recognize that they were killing off their own species. The desire for peace would prompt a disposition in people to find a way to settle their conflicts. Three things would likely satisfy the conditions for peace in the primitive world: first, rules prohibiting certain types of killing; second, the definition of property rights; and third, the emergence of a strong leader to enforce the peace. The need for peace inspires the evolution of a hierarchy of authority. With that authority in place, a delineation of work and resources would follow. Once the idea of property was recognized and affirmed, and murder without reason suppressed, creative ventures and commerce could grow. Relationships would suddenly take a quantum leap in complexity, and an ethical system would soon become more assertive in an attempt to hold in check a growing web of obligations.

As the first ethical and legal systems came to life, several events should have occurred simultaneously. First, strong impulses to kill or harm others would have become counterbalanced by a strong desire of people to be together for mutual benefit. Second, more "reasons" to act or not to act would thrust themselves consciously into the mind. Pain, starvation, suffering, and fear powerfully affect thinking and sometimes bring people's minds to consciousness. Third, as more and more people crowded closer together, there would be more instances in which crucial behavioral decisions would have to be made. With more people, possibilities for pain and violence would increase. The increase in conflicts and potential conflicts would force a quanta of evolutionary growth to hold the violence in check. Fourth, the increasing complexity would culminate in the development of formal and informal rules to allow people to live in closer spaces without violence. The rules would evolve from the knowledge that human nature goes awry under certain circumstances. The new rules, based on good sense, would in effect act as a memorial to future generations of the problems of the prior generation. Once a system of remembering "reason" was established, societal intelligence would increase, providing greater peace and security for the following generations. Peace would increase the possibility of the human species surviving much longer than it would if it existed at an evolutionary level of being subject to no social laws. At the genetic level or at the human level, a system of distinguishing good actions from bad ones is essential for survival.

In early times, human civilization, with very little at its disposal, bootstrapped itself toward a semblance of intelligence by observing, developing a memory of what was observed, and using the memory of that observation to forecast future events. The emergence of social and environmental consciousness in early times must have been facilitated by a growing array of important memories. Initially, kinship memories would probably have been strongest, along with

recognition of the difference between food and non-food objects. Following natural selection's sharpening of the capacity of early humans to remember would have come the dawn of social consciousness, the recognition by individuals that an environment existed independent of them. Aided by sharpened memory skills, this consciousness was probably marked by the realization that there was a relationship between the availability of food and the seasons. The ability to recognize kin, food, and seasonal changes that could affect the availability of food, all relate to early humans' ability not only to survive, but to evolve. With an enhanced capacity to remember, there would evolve an information base to predict other relationships in nature that could affect early humans' well-being and ultimate survival.

Keeping track of "reasons" to take action or to repress behaviors serves as a positive feedback to society. As society keeps track of more and more significant events, in finer and finer detail, the energy of its intelligence correspondingly increases. If a society does not have to repeat its past mistakes, it has more energy and resources to creatively grow. As the quality and potency of intelligence bootstraps to higher and higher levels, distinct categories of knowledge naturally emerge. A wide variety of academic disciplines has evolved from the refinements of experience, thought, and experimentation. The evolution of ethical systems is a natural part of civilization defining a secure position so that it can survive in a world occupied by many other types of organisms competing for the same scarce resources.

As society matures it refines its rules of conduct and sharpens its memory of the difference between a good choice and a bad one. In not having to be condemned to repeat its past mistakes, while thriving upon the peace that follows good choices, a society remembers the many dangers and pitfalls of life by encouraging the development of systems, morals, manners, and laws. With time, a civilization becomes increasingly complex, and there is less time for individuals to learn all the hazardous facets of life by direct experience. In a fast-paced, competitive world, reliable models of behavior must be sought out to serve as examples of how good decision-making can fend off potential trouble. Behavioral information handed down through generations becomes subtly entwined in the cultural ethic. Seemingly innocuous aphorisms such as "patience is a virtue" can have a powerful influence on the life of an intelligent person. After all, people have been around for thousands of years and have observed the productive effects of patience.

To be bound by rules, in one sense, is the same as being legal and moral. But equally important, it should be remembered that to be legal and moral is to be relatively efficient in one's actions. The long-term survival of an individual or a society is served better by orderly behavior guided by refined rule sets than it is by living without them. Individuals must compete with other individuals, nations must compete with other nations, and the human species must compete with a whole array of other organisms for scarce

resources. Between systems of equal size and resources, the tactical advantage will lie with the more efficient system. To survive is the mandate of the species. This mandate imposes restraints upon individuals and those restraints naturally evolve as ethical systems in response to the greater need of the whole of humanity.

Ethical systems account for what it is to be human, developing from the knowledge of the many ways life can be hard and uncertain. Desperation leads to the rationalization of illegal or immoral actions. When times are hard, people attempt to make their problems someone else's. The fluid nature of morals, manners, and laws sense this about people, and so inspire rules to guide desperate people towards more original motifs of reason. If people manage their money badly, they begin to try to maximize taking from other people instead of sharing with them. Being short of money becomes an excuse to break the law or default on obligations to others. People who suddenly find themselves in desperate circumstances act differently than those who live a secure life. Given these factors, formal laws and informal moral traditions serve society by regulating the excesses of disruption that can arise from economic dislocations. The more this chaotic arena of human success and despair is regulated in a productive way, the more everyone will prosper. There will be fewer long-term disruptions that will dissipate people's wealth and emotional resources.

Ethical systems take into account the frailty of human emotions. If passions rule the laws of the land, life again becomes tenuous and prosperity is threatened. Many people yield to sexual passions that can disrupt society if they are not stigmatized and regulated. For instance, if child molesting evolves as an acceptable behavior, the situation benefits the short-term needs of the molester while disrupting the victims' entire lives. Consistency of reasoning in deriving laws is a factor in how much they will be respected. Disproportionate distribution of short-term pleasure and long-term emotional harm is less than reasonable. If parents are always concerned for the safety of their children because laws do not exist to protect them, then the society loses the resources those parents have to offer because much of their time will then be spent in protecting their children. If they raise children and invest considerable time and money in their upbringing, and that investment is destroyed for the sake of some person's short-term pleasure, there are wasted resources and damaged emotions that do not foster the growth of that society. Attitudes toward exploitative sex thus will naturally evolve in a complex society.

A prime mover giving people cause to "reason" in early civilization may have arisen from the tragic circumstances they experienced. Tragedy entwined in grief powerfully raises the human consciousness. In an environment where death and injury repeatedly occur, people begin to realize that some of the tragic circumstances could have been avoided by planning, patience, and better communication. As life becomes more organized, the chances that tragedy will occur diminish. With more organization and better

communication, fewer misunderstandings leading to violence occur.

If a society promotes the idea of reasoned behaviors rather than "felt" behaviors, suffering can be reduced. If there is even a semblance of a reason involved in a death, people can cope much better. But if death, destruction, and injury are the result of arbitrary actions, people are stimulated to seek reasons. Arbitrary actions generally emerge when people are not thinking; they simply feel like doing something that later leads to tragedy. Feeling that "something should be done" leads to more misunderstandings and possible retribution than do actions that are analytically reasoned. As more people pack into smaller areas, social order is better served by people whose actions are the result of reason rather than feeling. Biologically speaking, natural selection may favor a reasoning species as opposed to a sentient species. In early social formations, emotional and impulsive humans perhaps killed themselves off more often than cool-headed, analytically reasoning people, moving the genetic development of humans to higher and higher levels of order.

When people are killed in retribution for actions no one can remember, generations of people may kill each other for reasons that in the beginning were quite trivial. Small transgressions of morals, manners, or law can escalate into civil warfare. As social thinking becomes more advanced, there is a tendency to write finer and finer details into law. Small behavioral problems are significant because they can lead to much greater problems. This means that violations of rules, both significant and insignificant, must be vigorously pursued.

Ethical systems evolve to warn people that certain behaviors can lead to larger problems. For instance, many people ignore moral sentiments to avoid gambling. What may start as gambling for fun can lead to an addiction that drives a person into poverty.

The idea of dangerous circumstances influencing the direction of law can be seen in traffic laws. The evolution of traffic laws is not unlike the evolution of a broad spectrum of statutory laws and moral systems. When cars first were introduced to society, they were few in number. Therefore, a tight regulatory system was not necessary. But as society became more dependent on cars for its prosperity, attitudes toward regulation changed. Rapid, versatile transportation has become inextricably linked with commerce. Public transportation that runs on time maximizes the flow of goods and services. If transportation is interrupted by repeated congestion due to lack of regulations, there will be a natural tendency for more and more laws to evolve to make the traffic system more efficient. If better laws minimize accidents, deaths, and injuries on the highways, there will be a gradual evolution of better laws. With increased transit safety, there is an increase in the predictability of traffic. With increased predictability, motorists can move faster over more miles than was formerly possible. Good rules are beneficial to all. Nevertheless, people who might want to believe they could drive as they wished would be put at risk because of the highly unpredictable nature of highway traffic. The evolution of good

motor vehicle laws would benefit them as well as the rest of the society. What started as fairly simple traffic codes later became a profusion of regulations filling hundreds of pages of text. Most of the rules have reasons for their existence. These reasons are often decided by experience, pain, grief, and later, in the writing of laws, by calculation and engineering. The rules have evolved to maximize the chances of survival on the roads, and they regulate the flow of traffic to the highest theoretical limit of efficiency thus benefiting both the motorists and their nation. Tragedy is thus diminished by good rule-making. Formal and informal rule systems exist for the same productive reasons traffic laws exist. They allow more people to intermingle with fewer problems and with maximum benefit to all.

There is a quirk of perception that leads human beings to believe there would be more freedom in the world without the existence of rules. If people could move about in the world and do what they wanted unimpeded, the social world could not have evolved to its present form. In restricting some of the unlimited freedom the primitive setting appears to give, people receive in return a more meaningful existence. This in turn gives them the intellectual means to better appreciate the freedoms they retain as well as to know the rewards of an expanded world. When people are married and have children, they knowingly restrict their own freedom by taking on obligations to tend to other people's needs, but in return they often derive a greater satisfaction in living than they had as single people.

There is an inherent resistance in ignorant people to abide by rules of any kind because rules are often experienced as tools of repression. This defect of logic leads people to reject all the rules because some rules are bad. But bad rules will always be evident in any society where there is a hierarchy of power. Politically powerful people will always be able to impose their self-serving beliefs on a society, whether it is through formal laws or by subterfuge in the moral system. Simply because short-term and self-serving rules are spliced into a system of rules that have evolved for centuries does not destroy the integrity of moral or legal systems.

There appears to be a common thread of knowledge that runs through the development of ethics, laws, and manners that suggests some actions are better than others. Rule systems function as models to guide willing minds toward productive rather than destructive choices. Ethical commands that are a form of advice are different from legal commands. They are not perfect or free of self-serving interest. They are best viewed as statistically accurate advisory perspectives of behaviors. They define strategies that best serve every person's desire to achieve and become an accepted member of society. As difficult as it may be, ethics must be divorced from the notion of being a part of religion in order to facilitate an understanding of how ethical systems evolved in a developing world to stabilize it and contribute to the survival of the species.

An interesting facet of the growth of ethical systems is their power

to enhance human existence. This is to say that there is a direct relationship between the growth of complex rule systems and the quality of life. As the quality of life improves, people are more willing to give up primitive impulses in favor of a much more rewarding acceptance by their society, allowing them to be a functioning part of it. But in theory, it may not be desirable that human beings give up all their predatory habits to build the most survivable society. Small transgressions of the cultural ethic give life charm and depth as well as an intriguing sense of the world of danger and anarchy whence civilization emerged thousands of years ago. As the elegance of the ethical system deoptimizes slightly (in the short term), it gives rule systems a "plasticity," thus humanizing ethics and giving flexibility to their commands. This plasticity allows for greater cultural experimentation that in the end serves to optimize the overall aims of the species to survive over long periods of time. While all people may not have the capacity to cooperate, it cannot escape their attention how tolerant a developing ethical world is toward their predatory presence. Sustaining that tolerance itself may well inspire a degree of cooperation even among the most hardened and predatory souls. People cannot help but cooperate. It would seem that in the design of humanity, the missing parts in people's lives lie in the lives of others on whom they come to depend.

The Evolution of Ethics	The Evolutionary Process	Seminal Social Catalysts	The Evolution of Reason	Moving from Ethics to Cybernetics
Cybernetic ethics	Mathematical Concepts	Models of Ethical Evolution	Social engineering	Further Reading
	Preface	Foreword	pdf print-out	

[Top of page](#)