



The biological evolution of guilt, shame and anxiety: A new theory of negative legacy emotions



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ABSTRACT

Human beings are the most social and the most violent creatures on Earth. The combination of cooperation and aggression enabled us to dominate our ecosystem. However, the existence of violent impulses would have made it difficult or impossible for humans to live in close-knit families and clans without destroying each other. Nature's answer was the development of guilt, shame and anxiety—internal emotional inhibitions or restraints *specifically against aggressive self-assertion within the family and other close relationships*.

The theory of negative legacy emotions proposes the first unitary concept for the biopsychosocial function of guilt, shame and anxiety, and seeks their origin in biological evolution and natural selection. Natural selection favored individuals with built-in emotional restraints that reduced conflicts within their family and tribal unit, optimizing their capacity to survive and reproduce within the protection of their small, intimate societies, while maintaining their capacity for violence against outsiders. Unfortunately, these negative legacy emotions are rudimentary and often ineffective in their psychosocial and developmental function. As a result, they produce many unintended untoward effects, including the frequent breakdown of restraints in the family and the uninhibited unleashing of violence against outsiders.

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Introduction

Human beings suffer enormously from painful emotional reactions. Regardless of whether these emotions have some redeeming features, they are often self-defeating and disabling, and fuel a great many of what are called “mental disorders” [9]. No one seems to escape from this array of painful feelings, and a great deal of human effort on an individual and cultural level has gone into reducing their demoralizing impact. These painful emotions first display themselves in early childhood, often during infancy, and then persist throughout adult life.

Clinicians and researchers usually conceptualize the basic negative emotions within one of three somewhat overlapping categories of guilt, shame or anxiety. Although there are nuances, such as the distinction between these emotions and grief reactions, or the relationship between these emotions and physical pain, it is possible to address most negative emotional reactions within these three categories.

A unitary concept of guilt, shame and anxiety

Observers of human relationship have long sought an explanation for what restrains aggression, selfishness, and competitiveness. Adam Smith [36] spoke of “sympathy” or “fellow-feeling” for others. Darwin [14] described “the social virtues” as initially based on “the praise and the blame of our fellowmen” (1981, p. 184). He described this “love of approbation and the dread of infamy” as derivatives of “the instinct for sympathy” acquired through natural selection. Although Darwin does not dissect these emotions, his description suggests that our baser instincts are or can be controlled by both positive feelings of sympathy and painful inhibiting feelings of shame and humiliation.

In the dawn of modern psychology, Freud [17] emphasized guilt as the controlling force over destructive instincts while Adler [1] emphasized social interest as the alternative to shame and inferiority. In a psychoanalytic study, Lewis (1971 p. 19 [27]) addressed both emotions and concluded “shame and guilt are ordinarily grouped together because of their common function as drive controls” and that they “alter the course of instinctual behavior.” However, Lewis did not include anxiety as the third inhibitory emotion and her psychoanalytic theorizing was highly speculative. In a sociological approach, Scheff and Retzinger [33] saw guilt as a

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derivative of shame, again without giving much attention to anxiety. In recent times, evolutionary approaches have examined these issues, often in search of the origins of human morality. Most of these studies of the evolution of morality ignore guilt, shame and anxiety or give them passing mention (e.g., [3,12]).

Without unnecessarily subjecting the reader to a comprehensive review of the literature, the theory of negative legacy emotions appears to be the first unified theory of guilt, shame and anxiety, as well as the first theory that roots these emotions firmly in biological evolution and natural selection.

From shrews to infants

From an evolutionary viewpoint, we can view the first mammal as the big step in our biopsychosocial evolution. This shrew-like little creature, no larger than a child's pinky, was the first to nurse its young [13]. Eventually that led to a vast array of mammals, including humans. We developed our intense family lives around the necessity of nursing a helpless infant and then nurturing it toward maturity over many years.

Martin [30] observed, "After birth the pattern of human brain growth differs sharply from that of any other primate and any other mammal." He described how the "human brain size increases almost fourfold after birth rather than merely doubling as in other primates." Further, "the human brain continues to show a rate of growth as fast as that of a fetus for a year after birth." (p. 125). The human brain is born in what can be considered a fetal state and within the first year of life grows in response to the quality of nurturing that surrounds it. Our brain is literally a social fabric made up both by its inherited capacities and by environmental influences during its accelerated growth in the first few years of life. Our brain goes through massive development in response to early socialization weaving these experiences into the neuronal structure and function of the brain, creating a social brain. Humans are the most social, most cooperative, most empathic and most loving creatures on Earth, and possess the capacity to develop these qualities beyond the processes of biological evolution and natural selection.

The survival and successful development of infants and young children depends on a safe, nurturing environment [5]. Unfortunately, another aspect of human nature, the potential for self-assertive aggressiveness, has throughout our history been a constant threat to the infant and child's successful upbringing.

Human beings: inherently violent and potentially self-destructive

Biological evolution, human history, cultural anthropology, as well as contemporary times, confirm that human beings are and have always been the most social and the most violent creatures on Earth. In prehistory, human ancestors were hunting and butchering animals much larger than modern elephants and doing so with pointed sticks as weapons half-a-million years ago ([18,42]; also see [37]). Assaulting and killing these giant creatures while armed with untipped spears entailed the capacity to express enormous ferocity, along with courage and social cooperation.

Hare and Woods ([21], p. 27) argued that when humans arrived in Europe they were "the socially dominant carnivore." They do not examine this built-in divide within human nature between our being social and being a dominant predator, but their phrase "socially dominant carnivore" captures those potentially conflicted aspects of human nature that to this day cause us such difficulty in our mental life and personal relationships.

This conflict between sociability and aggressive self-assertion is apparent in every healthy infant and child. Anyone who has spent a few hours in charge of toddlers knows that even the most loving and cooperative child, when frustrated, can instantly become a

self-assertive, violent and tyrannical creature who requires all of our patience and skill to manage.

Because self-assertive aggression is innate within us, throughout human history there has been a risk of turning our violence not only against animals and strangers, but also against ourselves. Our social nature and our tendency to live in small groups of families would lead to inevitable frustrations and conflicts, and the risk of dangerous outbursts. As noted above, even small children can become violent toward siblings and parents, increasing the threat of violent reactions to them. Furthermore, as children reach adolescence, they become a physical threat to their parents and other adults.

Human-on-human violence

Few other creatures show such a significant tendency to harm their own kind. Like us, our nearest relatives the chimpanzees are both social and potentially violent. They are capable of interpersonal abuse and internecine warfare with the butchering of chimpanzees who had established a separate group, albeit on a much smaller scale and with less animosity than humans [19,41]. We are far ahead of all other creatures in having this unique combination of craving for social life and propensity for violence.

Stone-Age peoples who inhabited North and South America before the arrival of Europeans were constantly at war with each other and the Iroquois League was a cultural achievement aimed at limiting intertribal warfare. Captured warriors were tortured with unspeakable cruelty that went on for hours and days [32]. War-like violence against our own kind dominates ancient historical accounts such as the Homeric poems and the Hebrew Bible.

Human history is littered with violence against our own species and other creatures. These conflicting human impulses toward socialization and willful aggression are to this day perpetually in conflict everywhere on Earth. One need only read history or look at the examples of modern genocide to grasp the scope of our self-destructiveness. Without a doubt, we are the most violent and in particular the most self-destructive creature known to exist on the globe.

Unfortunately, we also express aggressive willfulness and outright violence in our personal and domestic lives, and in the raising of our children. For evidence we need only look at the frequency of child abuse to see how often parents turn on their own children.

Limits on sympathy and empathy

Nearly all modern psychology and sociology emphasizes our social nature and an increasing body of theory and practice in psychotherapy focuses specifically on our empathic qualities. The term "sympathy" used by Adam Smith [36] and Darwin [14] has increasingly been refined into the concept of empathy ([4,6–9,38]).

Although flickering signs of empathy begin to show perhaps as early as the "contagion" of crying in nurseries, by the exchange of smiles in early infancy, and more certainly in acts of kindness by children age one or two, it is insufficient to control the self-centered frustration and aggression which can take over a small child, sometimes at the merest frustration. Further, many adults lack sufficient sympathy or empathy for others to restrain themselves, especially when faced with the frustrations of living in close physical and emotional contact.

This author [8,9] and many others promote empathy as the ultimate solution to human conflict; but an honest assessment demonstrates that the human race remains far away from such a cultural achievement. Without a built-in inhibition on expressing willfulness and aggression within close relationships, human beings would probably have killed each other off within their families and clans, and humanity would have become a lost blip on the evolutionary screen. Hence the need for guilt, shame and anxiety

as an inhibitor of destructive instinctual reactions in our family relationships.

Negative legacy emotions

Guilt, shame and anxiety are negative legacy emotions that inhibit, restrain, disperse or redirect the expression of our enormous willfulness and violence in our personal and family relationships. Further on, I will discuss how each functions and differs in this regard. The most basic concept is that each of them acts as a built-in restraint on human willfulness and violence.

Negative legacy emotions are *negative* because they act as emotional brakes and also because they can become extremely self-destructive and even disabling in both childhood and adult life. They are legacies because they are inherited from biological evolution and then elicited, amplified and shaped in childhood.

Guilt, shame and anxiety are weak inhibitors of violence toward “outsiders” or “strangers,” which has always run rampant throughout our species in terms of destructive competition, domination, and extermination. It requires a high degree of personal development and cultural evolution working in concert for individuals to love the stranger as they would love their family, friends, and immediate neighbors. Probably there was little or no advantage in biological evolution to inhibiting suspicion, hatred and violence toward other human groups. It may have been an advantage, since we have survived a multiplicity of human variations, most recently *Homo habilis* and the Neanderthals whose histories overlap with ours. Although it continues to be debated, it seems likely that we destroyed our competitors. Otherwise, some of them seemingly would have found their own niches in which to live in peace with us. The truth is, *Homo sapiens* does not live in peace with himself, let alone with earlier humans whom we most likely viewed with at least as much hostility and disdain as we continue to view people from other races, religions, nationalities, and political views.

The development of guilt, shame and anxiety probably goes back to our earliest social beginnings two million to four million years ago. It was probably a part of our genome in its present form hundreds of thousands of years ago. As Patricia Churchland [12] observed:

Archeological evidence indicates that anatomically modern *H. sapiens* existed in Africa about 300,000 years ago. . . . If we make the reasonable assumption that Middle Stone Age humans (300,000–50,000 years ago) had brains that, at birth, were pretty much like ours. . . . then any story of the neural underpinnings of human morality should apply to them as well (p. 24).

The specific advantages of guilt, shame and anxiety

Willfulness and aggression are special problems when potentially self-centered, aggressive creatures are in nearly constant proximity to one another the way humans live in families and work in groups. In addition to hunting, gathering was also carried out in groups, if only for self-protection. Childrearing, of course, requires extremely close contact, along with many inevitable frustrations involving the individual child, siblings, peers, parents, and other adults.

Patriarchy, with the domination of the family by the physically stronger male, may have helped to control willfulness and aggression among subordinate family members. However, this fear factor would only work effectively if the threatening male was able to witness or receive reports about the conflicts. Internal emotional blocks were needed to prevent severe conflicts, specifically in these intimate relationships. In addition, the dominant male as well needed innate emotional restraints, lest he unleash his dominating tendencies in too destructive a fashion.

The need for negative legacy or inhibitory emotions was especially strong in regard to reproduction. Natural selection favored those mothers who restrained their frustration with their children and fathers. It favored fathers who inhibited their willfulness and rage when dealing with their sexual partners and children. It favored the safety and hence survival of children who avoided stimulating violent conflict. Individuals with guilt, shame and anxiety would have a decided reproductive advantage within the family life.

In sum, guilt, shame and anxiety developed as ways of suppressing or redirecting self-assertive aggression against one's family and closest relationships, and not against strangers or other species, unless, like dogs, they became members of the family.

Instinctual origins

Although built in by biological evolution, guilt, shame and anxiety are triggered and shaped by experiences beginning in childhood and continuing with intensity at least through adolescence. As an aspect of our social instincts, they are innate and the environment inevitably elicits and directs their expression.

That negative legacy emotions are instinctual does not rule out how much human beings can then choose to modify their responses. Even in respect to an obvious instinct like hunger, for example, its expression through eating is widely influenced by cultural evolution and individual choice. The hunger strike is an extreme example of modifying one's instinctual responses. Anorexia and obesity are others.

As instincts, negative legacy emotions are not only built into the fabric of the brain and its function, each emotion is biologically wired for its expression in bodily functioning. Shame often induces blushing. This response occurs in every individual human, every race, and every culture. Across cultural boundaries, shame also induces similar voluntary physical responses, such as a shrinking posture and evasive eye movements, although these may represent universal phenomena of cultural evolution.

Anxiety stimulates the secretion of adrenaline, producing characteristic physiological responses, including increased heart rate and respiration, dilation of the pupils, increased blood flow to the muscles, and sometimes piloerection. It also produces the tell-tale sweaty palms and tremor. The brain also goes on high alert.

Guilt is more complex, subtle and variable in its physical manifestations; but it tends to produce a slowing down of many bodily functions, physical movement, and even mental life.

Psychotherapists routinely see people who suffer from unbearable and unresolved conflicts. If the therapeutic exploration is sufficient, in my clinical experience these disabling or overwhelming conflicts are always associated with and probably caused by feelings of guilt, shame and anxiety together or in combination. When the individual feels overwhelmed, the expression and self-awareness of the negative legacy emotions may be masked by anger or numbness; but beneath the anger or numbness is guilt, shame or anxiety that can usually be unearthed [9].

When the individual attempts to resolve the conflict through self-assertion or aggression, regardless of the rational basis for these actions, the individual is stymied by negative legacy emotions. Further in this analysis, the variations among these emotions will be examined; for now, it is critical to see how each of these emotions produces an underlying feeling of helplessness that overwhelms active attempts to address the conflict.

The emotional helplessness engendered by negative legacy emotions is not based in reality. That is, the individual is not physically paralyzed or cognitively impaired in his or her ability to consider or implement alternatives. Furthermore, the environmental threats do not necessitate or force the individual to feel helpless. The individual could exert more will in a variety of chosen directions. Instead, the individual *feels* helpless, even if seemingly

rational and effective solutions are available. I call this subjective or emotional helplessness [8,9]. The concept has similarities to Seligman's [35] learned helplessness, but that concept is used more narrowly as the root of depression and is not specifically related to guilt, shame and anxiety.

Limits and untoward consequences of guilt, shame and anxiety

Evolution is an imperfect trial and error process. One genetically-induced variation after another fails to give an advantage in survival and reproduction, and falls by the evolutionary wayside. Evolution never reaches a "goal," it is always a process. The complexities of the human brain and mind, as well as interpersonal conflict, are infinite, making it even less likely that natural selection would completely solve the problem through biological evolution. It is therefore not surprising that guilt, shame and anxiety are imperfect inhibitors of self-assertive aggression. The shortcomings of negative legacy emotions include their primitiveness, their prehistoric qualities, and their childhood origins.

Negative legacy emotions are primitive

Negative legacy emotions are primitive in several aspects. As already discussed, they are crude biopsychosocial mechanisms and often fail to achieve their aim. They can cause unintended paradoxical consequences, for example, when shame fails to suppress willfulness, builds up frustration, and results in an unleashing of even greater rage. They are primitive in having developed through hundreds of thousands or millions of years, and probably reached their current stage of development when *H. sapiens* topped the human evolutionary ladder 50,000–150,000 years ago. They are also primitive because they were triggered and shaped during infancy and childhood due to largely haphazard events and before the youngster could understand and evaluate what was happening.

Negative legacy emotions are prehistoric

Negative legacy emotions are also prehistoric in two senses. First, they developed during human prehistory and so their origins remain outside our self-awareness. Second, they were triggered and directed by childhood events that the grown person can mostly no longer recall. Many people remember some events from childhood that particularly seemed to stimulate feelings of guilt, shame and anxiety; but these recollections will be spotty and disorganized. Often, the recollections are flawed while other more traumatic events are repressed.

Negative legacy emotions cause suffering

Guilt, shame and anxiety are biopsychosocial inflictions of emotional pain in order to inhibit self-assertive and aggressive instincts. They are complex negative reinforcements. Like any other negative reinforcer they tend to stop behavior, to befuddle, and to cause helplessness. They differ from sympathy and empathy, which do not necessarily induce suffering, but which encourage a loving and positive attitude toward others. This is a complicated question that I have tried to resolve by distinguishing between empathy and induced suffering [7]. Empathy is a positive feeling that reaches out to another person.

Negative legacy emotions do not reflect reason or ethics

Because they are primitive and prehistoric, negative legacy emotions do not reflect rationally chosen ethics. Subtle ethics are too complex to be genetically transmitted and selected by

evolution. Besides, guilt, shame and anxiety were favored not because of any exalted result of cultural evolution, but to dampen the effects of our aggressive nature in our close relationships, especially in the family during childrearing. In addition, these instinctual drives are elicited and shaped during infancy and childhood, before the age of reason, and even before the solidification of memories. They develop in a haphazard fashion depending on many factors such as chance events (e.g., trauma inflicted by illness, environmental catastrophe, death of a caregiver); on the availability and quality of nurturing; and on the child's immature perceptions and individual choices in response to the infliction of these emotions. As a result, negative legacy emotions often if not always push adults into self-defeating and irrational decisions.

In clinical work, it is commonplace to see people who feel little shame over big transgressions they have perpetrated against other people, including violence, while feeling considerable shame over the slightest hint of being disrespected. Similarly, people vary greatly in what makes them feel guilty. A man who beats his wife may feel little or no guilt about it, and yet feel disabling guilt at the mere thought of standing up to his abusive mother. A woman may feel very anxious about leaving the house, but once outside the house may drive recklessly without giving it a second thought. Guilt, shame and anxiety have been built into us over millions of years and reinforced in childhood largely without regard for rational ethics. They cannot provide emotional guidance for making adult decisions.

Negative legacy emotions become generalized to all spontaneous or self-interested behavior

Guilt, shame and anxiety are usually triggered when an infant or child is acting selfishly, aggressively or simply spontaneously. Consider the toddler who finds himself equally subjected to harsh emotional responses when he soils himself, accidentally drops his food to the floor, refuses to eat something he dislikes, touches something intriguing, expresses himself in a loud voice, runs in the house with gusto, or interrupts whatever his parents or older siblings are doing. The infant and child are largely incapable of distinguishing one event from another in regard to the infliction of guilt, shame and anxiety. Probably every young human being develops a tendency to feel guilt, shame and anxiety in response to self-generated, spontaneous or assertive behavior of any kind.

In addition, these negative emotions are likely to be inflicted at exactly the moment the child most strongly and even vehemently desires to do something, such as yelling loudly, climbing on the furniture, having a treat, or defying his dad for the amusement and thrill of it. As a result, guilt, shame and anxiety in adulthood are likely to be felt when contemplating or attempting especially attractive, interesting or seemingly worthwhile activities, including creative projects, rational risk taking, and even love.

The comparative evolutionary functions of guilt, shame and anxiety

While recognizing the subtlety of such a complex subject and the almost infinite literature about painful emotions, the theory of negative legacy emotions places the suppression of willfulness and violence as the central functions of guilt, shame and anxiety. It further finds that a subjective feeling of helplessness underlies each of these emotions and that this common ground of helplessness additionally ties these emotions together in a unitary concept.

Guilt is recognized as a judgment that is directed inward. In the theory of negative legacy emotions, guilt inhibits and redirects self-assertive aggression by turning it inward in the form of blame and aggression toward oneself. Guilt-ridden people tend to think of themselves as potent and harmful, but beneath it they feel helpless and can lapse into paralyzing feelings of depression. They may

present themselves as very responsible but they are actually unable to think and to act in a rational and loving manner.

Shame is recognized as reflecting the judgments of others on us, or our own judgment of our relationship to others. In the theory of negative legacy emotions, shame directs blame outward, but simultaneously produces feelings of worthlessness, insignificance and impotence that render the individual unable to take protective actions or to retaliate. Because the emotion is triggered by outside offenses or comparisons, when the inhibitory mechanism becomes overwhelmed by outrage, the individual tends to become aggressive and violent. Shame lies at the root of nearly all interpersonal violence. The humiliated person will deny feeling helpless because it seems too shameful to acknowledge. Nonetheless, shame most commonly leads to helpless withdrawal. Clinically, helpless feelings will be found beneath the feelings of shame, rendering the individual unable to act rationally and ethically.

Anxiety is not commonly understood as an emotion that is closely related to guilt and shame, and contradictory theories about its function abound. In the theory of negative legacy emotions, anxiety befuddles, confuses, and paralyzes the individual, rendering him or her unable to express willfulness or aggression. Helplessness lies *beneath* guilt and shame, but it lies at the forefront in anxiety. Anxiety makes the individual feel incompetent or unable to make choices and to direct blame in any direction, except vaguely toward “the way the world is” or toward one’s personal incompetence.

In summary, guilt tends to lead toward self-blame and self-destruction, shame toward blaming others and violence when the inhibition fails, and anxiety leads to a know-nothing lack of blaming with violence suppressed or directed ineffectually and haphazardly. *All three negative legacy emotions have the primary impact of rendering the individual helpless with the evolutionary aim of suppressing or controlling willfulness and violence within the family and close relationships.* When guilt, shame or anxiety become unendurable, chronic anger and emotional numbing often replaces them, while the individual continues to feel too helpless to act in an effective manner. Because chronic anger and emotional numbing cause helplessness and ineffectiveness in the face of conflict, they are negative legacy emotions.

Objections and implications

The theory of negative legacy emotions has sweeping implications across many psychological, social and even political fields. Here are some of the more common or fundamental objections that might arise, as well as further implications.

Human beings and sociability

The theory of negative legacy emotions does not require that humans be either the most social or the most aggressive creatures on Earth in order to demonstrate the need for negative legacy emotions to prevent interpersonal violence, especially in the family. However, I believe that both statements are true and that this fact helps us to understand why guilt, shame and anxiety play such powerful roles in our lives.

It has been argued that insects are more social than humans. Robert Wood Krutch [25] points out that elaborate agricultural and husbandry activities among insects developed in evolution long before they developed in humans. However, he also points out that humans have, within a few thousand years, developed complex and numerous activities of a cooperative social and economic nature that far exceed those of the insects. Furthermore, as Krutch also observes, insects carry on these activities largely through instinct in a mechanical manner, without the enormously more complex social interactions that occur on an *emotional level* in self-aware

humans. Nor do the social relationships of insects continue to escalate at enormous rates through science and technology.

Human beings and violence

At least one critic of the negative legacy emotion theory has proposed that human beings are not violent compared to other animals, and furthermore that other primates are more violent.¹ Once again, this is not critical to the theory. What is important is that humans are so torn between strong social and strong violent instincts that we needed negative legacy emotions in order to keep from destroying our intimate relationships and family life. However, as noted earlier in the paper, I believe that most if not all primatologists, including Frans de Wall, would agree that primates are less aggressive and violently destructive toward themselves and others when compared to humans [40,41]. Another primatologist, Jane Goodall [19], for many years used chimpanzees as a model of cooperation and non-violence compared to humans, until she discovered that the larger band in her group attacked and slaughtered a smaller offshoot. As noted earlier, Goodall continued correctly to maintain that violent behavior remains much more contained and controlled among chimpanzees than among humans.

Feminist theory

Feminist theory, including the examination of patriarchy, has contributed a great deal to the human sciences, to political science, and to justice in society. Phyllis Chesler [11], Marilyn French [16], Kate Millett [31] and many others have influenced my thinking, leading me to apply feminist analyses to psychiatry (e.g., [6], Chapter 14, “Suppressing the Passion of Women”) and to conflict theory and resolution (e.g., [8]). The theory of negative legacy emotions, however, does challenge some implications or interpretations of feminism and patriarchal theory without rejecting its overall value and importance.

Some feminist theory argues that violence is not an innate, instinct-like reaction within humans, but rather it is wholly a creation of patriarchy with domination of men over women, children and other weaker males. Riane Eisler [15] takes a more sophisticated view that the “dominator culture” is the source of most violence. She believes that “partnership” can reduce violence. My own views are largely consistent with this [8], but I place more emphasis on the innate willfulness and violence that begins to make itself known in infancy and childhood.

Unfortunately, partnership approaches, although ideal, have grave limitations. They are easiest to implement within oneself as an approach to life and at times in couples who are dedicated to these principles. At times, partnership principles can also be applied in small groups with shared values; but even these successes are likely to be unstable. Partnership values seldom if ever become the primary *implemented* values in larger groups, organizations, or cultures. The fundamental problem is the conflicted constitution of human nature—a reality that utopian viewpoints wish to deny.

The effort required to implement partnership values illustrates, I believe, how difficult it is to overcome the innate human tendencies toward willfulness and aggression. Negative legacy emotions commonly add to the problem by stifling rationality and the hope of cooperative and loving relationships. The answer, of course, is to continue to work at overcoming our tendencies toward willfulness and violence, as well as our reliance on flawed negative legacy emotions as forms of anger management. At the same time, we need to persist at building relationships, families, and societies that are based, as much as humanly possible, on mutual respect, cooperation and love.

¹ Criticism by a reviewer of this article.

In the extreme, some feminist theorists may claim that nothing can be learned about human nature from studying anthropology or history because it is entirely corrupted by patriarchy.¹ However, most anthropologists and historians would reject this sweeping negative conclusion. As one very fruitful anthropological illustration, observations of the estimated 500 nations of Native Americans, some made near to the time of first European contacts with them, indicate that they had violent disputes within their own clans, often forced their adolescent boys through violent rituals of manhood, frequently fought with each other, and had to work hard to accomplish a degree of peace among their nations, for example, through the Iroquois Confederacy [10,23,22]. Although patriarchy certainly breeds conflict and violent suppression, and infinite injustices, the consistency of violent behavior in infants, children and adults in all societies seems to require a biological substrate or potential that the environment can readily trigger under a broad range of circumstances.

In addition, there are routes other than anthropology and history for understanding human nature, in particular the study of child development.

The innocent child theory

Although seldom voiced anymore, there is a lingering theory that children are innocent and that their aggression, while a potential, only occurs in response to negative stimulation. One feminist has gone so far as to aver, “Children who are not hit, do not respond with aggression.”¹ Kohn [24], as another example, wants to avoid calling aggression “innate.” Instead, he argues, the potential is inborn—but since it requires stimulation from the environment, it is not “innate.” Thus, he observed, “The evidence, then, seems to indicate that we have the potential to be warlike or peaceful. Why, then, is the belief in a violent ‘human nature’ so widespread?” (p. 1). The logic is tortured. As Kohn himself points out, almost all instincts require external stimulation. Consistent with this, children do not usually display aggression unless something elicits it. Unfortunately, as any parent can verify, aggression is frequently triggered in children by little more than the inevitable frustration of childish whims, such as a sibling’s refusal to give up a toy or a parent’s insistence on putting on boots before going out in the snow.

Based on a random sample of 572 families, Tremblay et al. [39] concluded:

Conclusions—Most children have initiated the use of physical aggression during infancy, and most will learn to use alternatives in the following years before they enter primary school. Humans seem to learn to regulate the use of physical aggression during the preschool years. Those who do not, seem to be at highest risk of serious violent behavior during adolescence and adulthood. Results from the present study indicate that children who are at highest risk of not learning to regulate physical aggression in early childhood have mothers with a history of antisocial behavior during their school years, mothers who start childbearing early and who smoke during pregnancy, and parents who have low income and have serious problems living together (p. 2).

Children must be taught to handle their aggressive tendencies in more positive ways. This is commonsense parenting.

The noble savage theory

Rousseau’s theories of human nature share with some aspects of feminist theory the idea that the worst of human violence takes place when human beings enter into elaborate social relationships

or “civil society.” However, Rousseau did not believe that human beings in a state of nature were nonviolent or cooperative, or even moral. Instead, he found that children require the cultivation of reason through education to lift them above the self-centered impulsiveness of human nature and savage life:

The passage from the state of nature to the civil state produces a very remarkable change in man, by substituting justice for instinct in his conduct, and giving his actions the morality they had formerly lacked. Then only, when the voice of duty takes the place of physical impulses and right of appetite, does man, who so far had considered only himself, find that he is forced to act on different principles, and to consult his reason before listening to his inclinations (p. 12).

Psychoanalytic theory and defense mechanisms

Freud [17] theorized that human beings suffer from continuous internal conflict between their innate life and death instincts. This is somewhat consistent with the theory of negative legacy emotions: the death instinct roughly corresponds to innate capacities for willfulness and aggression while the sexual or life instincts correspond to the innate capacities for sociability, cooperativeness and love. However, the theory of negative legacy emotions is much simpler and more straightforward than Freud’s psychoanalytic elaborations.

In respect to how they view guilt, shame and anxiety, there is considerable difference between psychoanalytic theory and the theory of negative legacy emotions. Perhaps most important, psychoanalytic theory does not view all three emotions as performing a common function of restraining willfulness and aggression. The psychoanalytic view does at times describe guilt as an inhibitor of instincts, but then gives much more elaborate “dynamic” explanations involving the Oedipus complex and other psychological mechanisms.

Freud initially paid less attention to shame; but many psychoanalytic theorists, along with contemporary psychologists and sociologists, have increasingly emphasized the role of shame as an enforcer of social conformity in child development. They also emphasize how shame can backfire when the humiliated individual stops withdrawing and instead fights back violently against real or imagined aggressors [33,34]. This is consistent with the theory of negative legacy emotions.

Anxiety is seldom if ever viewed in psychoanalytic theory specifically as an inhibitor of the aggressive instincts. However, in my clinical experience, and as proposed in the theory of negative legacy emotions, anxiety commonly arises as a restraint when an individual would otherwise want to express anger or to become strongly self-assertive. Beneath anxiety lurks frustrated, helpless feelings of anger and self-assertiveness.

The concept of defense mechanisms in psychoanalytic theory is somewhat consistent with the concept of negative legacy emotions. Negative legacy emotions are built-in defenses against willfulness and aggression in intimate relationships. However, nowhere have I found in psychoanalytic theory, or in any other psychological theory, a straightforward observation that the fundamental function of all three emotions—guilt, shame and anxiety—is the suppression of willfulness and aggression, and ultimately self-assertion.

Useful applications of the theory of negative legacy emotions

The theory of negative legacy emotions provides an approach that usefully addresses a number of fundamental questions that have thus far eluded solution in the human sciences:

(1) Why are human beings so plagued by guilt, shame and anxiety?

The answer is that these emotions are instinctual, literally built into the human brain and body, and then inevitably triggered and shaped in early childhood.

(2) What are the origins of these emotions in human biological evolution?

Human beings suffer from conflicting tendencies to be willfully aggressive and cooperatively social. As a response to this contradiction in human nature, natural selection favored individuals who were emotionally inhibited in the expression of willful aggression within their families and close-knit social relationships.

(3) Why are these emotions so self-destructive and self-defeating?

They are primitive and prehistoric in origin, and therefore cannot provide rational or ethical guidelines for conduct. In addition, they tend to suppress overall spontaneous mental life and behavior, and in particular the pursuit and fulfillment of strongly motivated desires and wishes.

(4) Why do guilt, shame and anxiety provide so little control over violence against people or groups who are different or otherwise separate from us?

Negative legacy emotions were favored by natural selection in order to inhibit interpersonal aggression in the family and clan, without inhibiting violence against predators, prey, or strangers. This combination of inhibiting interpersonal violence *without* impairing violence in external affairs had high survival and reproductive value—until the last century when human beings became increasingly capable of mutual global destruction.

(5) Why do willfulness and violence persist in family life, contributing to rampant neglect, child abuse and domestic violence?

Biological evolution is a process and humans are incompletely evolved in respect to the control of willful, aggressive emotions. The negative legacy emotions are crude and produce paradoxical aggressive reactions when people resent feeling guilty, ashamed and anxious. Guilt, shame and anxiety often drive abuses against children and domestic partners by inhibiting more positive responses, and by building up resentment that breaks through the negative legacy emotions. In addition, there are many other societal factors that create these abusive situations, including patriarchy, poverty, and lack of law enforcement to protect women and children.

(6) Do guilt, shame and anxiety have a positive role in modern life?

In childhood, fear of external consequences is an inadequate method of control, and so guilt, shame and anxiety are perhaps necessary as internal controls for children before they can develop empathy and sound ethics. However, the question is at present impossible to answer and moot, since all healthy children develop these instinctually-based emotions in varying degrees even within the most nurturing environments. In adulthood, these emotions clearly and grossly interfere with rational judgment, stifle creativity, inhibit empathy and love, and ultimately make people feel more helpless. In maturity, guilt, shame and anxiety need to be identified, rejected and replaced with more positive guidelines, including reason, ethics and empathy for others [9].

(7) What is the relationship between negative legacy emotions, positive psychology, and conflict resolution theories?

The theory of negative legacy emotions provides an understanding of the primitive, prehistoric emotional reactions that impede positive approaches to life and to conflict. Because of guilt, shame and anxiety, and the chronic anger and numbness that results from it, as well as the feelings of helplessness that lie beneath it all [9], the individual is handicapped in making the most of his or her positive social and empathic qualities.

Meanwhile, it requires cultural evolution and education for human beings to extend their compassion to outsiders. Now that we have the capacity to destroy ourselves on a global scale, we can wish that we had biologically evolved to care as much about strangers as ourselves; but as a human group we have not. Only the future will tell if we can individually and culturally evolve sufficiently to head off annihilation through global warfare or other manmade threats to human survival as a species. The theory of negative legacy emotions indicates that this process is impeded and even reversed by systematically instilling guilt, shame and anxiety within our family life and cultural institutions. From Buddha and Christ to Gandhi and Martin Luther King, Jr., great leaders have encouraged us to triumph over and to transcend our dark emotions in order to live by consciously chosen principles, including reason, justice and love.

Darwin was not a Darwinist

Darwin repeatedly emphasized our social nature, placing it far ahead of competition or survival of the fittest in guiding human evolution [28]. In *The Descent of Man*, Darwin [14] described how even animals can love, cooperate and provide mutual aid, sometimes outside their own species (1981, p. 173–177) He contrasted these animal capacities with the far greater human capacities for the expression of these positive social qualities and ultimately for higher ideals and morality.

Although Darwin saw the social instincts as the biological basis of morality, he rejected the idea that our higher ideals are mere instincts. After describing the importance of the “instinct for sympathy” in creating a moral sense in human beings, he went on to say the following about morality:

Ultimately a highly complex sentiment, having its first origin in the social instincts, largely guided by the approbation of our fellow-men, ruled by reason, self-interest, and in later times by deep religious feeling, confirmed by instruction and habit, all combined, constitute our moral sense or conscience (1981, p. 165–166).

Darwin [14] saw individual intellect and culture as the source of higher principles and ideals, including the Golden Rule, which he called “the foundation-stone of morality” (1981, p. 165).

According to the concordance for *The Descent of Man* [2], “love” is mentioned 80 times and “sympathy” 52 times. By contrast, “competition” is mentioned only 14 times and “survival of the fittest” is mentioned only three times, once with a disclaimer (1981, p. 152) by Darwin that he gave it too much emphasis in the *Origin of Species*. For Darwin [14], natural selection leading to adaptation was the key to evolution (1981, p. 152), and this more importantly led to cooperative efforts rather than to destructive or competitive ones. In the early Twentieth Century, Kropotkin [26] had already confronted and rejected the misrepresentation of Darwin’s views and made Darwin’s concept of mutual aid the center of his focus in understanding human evolution.

Although in nature difficult times produce an escalation of natural selection, Darwin [14] saw humans as rising above this evolutionary process. Instead of condoning unbridled competition with the weak falling by the wayside of evolution, he praised the beauty of our willingness to care for our infirm in defiance of the laws of natural selection that operate in the wild (1981, p. 169). In short, Darwin was not a “Darwinist.” He promoted sympathy and love, and not unbridled competition in his concept of evolution and especially in his applications to how human beings should relate to one another and build communities (for a practical applications of these principles to personal growth, see [9]).

As Loye [28] has pointed out, many contemporary evolutionists misrepresent or overlook Darwin's emphasis on the social life of human beings, and on the importance of reason and choice. This is unfortunately true. However, from Darwin himself through Gould [20] and Machluf et al. [29], many evolutionary scientists have rejected a deterministic viewpoint on the development of our higher intellectual, ethical and spiritual qualities. Our social instincts provide the basis for our moral instincts or attitudes, but individual reason and choice, and cultural evolution, have created our highest ideals and aspirations. Recognition of the importance of reason, choice and love is critical to a scientific understanding of human evolution and to the potential for individual and cultural self-development.

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