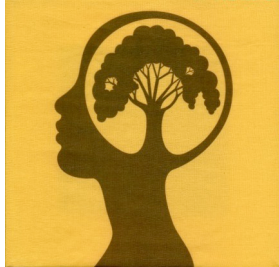


**Conscience, Morality and the Spiritual Life
CMS-005 and 006:
Part 2 of the Introduction to the Moral
Foundations of Haidt**



"The most difficult subjects can be explained to the most slow-witted man if he has not formed any idea of them already; but the simplest thing cannot be made clear to the most intelligent man if he is firmly persuaded that he knows already, without a shadow of doubt, what is laid before him." – Leo Tolstoy

"He that answers a matter before he hears it is a Fool."
-- God

WE ARE GOING TO BE LOOKING AT A TOTALLY UN-BIBLICAL VIEW OF HUMAN NATURE TODAY, AND I NEED TO MAKE IT CLEAR THAT THE VIEWS OF JONATHAN HAIDT ARE NOT BIBLICAL TRUTH, BUT ARE SETTING OUR STAGE FOR OUR STUDY OF BIBLICAL TRUTH, THEREFORE, WE WILL LOOK AT AN INTRODUCTORY ARTICLE TO PLACE DR. HAIDT IN HIS PROPER MILIEU:

FROM:
Probe Ministries
Sociobiology:
Evolution, Genes and Morality
Raymond Bohlin, Ph.D.

In 1981 I wrote an article for *Christianity Today*, which they titled "Sociobiology: Cloned from the Gene Cult."(1) At the time I was fresh from a graduate program in population genetics and had participated in two graduate seminars on the subject of sociobiology. You might be thinking, "What in the world is sociobiology, and why should I care?"

- That's a good question.
- Sociobiology explores the biological basis of all social behavior, including morality.
- You should care because sociobiologists are claiming that all moral and religious systems, including Christianity, exist simply because they help promote the survival and reproduction of the group.
- These sociobiologists, otherwise known as *evolutionary ethicists*, claim to be able to explain the existence of every major world religion or belief system, including Christianity, Judaism, Islam, and even Marxism and secular humanism, in terms of natural selection and evolution.

- E. O. Wilson, a Harvard biologist and major advocate of sociobiology, claims that scientific materialism (a fully evolutionary world view) will eventually overcome both traditional religion and any other secular ideology.
- While Wilson does admit that religion in some form will always exist, he suggests that theology as an explanatory discipline will cease to exist.

Four Foundational Principles of Sociobiology

- The despair of the sociobiological world view and the ultimate lack of meaning it presents are derived from what I consider the four foundational principles of sociobiology.
- The first principle is the assertion that human social systems have been shaped by evolutionary processes.
- Human societies exist in their present form because they work, or at least have worked in the past, not because they are based on any kind of revelation.

- Second, there is what sociobiologist Robert Wallace called the reproductive imperative.(2)
- The ultimate goal of any organism is to survive and reproduce.
- Species survival is the ultimate goal.
- Moral systems exist because they ultimately promote human survival and reproduction. ["Be fruitful and multiply and replenish the Earth."]

- Third, the individual--at least in respect to evolutionary time--is meaningless.
- Species, not individuals, evolve and persist through time.
- E.O. Wilson stated that the organism, your body, is simply DNA's way of making more DNA.(3) ["Through One Man - Adam, The Sin entered the World, and through The Sin The Death passed upon all mankind."]

- Fourth, all behavior is therefore selfish, or at least pragmatic, at its most basic level.
- We love our children because love is an effective means of raising effective reproducers. ["Oh, look at my little bundle of Reproduction."]
- Wilson spells out the combined result of these principles quite clearly in his book *On Human Nature* when he says that "...no species, ours included, possesses a purpose beyond the imperatives created by its own genetic history (i.e., evolution)...we have no particular place to go."

- The species lacks any goal external to its own biological nature.(4)
- Wilson is saying that since humans have been shaped by evolution alone, they have no purpose beyond survival and reproduction.
- Even Wilson admits that this is an unappealing proposition.

Hope and Meaning

- Since sociobiologists claim that all behavior is ultimately selfish, that an organism's only goal or purpose is to survive and reproduce, and that it is species survival, not individual survival, that is ultimately required, personal worth and dignity quickly disappear.
- The responses of sociobiologists when they are confronted with this conclusion have always been curious to me.

- I distinctly remember posing a question about hope and purpose to a graduate seminar composed of biology students and faculty.
- I asked, "Let's suppose that I am dead and in the ground, and the decomposers are doing their thing.
- What difference does it make to me now whether I have reproduced or not?"
- My point was that if death is the end with a capital "E", who cares whether or not I have reproduced?
- After an awkward silence, one of the faculty answered, "Well, I guess that it doesn't matter at all."

- In response, I asked, "Don't you see, we were just discussing how the only purpose in life is to survive and reproduce, but now you admit that this purpose is really an illusion.
- How do you go on with your life when you realize that it really doesn't matter what you do?"
- That there is no point to any of it?"
- After an even longer silence, the same faculty member said, "Well, I suppose that those who will be selected for in the future will be those who know there is no purpose in life, but will live as if there is."

- To say the least, I was stunned by the frankness of his response.
- He was basically saying that the human race will be forced to live with a lie--the illusion of hope and meaning.
- What was even more unsettling, however, was the fact that no one disagreed or offered even the most remote protest.
- Apart from myself, everyone there accepted evolution as a fact, so they were forced to accept this conclusion.
- (I would find out later that at least a couple of them didn't like it.)

- A professor of philosophy at a university in Minnesota recently answered my challenge by saying that maybe there are two different kinds of hope and meaning: hope and meaning in small letters (meaning survival and reproduction) and Hope and Meaning in capital letters (meaning ultimate worth and significance).
- We all have hope and meaning in small letters, and maybe there just isn't any in capital letters.
- So what?
- But that was precisely my point.
- Hope and meaning in small letters is without significance unless Hope and Meaning in capital letters really exists.

- Over the years I have noted three responses of evolutionists to the stark realization that their world view offers no hope or meaning in their lives.
- The first is strong disagreement with the conclusions of sociobiology without strong reasons for disagreeing.
- They don't like the result, but they find it difficult to argue with the basic principles.
- As evolutionists, they agree with evolution, but they don't want to believe that a meaningless existence is the end result.

- The second response is simple acceptance.
- These evolutionists agree that there is no purpose or meaning in life.
- They just have to accept it, as the professor in the story did.
- Their commitment to an evolutionary world view is total.
- I find this attitude most prevalent among faculty and graduate students at secular institutions.
- There is an almost eerie fatalism that stoutly embraces the notion that one's dislike of a theory is not sufficient cause to raise questions about it, especially when it is based on "sound" evolutionary principles.

- The third response is an existential leap for meaning and significance when both have been stripped away.
- This leap is aptly illustrated by evolutionist Robert Wallace at the end of his book, *The Genesis Factor*.
- He writes:
- "I do not believe that man is simply a clever egotist, genetically driven to look after his own reproduction. He is that. But he is at least that. He is obviously much more. The evidence for this is simple and abundant. One need only hear the Canon in D Major by Johann Pachelbel to know that there are immeasurable depths to the human spirit....I am sorry for the person who has never broken into a silly dance of sheer exuberance under a starry sky: perhaps such a person will be more likely to interpret the message of this book more narrowly."

- "The ones who will find it difficult to accept the narrow view are those who know more about the joy of being us. My biological training is at odds with something that I know and something that science will not be able to probe, perhaps because the time is now too short, perhaps because it is not measurable. I think our demise, if it occurs, will be a loss, a great loss, a great shame in some unknown equation."(5)
- What Wallace is saying in this passage is that something is missing, and it can't be found within the confines of the evolutionary world view.
- So look wherever you can!

- Some may argue that those who have trouble with the loss of hope and meaning are taking all this too seriously.
- I don't agree.
- On the contrary, I believe that they are being very consistent within their world view.
- If everything has evolved, and there is nothing outside of mere biology to give meaning and significance to life, then we must live in despair, denial, or irrational hope.
- Sociobiology is gaining in popularity because of the scientific community's strong commitment to evolution.

- If something follows logically from evolutionary theory, which I believe sociobiology does, then eventually all who consider themselves evolutionists will embrace it, whether it makes them comfortable or not.
- They will have no other rational choice.

The Second Paradox

- In reflecting on the notion that all human societies and moral systems should have characteristics that seem to have evolved, I am led to a second paradox for sociobiology.
- The first paradox was that, despite the loss of hope and meaning in the context of a completely naturalistic world view, sociobiology has continued to grow in influence.
- The second paradox involves Christianity.
- Since Christianity is based on revelation, it should be antithetical to or unexplainable by sociobiology, at least in some crucial areas.

- It is not unreasonable to expect that some aspects of Christian morality would be consistent with a sociobiological perspective, since Christians in small and large groups do work for the betterment of the group as a whole, and the argument could be made that the survival of individuals is thus increased.
- However, if Christianity's claim to be based on revelation from a transcendent God is true, I would be surprised, indeed extremely disappointed and confused, if everything in Christianity's moral standards also made sense from a sociobiological perspective.

- What little I have seen in the way of an evaluation of Christianity from E.O. Wilson and other sociobiologists is a poor caricature of true Christianity.
- I would like to offer a few suggestions for consideration.
- William Irons, in a discussion of theories of the evolution of moral systems, comments that nepotism is a very basic prediction of evolutionary theory.(6)
- Humans should be expected to be less competitive and more helpful towards relatives than towards non-relatives.
- He cites numerous studies to back up his claim that this prediction, more than any other sociobiological prediction, has been extensively confirmed.

- To be sure, the New Testament holds to very high standards concerning the importance of the family.
- Church leaders are to be judged first by how they conduct and relate themselves to their families (1 Tim. 3:12; Tit 1:6).
- Yet Jesus makes it quite clear that if there is any conflict between devotion to Him and devotion to our family, the family comes second.

He said,
"Do not think that I came to bring peace on the earth; I did not come to bring peace, but a sword. For I came to set a man against his father, and a daughter against her mother, and a daughter-in-law against her mother-in-law; and a man's enemies will be the members of his household. He who loves his father or mother more than Me is not worthy of Me. And he who does not take his cross and follow after Me is not worthy of Me. He who has found his life shall lose it, and he who has lost his life for My sake shall find it." (Matt. 10:34-39).

- In other passages Jesus gives promises that if we give up our families and possessions for His sake, then we will receive abundantly more in this life and the next, along with persecutions (Mark 10:29,30).
- Jesus Himself preferred the company of those who do the will of God to His own mother and brothers (Matt. 12:46-50).
- The clear message is that, while our families are important, our relationship with the living God comes first, even if members of our family force us to choose between God and them.

- Sociobiology may respond by saying that perhaps the benefit to be gained by inclusion in the group will compensate for the family loss, but how can the loss of an individual's entire genetic contribution to the next generation be explained away by any evolutionary mechanism?

- So far I have concentrated my remarks in areas where a Christian world view is in sharp contrast with the evolutionary world view of the sociobiologists.
- Now I would like to explore an area of curious similarity.
- While Christianity should not be completely explainable by sociobiology, there are certain aspects of Christian truth that are quite compatible with it.
- I have always been amazed by the curious similarity between the biblical description of the natural man or the desires of the flesh, and the nature of man according to evolutionary principles.

- Both perceive man as a selfish creature at heart, looking out for his own interests.
- It is not "natural" for a man to be concerned for the welfare of others unless there is something in it for him.
- Sociobiology seems to be quite capable of predicting many of the characteristics of human behavior.

- Scripture, on the other hand, informs us that the natural man does not accept the things of the Spirit, that they are foolishness to him (1 Cor. 2:14).
- I have wondered if our sin nature is somehow enveloped by biology, or, to be more specific, genetics.
- Could it be that some genetic connection to our sin nature at least partially explains why "there is none righteous, there is none who understands, there is none who seeks for God" (Rom. 3:10,11)?
- Does a genetic transmission of a sin nature help explain why "all have sinned and fall short of the glory of God" (Rom. 3:23)?

- Is this why salvation can only be through faith, that it is not of ourselves but is a gift of God, not a result of works (Eph. 2:8, 9)?
- Is this why the flesh continues to war in our bodies so that we do the thing which we do not want to do, why nothing good dwells in me, and why the members of my body wage war against the law of my mind (Rom. 7:14-25)?
- If there is a genetic component to our sin nature, it seems reasonable to assume that only the Spirit of God can overcome the desires of the flesh and that this struggle will continue in the believer until he or she is changed, until we see God face to face (1 Cor. 13:12; 15:50-58).

- I ask these questions not thinking that I have come upon some great truth or the answer to a long-standing mystery, but simply looking for some common ground between the truth of Scripture and the truth about human nature we may be discovering from the perspective of sociobiology.
- All truth is ultimately God's truth.
- While I certainly do not embrace the world view of the sociobiologist, I realize that there may be some truth that can be discovered by sociobiologists that can be truly captured to the obedience of Christ (2 Cor. 10:5).

· When I wrote that article for *Christianity Today* in 1981, I closed with this paragraph:
 "To know what to support and what to oppose, Christians involved in the social and biological sciences must be effective students of sociobiology. The popularity of sociobiology has gone unnoticed for too long already. We need precise and careful study as well as a watchful eye if we are to take every thought captive to the obedience of Christ."(7)
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New Year's Resolutions: Why You Can't Keep Them
 by [Rich Deem](#)

Introduction

- Why is it that we make New Year's resolutions, but fail to keep them within the first month of the new year?
- Some will say that you lack the willpower. Others have given up making New Year's resolutions altogether.
- What the Bible says
- The fact is that *all* people lack the willpower to keep all but the easiest of resolutions.

- The Bible makes the claim that the reason why we are unable to do what is good because we are, by nature, sinners.¹
- In fact, the Bible claims that we are born sinners.²
- Of course, these ideas are not politically correct.
- Political correctness would claim that we are born innocent or even virtuous and are corrupted by society, parents or other adults.

What evolutionary biology says

- Such claims do not hold up to scientific scrutiny. In [The Blank Slate: The Modern Denial of Human Nature](#), Steven Pinker, professor of Brain and Cognitive Sciences at MIT, provides that our facility with language, our ability to understand each other's actions as manifestations of mind, our number sense, our moral sense, our tool-making propensities are all pre-programmed.
- Being an evolutionary psychologist, Pinker claims that immoral behaviors, such as violence, clannishness, nepotism, lying and cheating have an evolutionary basis.

- Pinker goes on to show that the "noble savage" idea (that we are born virtuous and that it is only society that warps and corrupts us) is a myth.

The solution

- Although Pinker gets the data right, he fails to provide the direct genetic evidence that these mental functions are encoded by genes (although it is likely that at least some mental functions are genetically programmed).
- Ultimately, the Bible's claim that humans are "born sinners" seems to be supported by this research, even if the cause (evolutionary genetics vs. the biblical sin nature) remains unresolved.

- Given this depressing news, what are we to do?
- Pinker suggests that we fight against our genes and rise above them.
- You (and I) have already tried that approach and failed at it.
- The Bible has another suggestion. It is not through human willpower, but by abiding in "the light" - Jesus Christ - the source of all power - that we have the ability to do good.
- If you are trying to do things through your own will power, you will find that there is no "power" in your own will.
- Only by abiding in Christ can we fulfill the will of God in our own lives. END

- Now to look at the "evolutionary geneticist" viewpoint:

THE HAPPINESS HYPOTHESIS - Jonathan Haidt
Introduction: Too Much Wisdom

- What should I do, how should I live, and whom should I become?
- Many of us ask such questions, and, modern life being what it is, we don't have to go far to find answers.
- Wisdom is now so cheap and abundant that it floods over us from calendar pages, tea bags, bottle caps, and mass e-mail messages forwarded by well-meaning friends.

- We are in a way like residents of Jorge Luis Borges's Library of Babel—an infinite library whose books contain every possible string of letters and, therefore, somewhere an explanation of why the library exists and how to use it.
- But Borges's librarians suspect that they will never find that book amid the miles of nonsense.
- Our prospects are better.

- Few of our potential sources of wisdom are nonsense, and many are entirely true.
- Yet, because our library is also effectively infinite—no one person can ever read more than a tiny fraction—we face the paradox of abundance: Quantity undermines the quality of our engagement.
- With such a vast and wonderful library spread out before us, we often skim books or read just the reviews.
- We might already have encountered the Greatest Idea, the insight that would have transformed us had we savored it, taken it to heart, and worked it into our lives.

- This is a book about ten Great Ideas.
- Each chapter is an attempt to savor one idea that has been discovered by several of the world's civilizations—to question it in light of what we now know from scientific research, and to extract from it the lessons that still apply to our modern lives.
- I am a social psychologist.
- I do experiments to try to figure out one corner of human social life, and my corner is morality and the moral emotions.
- I am also a teacher.
- I teach a large introductory psychology class at the University of Virginia in which I try to explain the entire field of psychology in twenty-four lectures.

- I have to present a thousand research findings on everything from the structure of the retina to the workings of love, and then hope that my students will understand and remember it all.
- As I struggled with this challenge in my first year of teaching, I realized that several ideas kept recurring across lectures, and that often these ideas had been stated eloquently by past thinkers.
- To summarize the idea that our emotions, our reactions to events, and some mental illnesses are caused by the mental filters through which we look at the world, I could not say it any more concisely than Shakespeare:

- “There is nothing either good or bad, but thinking makes it so.”¹
- I began to use such quotations to help my students remember the big ideas in psychology, and I began to wonder just how many such ideas there were.
 - To find out, I read dozens of works of ancient wisdom, mostly from the world's three great zones of classical thought:
 - India (for example, the Upanishads, the Bhagavad Gita, the sayings of the Buddha),
 - China (the Analects of Confucius, the Tao te Ching, the writings of Meng Tzu and other philosophers),
 - and the cultures of the Mediterranean (the Old and New Testaments, the Greek and Roman philosophers, the Koran).

- I also read a variety of other works of philosophy and literature from the last five hundred years.
- Every time I found a psychological claim—a statement about human nature or the workings of the mind or heart—I wrote it down.
- Whenever I found an idea expressed in several places and times I considered it a possible Great Idea.
- But rather than mechanically listing the top ten all-time most widespread psychological ideas of humankind, I decided that coherence was more important than frequency.
- I wanted to write about a set of ideas that would fit together, build upon each other, and tell a story about how human beings can find happiness and meaning in life. (Emphasis Added)

- Helping people find happiness and meaning is precisely the goal of the new field of positive psychology.² a field in which I have been active,³ so this book is in a way about the origins of positive psychology in ancient wisdom and the applications of positive psychology today.
- Most of the research I will cover was done by scientists who would not consider themselves positive psychologists. Nonetheless, I have drawn on ten ancient ideas and a great variety of modern research findings to tell the best story I can about the causes of human flourishing, and the obstacles to well being that we place in our own paths. (Emphasis Added)

- The story begins with an account of how the human mind works.
- Not a full account, of course, just two ancient truths that must be understood before you can take advantage of modern psychology to improve your life.
- The first truth is the foundational idea of this book: **The mind is divided into parts that sometimes conflict.**
- Like a rider on the back of an elephant, the conscious, reasoning part of the mind has only limited control of what the elephant does.
- Nowadays, we know the causes of these divisions, and a few ways to help the rider and the elephant work better as a team.

- The second idea is Shakespeare's, about how "thinking makes it so." (Or, as Buddha 4 said, "Our life is the creation of our mind.") [Or, as God, "As a man thinks in his heart, that is what he is"]
- But we can improve this ancient idea today by explaining why most people's minds have a bias toward seeing threats and engaging in useless worry.
- We can also do something to change this bias by using three techniques that increase happiness, one ancient and two very new. [Meditation, Counseling and Drugs.]

- The second step in the story is to give an account of our social lives—again, not a complete account, just two truths, widely known but not sufficiently appreciated.
- One is the Golden Rule.
- Reciprocity is the most important tool for getting along with people, and I'll show you how you can use it to solve problems in your own life and avoid being exploited by those who use reciprocity against you.
- However, reciprocity is more than just a tool.
- It is also a clue about who we humans are and what we need, a clue that will be important for understanding the end of the larger story.

- The second truth in this part of the story is that we are all, by nature, hypocrites, and this is why it is so hard for us to follow the Golden Rule faithfully.
- Recent psychological research has uncovered the mental mechanisms that make us so good at seeing the slightest speck in our neighbor's eye, and so bad at seeing the log in our own.
- If you know what your mind is up to, and why you so easily see the world through a distorting lens of good and evil, you can take steps to reduce your self-righteousness.
- You can thereby reduce the frequency of conflicts with others who are equally convinced of their righteousness.

- At this point in the story, we'll be ready to ask:
- Where does happiness come from?
- There are several different "happiness hypotheses."
- One is that happiness comes from getting what you want, but we all know (and research confirms) that such happiness is short-lived.
- A more promising hypothesis is that happiness comes from within and cannot be obtained by making the world conform to your desires.
- This idea was widespread in the ancient world:

- Buddha in India and the Stoic philosophers in ancient Greece and Rome all counseled people to break their emotional attachments to people and events, which are always unpredictable and uncontrollable, and to cultivate instead an attitude of acceptance.
- This ancient idea deserves respect, and it is certainly true that changing your mind is usually a more effective response to frustration than is changing the world.
- However, I will present evidence that this second version of the happiness hypothesis is wrong.

- Recent research shows that there are some things worth striving for; there are external conditions of life that can make you lastingly happier.
- One of these conditions is relatedness—the bonds we form, and need to form, with others.
- I'll present research showing where love comes from, why passionate love always cools, and what kind of love is "true" love.
- I'll suggest that the happiness hypothesis offered by Buddha and the Stoics should be amended:
- Happiness comes from within, and happiness comes from without.
- We need the guidance of both ancient wisdom and modern science to get the balance right.

- The next step in this story about flourishing is to look at the conditions of human growth and development.
- We've all heard that what doesn't kill us makes us stronger, but that is a dangerous oversimplification.
- Many of the things that don't kill you can damage you for life.
- Recent research on "posttraumatic growth" reveals when and why people grow from adversity, and what you can do to prepare yourself for trauma, or to cope with it after the fact.

- We have also all heard repeated urgings to cultivate virtue in ourselves, because virtue is its own reward, but that, too, is an oversimplification.
- I'll show how concepts of virtue and morality have changed and narrowed over the centuries, and how ancient ideas about virtue and moral development may hold promise for our own age.
- I'll also show how positive psychology is beginning to deliver on that promise by offering you a way to "diagnose" and develop your own strengths and virtues.

- The conclusion of the story is the question of meaning:
- Why do some people find meaning, purpose, and fulfillment in life, but others do not?
I begin with the culturally widespread idea that there is a vertical, spiritual dimension of human existence.
- Whether it is called nobility, virtue, or divinity, and whether or not God exists, people simply do perceive sacredness, holiness, or some ineffable goodness in others, and in nature.

- I'll present my own research on the moral emotions of disgust, elevation, and awe to explain how this vertical dimension works, and why the dimension is so important for understanding religious fundamentalism, the political culture war, and the human quest for meaning.
- I'll also consider what people mean when they ask, "What is the meaning of life?"
- And I'll give an answer to the question—an answer that draws on ancient ideas about having a purpose but that uses very recent research to go beyond these ancient ideas, or any ideas you are likely to have encountered. In doing so, I'll revise the happiness hypothesis one last time.

- I could state that final version here in a few words, but I could not explain it in this brief introduction without cheapening it.
- Words of wisdom, the meaning of life, perhaps even the answer sought by Borges's librarians—all of these may wash over us every day, but they can do little for us unless we savor them, engage with them, question them, improve them, and connect them to our lives.
- That is my goal in this book.

1

The Divided Self

· *For what the flesh desires is opposed to the Spirit, and what the Spirit desires is opposed to the flesh; for these are opposed to each other, to prevent you from doing what you want.* —St. Paul, Galatians 5:17

If Passion drives, let Reason hold the Reins. — Benjamin Franklin²

· I first rode a horse in 1991, in Great Smoky National Park, North Carolina.

I'd been on rides as a child where some teenager led the horse by a short rope, but this was the first time it was just me and a horse, no rope.

· I wasn't alone—there were eight other people on eight other horses, and one of the people was a park ranger—so the ride didn't ask much of me.

- There was, however, one difficult moment. We were riding along a path on a steep hillside, two by two, and my horse was on the outside, walking about three feet from the edge.
- Then the path turned sharply to the left, and my horse was heading straight for the edge.
- I froze.
- I knew I had to steer left, but there was another horse to my left and I didn't want to crash into it.
- I might have called out for help, or screamed, "Look out!"; but some part of me preferred the risk of going over the edge to the certainty of looking stupid.

· So I just froze. I did nothing at all during the critical five seconds in which my horse and the horse to my left calmly turned to the left by themselves.

· As my panic subsided, I laughed at my ridiculous fear. The horse knew exactly what she was doing.

· She'd walked this path a hundred times, and she had no more interest in tumbling to her death than I had.

· She didn't need me to tell her what to do, and, in fact, the few times I tried to tell her what to do she didn't much seem to care.

· I had gotten it all so wrong because I had spent the previous ten years driving cars, not horses.

· Cars go over edges unless you tell them not to.

· **Human thinking depends on metaphor.**

· We understand new or complex things in relation to things we already know.³

· For example, it's hard to think about life in general, but once you apply the metaphor "life is a journey," the metaphor guides you to some conclusions:

· You should learn the terrain, pick a direction, find some good traveling companions, and enjoy the trip, because there may be nothing at the end of the road.

· It's also hard to think about the mind, but once you pick a metaphor it will guide your thinking.

· Throughout recorded history, people have lived with and tried to control animals, and these animals made their way into ancient metaphors.

· Buddha, for example, compared the mind to a wild elephant:

· "In days gone by this mind of mine used to stray wherever selfish desire or lust or pleasure would lead it. Today this mind does not stray and is under the harmony of control, even as a wild elephant is controlled by the trainer."⁴

· Plato used a similar metaphor in which the self (or soul) is a chariot, and the calm, rational part of the mind holds the reins.

· Plato's charioteer had to control two horses:

· The horse that is on the right, or nobler, side is upright in frame and well jointed, with a high neck and a regal nose;...he is a lover of honor with modesty and self-control; companion to true glory, he needs no whip, and is guided by verbal commands alone.

· The other horse is a crooked great jumble of limbs ... companion to wild boasts and indecency, he is shaggy around the ears—deaf as a post—and just barely yields to horsewhip and goad combined.

- For Plato, some of the emotions and passions are good (for example, the love of honor), and they help pull the self in the right direction, but others are bad (for example, the appetites and lusts).
- The goal of Platonic education was to help the charioteer gain perfect control over the two horses.
- Sigmund Freud offered us a related model 2,300 years later.⁶
- Freud said that the mind is divided into three parts: the ego (the conscious, rational self); the superego (the conscience, a sometimes too rigid commitment to the rules of society); and the id (the desire for pleasure, lots of it, sooner rather than later).

- The metaphor I use when I lecture on Freud is to think of the mind as a horse and buggy (a Victorian chariot) in which the driver (the ego) struggles frantically to control a hungry, lustful, and disobedient horse (the id) while the driver's father (the superego) sits in the back seat lecturing the driver on what he is doing wrong.
- For Freud, the goal of psychoanalysis was to escape this pitiful state by strengthening the ego, thus giving it more control over the id and more independence from the superego.

- Freud, Plato, and Buddha all lived in worlds full of domesticated animals.
- They were familiar with the struggle to assert one's will over a creature much larger than the self.
- But as the twentieth century wore on, cars replaced horses, and technology gave people ever more control over their physical worlds.
- When people looked for metaphors, they saw the mind as the driver of a car, or as a program running on a computer.
- It became possible to forget all about Freud's unconscious, and just study the mechanisms of thinking and decision making.

- That's what social scientists did in the last third of the century:
- Social psychologists created "information processing" theories to explain everything from prejudice to friendship.
- Economists created "rational choice" models to explain why people do what they do.
- The social sciences were uniting under the idea that people are rational agents who set goals and pursue them intelligently by using the information and resources at their disposal.
- But then, why do people keep doing such stupid things?

- Why do they fail to control themselves and continue to do what they know is not good for them?
- I, for one, can easily muster the willpower to ignore all the desserts on the menu.
- But if dessert is placed on the table, I can't resist it.
- I can resolve to focus on a task and not get up until it is done, yet somehow I find myself walking into the kitchen, or procrastinating in other ways.
- I can resolve to wake up at 6:00 A.M. to write; yet after I have shut off the alarm, my repeated commands to myself to get out of bed have no effect, and I understand what Plato meant when he described the bad horse as "deaf as a post."

- But it was during some larger life decisions, about dating, that I really began to grasp the extent of my powerlessness.
- I would know exactly what I should do, yet, even as I was telling my friends that I would do it, a part of me was dimly aware that I was not going to.
- Feelings of guilt, lust, or fear were often stronger than reasoning.
- (On the other hand, I was quite good at lecturing friends in similar situations about what was right for them.)
- The Roman poet Ovid captured my situation perfectly.

- In *Metamorphoses*, Medea is torn between her love for Jason and her duty to her father.
- She laments:
"I am dragged along by a strange new force. Desire and reason are pulling in different directions. I see the right way and approve it, but follow the wrong."⁷
- Modern theories about rational choice and information processing don't adequately explain weakness of the will.
- The older metaphors about controlling animals work beautifully.

- The image that I came up with for myself, as I marveled at my weakness, was that I was a rider on the back of an elephant.
- I'm holding the reins in my hands, and by pulling one way or the other I can tell the elephant to turn, to stop, or to go.
- I can direct things, but only when the elephant doesn't have desires of his own.
- When the elephant really wants to do something, I'm no match for him.

- I have used this metaphor to guide my own thinking for ten years, and when I began to write this book I thought the image of a rider on an elephant would be useful in this first chapter, on the divided self.
- However, the metaphor has turned out to be useful in every chapter of the book.
- To understand most important ideas in psychology, you need to understand how the mind is divided into parts that sometimes conflict.

- We assume that there is one person in each body, but in some ways we are each more like a committee whose members have been thrown together to do a job, but who often find themselves working at cross purposes.
- Our minds are divided in four ways.
- The fourth is the most important, for it corresponds most closely to the rider and the elephant; but the first three also contribute to our experiences of temptation, weakness, and internal conflict.

- First Division: Mind vs. Body
- We sometimes say that the body has a mind of its own, but the French philosopher Michel de Montaigne went a step further and suggested that each part of the body has its own emotions and its own agenda.
- Montaigne was most fascinated by the independence of the penis:

- "It imperiously contests for authority with our will."⁸
- Montaigne also noted the ways in which our facial expressions betray our secret thoughts; our hair stands on end; our hearts race; our tongues fail to speak; and our bowels and anal sphincters undergo "dilations and contractions proper to [themselves], independent of our wishes or even opposed to them."

- But the last item on Montaigne's list—the bowels—reflects the operation of a second brain.
- Our intestines are lined by a vast network of more than 100 million neurons; these handle all the computations needed to run the chemical refinery that processes and extracts nutrients from food.⁹
- This gut brain is like a regional administrative center that handles stuff the head brain does not need to bother with.
- You might expect, then, that this gut brain takes its orders from the head brain and does as it is told. But the gut brain possesses a high degree of autonomy, and it continues to function well even if the vagus nerve, which connects the two brains together, is severed.

- The gut brain makes its independence known in many ways: It causes irritable bowel syndrome when it “decides” to flush out the intestines.
- It triggers anxiety in the head brain when it detects infections in the gut, leading you to act in more cautious ways that are appropriate when you are sick.¹⁰
- And it reacts in unexpected ways to anything that affects its main neurotransmitters, such as acetylcholine and serotonin.
- Hence, many of the initial side effects of Prozac and other selective serotonin reuptake inhibitors involve nausea and changes in bowel function.

- Trying to improve the workings of the head brain can directly interfere with those of the gut brain.
- The independence of the gut brain, combined with the autonomic nature of changes to the genitals, probably contributed to ancient Indian theories in which the abdomen contains the three lower chakras—energy centers corresponding to the colon/anus, sexual organs, and gut.
- The gut chakra is even said to be the source of gut feelings and intuitions, that is, ideas that appear to come from somewhere outside one's own mind.
- When St. Paul lamented the battle of flesh versus Spirit, he was surely referring to some of the same divisions and frustrations that Montaigne experienced.

Second Division: Left vs. Right

- A second division was discovered by accident in the 1960s when a surgeon began cutting people's brains in half.
- The surgeon, Joe Bogen, had a good reason for doing this: He was trying to help people whose lives were destroyed by frequent and massive epileptic seizures.
- The human brain has two separate hemispheres joined by a large bundle of nerves, the corpus callosum.
- Seizures always begin at one spot in the brain and spread to the surrounding brain tissue.
- If a seizure crosses over the corpus callosum, it can spread to the entire brain, causing the person to lose consciousness, fall down, and writhe uncontrollably.

- Just as a military leader might blow up a bridge to prevent an enemy from crossing it, Bogen wanted to sever the corpus callosum to prevent the seizures from spreading.
- At first glance this was an insane tactic. The corpus callosum is the largest single bundle of nerves in the entire body, so it must be doing something important.
- Indeed it is: It allows the two halves of the brain to communicate and coordinate their activity.
- Yet research on animals found that, within a few weeks of surgery, the animals were pretty much back to normal.
- So Bogen took a chance with human patients, and it worked.
- The intensity of the seizures was greatly reduced.

- But was there really no loss of ability?
- To find out, the surgical team brought in a young psychologist, Michael Gazzaniga, whose job was to look for the after-effects of this “split-brain” surgery.
- Gazzaniga took advantage of the fact that the brain divides its processing of the world into its two hemispheres—left and right.
- The left hemisphere takes in information from the right half of the world (that is, it receives nerve transmissions from the right arm and leg, the right ear, and the left half of each retina, which receives light from the right half of the visual field) and sends out commands to move the limbs on the right side of the body.

- The right hemisphere is in this respect the left's mirror image, taking in information from the left half of the world and controlling movement on the left side of the body.
- Nobody knows why the signals cross over in this way in all vertebrates; they just do.
- But in other respects, the two hemispheres are specialized for different tasks.
- The left hemisphere is specialized for language processing and analytical tasks.
- In visual tasks, it is better at noticing details.
- The right hemisphere is better at processing patterns in space, including that all-important pattern, the face.
- (This is the origin of popular and oversimplified ideas about artists being "right-brained" and scientists being "left-brained").

- Gazzaniga used the brain's division of labor to present information to each half of the brain separately.
 - He asked patients to stare at a spot on a screen, and then flashed a word or a picture of an object just to the right of the spot, or just to the left, so quickly that there was not enough time for the patient to move her gaze.
 - If a picture of a hat was flashed just to the right of the spot, the image would register on the left half of each retina (after the image had passed through the cornea and been inverted), which then sent its neural information back to the visual processing areas in the left hemisphere.
- Gazzaniga would then ask, "What did you see?"

- Because the left hemisphere has full language capabilities, the patient would quickly and easily say, "A hat."
- If the image of the hat was flashed to the left of the spot, however, the image was sent back only to the right hemisphere, which does not control speech.
- When Gazzaniga asked, "What did you see?", the patient, responding from the left hemisphere, said, "Nothing."
- But when Gazzaniga asked the patient to use her left hand to point to the correct image on a card showing several images, she would point to the hat.
- Although the right hemisphere had indeed seen the hat, it did not report verbally on what it had seen because it did not have access to the language centers in the left hemisphere.

- It was as if a separate intelligence was trapped in the right hemisphere, its only output device the left hand.¹¹
- When Gazzaniga flashed different pictures to the two hemispheres, things grew weirder.
- On one occasion he flashed a picture of a chicken claw on the right, and a picture of a house and a car covered in snow on the left.
- The patient was then shown an array of pictures and asked to point to the one that "goes with" what he had seen.
- The patient's right hand pointed to a picture of a chicken (which went with the chicken claw the left hemisphere had seen), but the left hand pointed to a picture of a shovel (which went with the snow scene presented to the right hemisphere).

- When the patient was asked to explain his two responses, he did not say, "I have no idea why my left hand is pointing to a shovel; it must be something you showed my right brain."
- Instead, the left hemisphere instantly made up a plausible story.
- The patient said, without any hesitation, "Oh, that's easy. The chicken claw goes with the chicken, and you need a shovel to clean out the chicken shed."¹²

- This finding, that people will readily fabricate reasons to explain their own behavior, is called "confabulation."
- Confabulation is so frequent in work with split-brain patients and other people suffering brain damage that Gazzaniga refers to the language centers on the left side of the brain as the interpreter module, whose job is to give a running commentary on whatever the self is doing, even though the interpreter module has no access to the real causes or motives of the self's behavior.

- For example, if the word “walk” is flashed to the right hemisphere, the patient might stand up and walk away.
- When asked why he is getting up, he might say, “I’m going to get a Coke.”
- The interpreter module is good at making up explanations, but not at knowing that it has done so.
- Science has made even stranger discoveries.
- In some split-brain patients, or in others who have suffered damage to the corpus callosum, the right hemisphere seems to be actively fighting with the left hemisphere in a condition known as alien hand syndrome.

- In these cases, one hand, usually the left, acts of its own accord and seems to have its own agenda.
- The alien hand may pick up a ringing phone, but then refuse to pass the phone to the other hand or bring it up to an ear.
- The hand rejects choices the person has just made, for example, by putting back on the rack a shirt that the other hand has just picked out.
- It grabs the wrist of the other hand and tries to stop it from executing the person’s conscious plans.
- Sometimes, the alien hand actually reaches for the person’s own neck and tries to strangle him.¹³

- These dramatic splits of the mind are caused by rare splits of the brain.
 - Normal people are not split-brained.
 - Yet the split-brain studies were important in psychology because they showed in such an eerie way that the mind is a confederation of modules capable of working independently and even, sometimes, at cross-purposes.
 - Split-brain studies are important for this book because they show in such a dramatic way that one of these modules is good at inventing convincing explanations for your behavior, even when it has no knowledge of the causes of your behavior.
- Gazzaniga’s “interpreter module” is, essentially, the rider.

Next Week:

Old Vs. New
and
The Controlled
Vs.
The Automatic
(and The Bible
Perspective)