

# In Adam's Fall We Sinned All: Inheritance before Epigenetics

Epigenetics may be a new scientific theory, but the questions it explores are very old: Who are we? Why do we act the way we do? Humanity has addressed these questions through means other than the strictly scientific. Myth, ritual, and theology have provided other avenues of exploration. We dedicate this pair of cases to exploring one of the oldest recorded and most influential theories of human behavior: the doctrine of original sin.

According to Genesis, Adam and Eve disobeyed the God by choosing to eat of the fruit of knowledge of good and evil. In so doing, they incur the conditions of exile from the Garden of Eden for all their descendants. The Genesis Fall is a story about free will, the loss of innocence, and the development of self-awareness. And while God curses the ground, he does not explicitly consign humanity to perpetual guilt. However, Western Christian thinkers would develop the story's rich suggestions into a theory of hereditary guilt. Hints first appear in Saint Paul, but the fully-fledged doctrine of Original Sin had to wait for Saint Augustine (354-450). The doctrine teaches that humanity is inescapably tainted, and that human life without sin is impossible without divine intervention. This view is present in Augustine's depiction of his own infancy in *Confessions*, where he recalls that he only failed to commit horrible deeds because he lacked the means to commit them.

Augustine remained very influential after his death and his works were among the most frequently copied in the early medieval kingdoms that succeeded the fall of the Roman Empire. Augustine's ideas on original sin influenced the poet who composed

the Anglo-Saxon poem *Beowulf*, copied around the year 1000. In a remarkable synthesis of Christianity and Germanic folklore, he identifies Grendel and other monsters as the descendants of Cain.

Augustine's ideas exerted a particularly strong influence on Protestantism in general and on Jean Calvin (1509-1564) in particular. Calvin's doctrine of Predestination—according to which the majority of humanity was damned and was powerless to do anything to change it—was predicated on Augustine's notion of original sin. Indeed, he cites Augustine more than any other source besides the Bible. Augustine travelled to America with the Puritans, where his ideas continued to inform theologians such as Jonathan Edwards (1703-1858), whose preaching lay behind such as the revival known as the First Great Awakening.

The idea of original sin is not limited to religious texts. Sigmund Freud (1856-1939) hatched an imaginative theory of the prehistory of human social development that attempted to account forth simultaneous development of religion and taboo. Freud posited a stage of social organization in which a single dominant male hoarded all the females of a group. Younger males murdered this primal father, incurring a sense of collective guilt that motivated religion. This guilt seems to be transmitted through an interaction of cultural and biological factors.

The novel *The Inheritors*, by William Golding, tells a story about the emergence of *Homo Sapiens* and their brutal near-decimation of other species that soon followed. In Golding's view, instead of Grace, it is the little bit of Neanderthal DNA that is our only hope from total annihilation.



The fall of Adam and Eve. Image courtesy National Library of the Netherlands.

*Grendel, who haunted the moors, the wild  
Marshes, and made his home in a hell,  
Not hell but earth. He was spawned in that slime,  
Conceived by a pair of those monsters born  
Of Cain, murderous creatures banished  
By God, punished forever for the crime  
Of Abel's death. The Almighty drove  
Those demons out, and their exile was bitter,  
Shut away from men' they split  
Into a thousand forms of evil—spirits  
And fiends, goblins, monsters, giants,  
A brood forever opposing the Lord's  
Will, and again and again defeated. (102-114)  
Beowulf, translated by Burton Raffel*

# 'You Go Girl': Pelagius and his Successors

While many are familiar with Augustine, chances are you might not have heard of Pelagius. He was a British monk whose teachings were declared heretical by Pope Zozimus in 418. Though he wrote letters and pamphlets, his ideas are only known through the filter of his opponents. He did not believe in original sin, and he downplayed the role of grace in bringing about salvation. He posited instead that the humanity could perfect itself through the will alone. The only reason his name did not disappear from history is because orthodox writers such as Augustine refuted his ideas and their writings survived. The Council of Trent re-condemned him.

Though condemned his own day, there is a sense in which he was the victor. Since the Renaissance and the growth of Humanism a belief in the essential goodness of humanity has prevailed, along with the belief that, with proper guidance, every individual is capable of self-improvement. Pelagius's ideas about human nature are probably closer to what most of us subscribe to today.

Erasmus disagreed with Luther's belief in our total dependence on grace. Instead, he believed that humanity could bring about its redemption through their own efforts. He did not discount the importance of grace, but he also believed that humans were capable of virtuous behavior of their own accord. He roundly rejected predestination.

According to the theologian Karl Barth, the eighteenth century was a "Pelagian century" and Jean-Jacques Rousseau (1712-1778), a "confirmed Pelagian." For Rousseau, the root of evil was not in man himself, but in society. Society corrupts man, who, in his natural state, is essentially good. Thus, the transition from primitive to civilization constituted the fall.

In 1936, Dale Carnegie published his *How to Win Friends and Influence People*, launching the self-help movement, fueled by the sense that we are just twelve steps away from an improved version of ourselves. Our "you go girl" culture is thoroughly Pelagian.



Portrait of Desiderius Erasmus, from *L'eloge de la folie* (Leiden, 1715). Image courtesy Special Collections and Rare Books, MU Libraries.

*Everything is good as it leaves the hands of the Author of things; everything degenerates in the Hands of Man.*

Jean Jacques Rousseau