

SO YOU MARRIED



A CONSERVATIVE

**A Stone Age Explanation of Our Differences
A New Path Towards Progress**

ROBERT HASTON

Cover Art: The statue is the *Venus of Willendorf*, a stone carving found near the Danube River in Austria, dated approximately 23,000 BC. It is commonly regarded as the first artifact of "true art". It is located in the Vienna Museum of Natural History:

<http://www.nhm-wien.ac.at/>

The hand axe was found near Norwich England. It was dated to approximately 500,000 BC, and was until recently considered the oldest tool in the British Isles. It is located in the Norfolk Museum Collection:

<http://www.museums.norfolk.gov.uk/>

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Preface

The two parties which divide the state, the party of Conservatism and that of Innovation, are very old, and have disputed the possession of the world ever since it was made.

This quarrel is the subject of civil history. The conservative party established the reverend hierarchies and monarchies of the most ancient world. The battle of patrician and plebeian, of parent state and colony, of old usage and accommodation to new facts, of the rich and the poor, reappears in all countries and times. The war rages not only in battle-fields, in national councils, and ecclesiastical synods, but agitates every man's bosom with opposing advantages every hour. On rolls the old world meantime, and now one, now the other gets the day, and still the fight renews itself as if for the first time, under new names and hot personalities.

Such an irreconcilable antagonism, of course, must have a correspondent depth of seat in the human constitution. It is the opposition of Past and Future, of Memory and Hope, of the Understanding and the Reason. It is the primal antagonism, the appearance in trifles of the two poles of nature.

Ralph Waldo Emerson

The Conservative
December 9th 1841

Emerson took wisdom handed down from the ancient Greeks and turned it into a brave revelation about our deepest political nature. Since his death, this revelation lay still while those from Karl Marx to modern feminists ushered in the myth of the blank slate – that the human mind was singularly unique among God’s creatures – putty in the two hands of nurture and culture.

In the decades since Watson and Crick discovered the code that writes the human constitution, scores of authors have made great claims about evolved biology driving every facet of human behavior, like ancient scrolls in a player piano. Yet only a few dare to touch Emerson’s brave claim that this also calls the tunes that our political subspecies dance to.

We need to grasp his idea and hold it for all to see it in the light of modern science, to remind us that there are no exceptions to these truths, regardless of how socially unpopular or individually repulsive we may find them. Like three unruly horses lashed together; nature, nurture, and culture pull our species across the centuries. An honest eye must see that Emerson’s ever repeating “primal antagonism” must stem either from DNA or God. And if it is God, well then God made DNA, so there you are.

Humanity’s dark ages didn’t fall when everyone suddenly stopped thinking of new ideas; dark ages descend when cultures conspire to suppress them. We now live in an ironic age where satellite and computer media is fostering a new dark era of ideological tribalism. We make too much about great minds and too little about the cultures they took seed in. It is time to break this last taboo and open our culture to Emerson’s, to carry on where we left him so long ago. We owe him that much.

*All people are born alike –
except Republicans and Democrats*

Groucho Marx

So you married a conservative. For many of you I mean this literally. This book picks up where *Men are From Mars and Women are From Venus* left off. Science has recently revealed how our political instincts are shaped not just years before our first vote, but from a mix of genes that evolved long ago. That’s why getting a liberal to think like a conservative seems as hard a task as getting a woman to think like a man. *Men are from Mars* proved that by simply accepting and understanding our differences, stagnant or poisonous relationships can once again flourish.

For all of us I mean this figuratively but just as sincerely. We are all trapped in a global multigenerational marriage of conservatives and liberals, a bad marriage that is getting worse. Unlike real spouses, we can’t divorce. This primal irreconcilable antagonism cannot be vanquished; but it can be understood and better managed.

Maybe you are surrounded by liberals at work. Maybe you are a devout partisan who wants to “know your enemy” so you can defeat him. Maybe you are a besieged moderate who wants to deflate that partisan bloviator or bloviatrix. Maybe you are an optimistic peacemaker. Maybe you are a descendant of Emerson, in search of deeper answers. Maybe you just want a metaphor that makes better sense of it all.

Human society is trapped inside a dysfunctional marriage of conservatives and liberals. We have a choice. We can accept and understand the red or blue tribal instincts that drive the other half, or we can continue our retreat into ever more blind and vicious combat.

Spouses looking back on a mended marriage realize that they shared the same goals, but they fought mostly over style or symbolism. They came to realize that just like a corporate team, Mars and Venus had different talents. These could either be used to create synergy or strife.

So for those interested in making this marriage work, those more interested in our common path than whether we ballet to the left or square dance to the right as we go down it, I offer this. Right now this is the best tool we have.

I also use the term stone age both ways too. Figuratively I offer you *Traditional Warrior* versus *New Villager*. This is the conflict between traditional instincts such as fertility and territoriality, and new culture such as art and diplomacy. As you will see, such metaphors come from the partisan's own mouths. They are so accurate they give you goose bumps, which are vestiges from your hairy ancestors – if you believe in that sort of thing.

Behind this figurative metaphor are the literal underpinnings that don't require a belief in human evolutionary origin. Our instincts may be God given. In fact it is often religious conservatives who fight for a biological view, particularly regarding the differences between the sexes; while feminist liberals who champion evolution are keen to deny such differences.

While how we got our genes will still be in dispute long after I am dead, no one is arguing that we don't have DNA, or that it doesn't shape about 40% of our personality traits. It turns out that our support for causes that are conservative or liberal is just as heritable as our extroversion or impulsiveness. These of course don't come from "political genes" related to policy. These stem from simpler instincts. Our instincts for fertility, territoriality, hierarchy and other behaviors shape our emotions and moral instincts about issues like abortion, immigration, and welfare. Politics don't shape personality; personality shapes politics.

Mention this and you can almost hear people's minds slamming shut. We want to believe that *our* moral instincts are based on pure logic, but our opponents are clearly emotional and irrational. Every other topic has been theorized about ad infinitum by evolutionary psychologists; but politics? We act as if when it comes to politics, we have no personality, that we are propelled only by pure learned ideology, as if our inner *Homo politicus* isn't human. This is the Great Pretense of our time.

The most common defensive reaction is: “If genes shape our politics, then why am I different from my siblings?” The real question here is: “If you shared the exact same environment, why are you so different?” Genetics easily explains both your differences and your similarities. The whole point of sexual reproduction is to mix up gene pools to create variation. Animal populations need this variation to survive and adapt to varying environments. This doesn’t occur with identical twins. Identical twins raised apart stand a 70% chance of sharing personality traits like extroversion or conservatism. Adopted siblings share lives but amazingly few personality traits.

Now consider how nature seeks its own nurture. A daycare worker can point out the bossy Alpha kids, nurturing bleeding hearts, law and order authoritarians and anti-authoritarian rebels. One study correlated such behavior to later political affiliation¹. Do you think that if Al Franken and Bill O’Reilly were switched at birth, O’Reilly would have become a liberal comedy writer and Al a conservative talk show host? Different siblings choose music over boy scouts or drama over football. Our personalities drive us to seek out friends, activities, careers and news sources that we like. Consider how as soon as technology gave us the chance, we retreated into alternate conservative and liberal media caves. We’ve come to accept how people often reject or embrace religion despite their upbringing. Politics is no different.

Then once we join a side (we had to split up over something) the incredible power of group subconscious kicks in. Then the power of language carries these themes across the world and down through generations. So like a trickle of water carving a great canyon, the persistent and consistent force of this “primal antagonism” was carving our social landscape for millennia and will continue to do so. It is a force we would do well to understand.

We all agree about the biology of human nature. No one disputes modern neuroscience. When a liberal empathizes or can’t stop thinking about tomorrow, he is using a different part of his brain than a conservative who is disgusted with how they disrespect tradition. Even if you are a devout behaviorist, how much do people’s opinions really

change after their 20s? Whatever got us here, we arrive as political Martians and Venusians.

We have long romanticized about man the rational animal. Modern neuroscience is revealing not just the power of genetics, but the equal power of social forces. Studies have shown how peer pressure can even make your optical cortex change what you see. Our social fears make it so we literally can't believe our own eyes. Between the power of our genes and the power of the herd, there is shrinking room left over for our outdated notion of man the independent thinker, challenging both his own ideas and those of his culture. Politics makes you emotional. Emotions (*especially group emotions*) suppress reason. Therefore, politics makes you stupid.

We aren't so much in charge of our brains as our brains are in charge of us. Our brains know what they want, and they often erect fantastic apparatuses (such as conspiracy theories) to get it. Much of what we spend our time doing makes little sense. Consider how many of us watch, listen to, or talk about national politics for hours a week, as if we work on Capitol Hill. This culminates in two minutes every two years in the voting booth, where we typically vote for whom we would have voted for anyway.

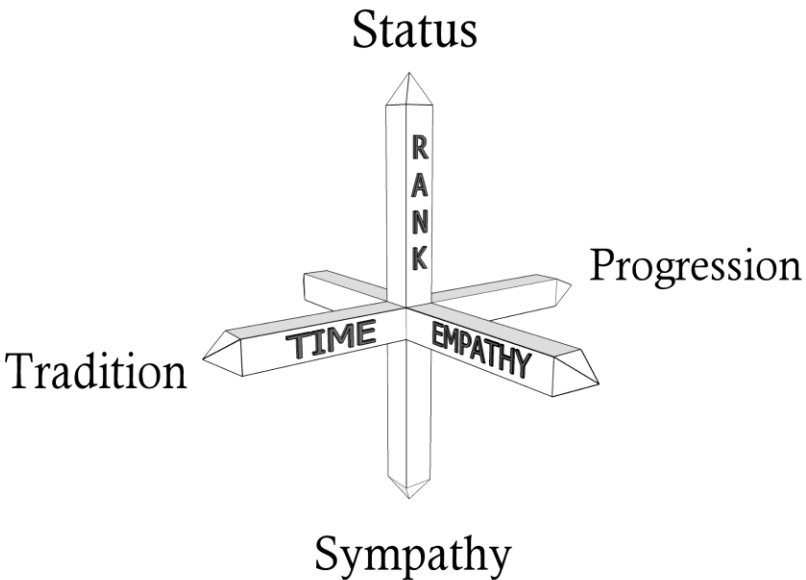
Such silly behavior demands a serious explanation. I'm not the first to note how we still act like we live in tiny tribes, where every adult was a member of congress. We are using Stone Age minds to deal with computer age challenges. Mankind isn't sane; we are just all crazy in the same general directions.

For everyone I will offer this. My work on this book has given me a whole new perspective. What has taken me years to uncover can be yours in a few days. I have some great examples of how I have gotten zealots to look towards common ground. I offer handy "how to" sections. I'll give you an example next, but first here is one key to help you see the essence of personality that makes one conservative or liberal.

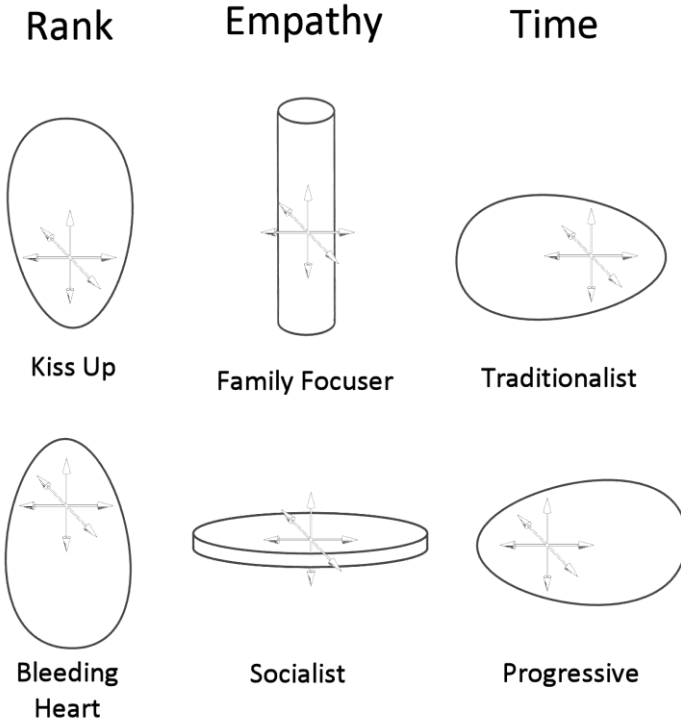
People go to ridiculous lengths to explain what to unadulterated eyes should be obvious. People are that way simply because they are. We accept this for every other human behavior, why not politics? Anxious

personalities worry about the future and are by nature more progressive. Bleeding hearts grow up to be more liberal.

Everyone's personality contains an "inner light" of social nature. Its height or depth orients around social rank or hierarchy. Its width is based on empathy; think of this ingroup/outgroup dimension as the width of one's hug. The conservative brain focuses in on the family, upward in hierarchy, and back towards tradition. The liberal brain focuses empathetically out towards others, sympathetically downward and forward (progressivism).



Like a Dr. Seuss story, there are rich people, poor people, near people, far people, past people, and future people. How we see them makes us red people or blue people. Here are the polar conservative and liberal examples for each axis. The cylinder shapes are for ease of illustration of what would look like a hot dog or pancake in reality. Our political personalities vary on these and other scales, giving each of us a unique lumpy bumpy shape.



Emerson saw this first described by the ancient Greek Aeschylus. Olympian gods of the age championed diversity, tolerance, cooperation and protection. They opposed the ancient Furies who fought for fertility, blood relations, and revenge. You can be a moderate, but you can't be a brown-nosing liver donor, a family focusing socialist, or a traditionalist

progressive any more than you can be a pacifist warrior. This goes across axes, too. You can't be an elitist lover and an egalitarian.

A relationship between the axes stands out just like it did to the ancient Greeks. Your ancestors, your family, and the elite are a clear in-group, defined by a genealogy. The teeming masses far away and in the future are defined mainly via culture. Our ideological divide is between the vision of man as a vessel of genes and birthright, or a vessel of culture. Jonathan Haidt's cross cultural research on moral psychology reveals the same orientation, plus a conservative affinity for purity/sanctity. This is less of an orientation and more of a *modus operandi* toward action. Declaring the other impure or profane is necessary before acting upon the beliefs of your group personality.

Furthermore it is in our nature to fear that which is beyond our light. We act upon this before we give it a first thought. We have instincts, emotions, morals, and other ingrained behavior for a reason. To make a step by step logical choice about every action would immobilize us. Unfortunately this means as creatures we will trust our gut even when it means disbelieving our own eyes.

In any other animal, conservative traits would be described as favoring alpha male (authoritarian) hierarchy and preferring a close social circle (strong ingroup/outgroup instinct). High fertility, hierarchy, territoriality, and combativeness would also be listed, along with seeking conformity instead of novelty, diversity, or change.

So now on to my example: The conflict about Global Warming is more about neuroscience than climate science. A liberal progressive is by nature dutifully "thinking globally" and fretting about our warming future. He sets about gathering information from like-minded individuals to support this. The conservative intuitively grasps how this is just one more attempt to take money from his family to benefit the grandchildren of foreigners. So he is equally certain that it is a hoax, a plot to provide "Windmills for Mexicans". Both of their minds were made up before either heard of Global Warming. A recent study revealed that more discussion (particularly among ideological peers) only entrenches such viewpoints².

The reality of course is more complex, wrought with concerns about both global warming and the fraud and corruption it attracts. If you want to win over a conservative, focus on his sense of territoriality by saying this is part of a strategy to wean ourselves off foreign oil, or how Canada and Russia will flourish while much of the conservative heartland such as Oklahoma will suffer recurring dust bowl droughts. Don't keep telling him how we need the government to take his money to benefit Moslem kids in Bangladesh in 2050. If you want to take the steam out of a liberal, explain that big corporations (he hates these domineering alpha males of our age) are already having a heyday hijacking the system. If they can crash the market for fossil fuel or real estate, consider what they can do marketing derivatives from *not* generating an invisible gas.

Generally speaking, big tribe liberals see the government as *us*; small clan conservatives see the government as *them*. Even a new earth fundamentalist can recognize that one's gut feelings stem not just from ideology but from genealogy that predates Noah.

If you are a fan of evolutionary psychology, the last sections are from the original incarnation of this book *The Origin of Political Species*. My big idea is that the culture wars originated in the Upper Paleolithic because before then, we had no culture to fight over.

Mixing genetics and politics is currently taboo, otherwise the political equivalent to *Why Men Don't Listen and Women Can't Read Maps* would be pouring off the shelves. Ivy League scholars would include political behavior in best sellers like Carl Sagan's *Shadows of Forgotten Ancestors*. My primary goal is breaking this taboo. It is folly for us to embrace how our origins shape every aspect of our personalities, but then deny they shape our demonstrably brutish political personalities.

This taboo is why only a handful of brave professors have done research here, and why they have been roundly attacked for it. This gives relative novices like Charles Brack and me an open field. A main reason I've persisted wasn't a crusade for "my novel idea", but how often I read others remarking how they had always felt that politics is shaped around personalities – personalities shaped by a long process going back from your middle school mates to the Stone Age. We want to drag political

behavior from its shelter into the sunlight and treat it like any other behavior.

So for now, fellow traveller, I'm all you've got. But take heart, many breakthrough books have been authored by those at the very bottom of the pecking order (John Gray *Men are from Mars*) crossover academics from unrelated fields (Jared Diamond's Pulitzer winning *Guns Germs and Steel*) or total novices such as Eric Hoffer, the longshoreman who wrote the definitive book about mass movements such as Fascism and Communism (*True Believer*).

The scientific case here is quite good. It relies on abundant and recent evidence. Research into our genetic clock has validated the archaeological record. Around 80,000 years ago on the shores of South Africa, about a thousand of our ancestors started creating art, sophisticated tools, and engaged in diplomatic trade between tribes. We certainly consider artistic talent as a largely genetic trait. Now consider how artists are almost universally liberal.

This small group quickly exploded across the globe, displacing all other human subspecies. Our becoming a species of culture and ever larger and more complex society accelerated human evolution 100 fold, creating roughly a million years' worth of baseline evolution. This discovery is overturning scientific convention, which had forcefully asserted (primarily out of political correctness) that evolution stopped at the dawn of human culture. Evolution didn't screech to a halt, it started laying rubber.

So our similarities are old, but our differences are new. During the last few thousand generations we lived in societies that were rapidly changing. They grew larger, more diverse, more social, artistic, and diplomatic. Our population boom wiped out a myriad of species and forced us to become sensitive to nature. Just as our guts have adapted to agriculture, our minds have been adapting to human culture. If you don't think newer forms of culture had a powerful influence on a group's survival, ask a Native American what he thinks.

When Professor John Hibbing reviewed data on identical versus fraternal twins, he discovered that 40% of our political orientation¹ was written in our DNA. So our political personality is just as heritable as our extroversion, compulsiveness, or any other part of our personality. We have discovered the first “liberal gene” (DRD4-7R) which alters your brain’s dopamine receptors. At first this doesn’t seem like much, but it is also the first gene ever to be reliably related to a behavior. We have failed to find the “gay gene” or the “God gene”. DRD4-7R evolved 40,000 years ago (exactly as I predicted).

Hibbing’s foreword a few pages from here will explain the pitfalls of looking too deep into our genes or evolution. It is all too easy for the reactionary to label anyone a fascist eugenicist for simply mentioning genes and politics in the same paragraph. That is why I rearranged and renamed the book. I keep the more metaphorical and “how to” portions in the front of the chapters and leave the most theoretical, technical, and controversial portions to the end of the book.

I also agree with Hibbing that this book may be a “just so” coincidence. I’ll go beyond that to say that if the alternative hands out old and new genes more equitably, that would be great!

So time may leave me nothing but a metaphor. But what a great metaphor! In the last year I have the opportunity to look at politics less as a dizzying swarm of behaviors and more as a symphony. Basic instincts drive the beat, while gut emotions sweep an array of behaviors.

A good title for this symphony or opera is *Traditional Warrior*, the term right wing media king Bill O’Reilly uses for himself and his followers. If you are a liberal trying to get your head around conservative thought, think of a Sioux Warrior. He is dedicated to protecting his family, his territory, his religion, and his heritage. He does this for good reasons, mainly because those before him who were more concerned about other people or the future were wiped from the earth. They focus on the family and believe in family values.

¹ Orientation hereafter means conservatism/liberalism; affiliation will mean Republican/Democrat or its equivalent in other countries.

The Traditional Warrior can't understand this odd new breed who believes that *it takes a village to raise a child*¹. Whether you think these *New Villagers* have dangerously departed from tradition, or that the T-Warriors have a reckless and obsolete worldview is irrelevant to our common cause, or even the partisan cause of better knowing your enemy. You can understand how others think and try to get them to see common ground, or you can keep trying to get them to think just like you do. We see how well that has been going.

I now realize that in this odd case, the metaphor is amazingly simple, powerful, and useful, whereas the potential truth is complex and can be self-defeating. If a liberal claims that a conservative thinks like a tribal warrior, the conservative might take it as a compliment. Telling a man who probably doesn't believe in evolution that he has cave man genes is the highest insult. For those that are interested, the science is new and fascinating in its own right, and it will take you where you want to go, a higher hill to see more of what it is to be human.

So if you are a religious fundamentalist who doesn't believe in evolution, or a conservative who sees the theory as sedition, or if you are busy or just not interested in evolutionary psychology, feel free to skip the evolution sections. For all practical purposes, it really, truly, doesn't matter at all.

Liberalism may be Karl Marx or Cro-Magnon. It may be a recent social trend from the hippies in the 60s or 6,000 years ago in Eden. Regardless, it just looks like the 60,000 year old clash between Mesolithic Classic Rockers and Neolithic New Age Rockers.

While the world waits for the next political gene to be found, I offer you the political Men are from Mars – *Traditional Warrior* versus *New Villager*. It is your choice to consider it a sound theory or a quaint metaphor. Liberals may not be driven by some new genetic code that makes them dig art, or love diplomacy and vegetables; they just act like they do. The science is complex and controversial; the metaphor is simple and handy. You will see that it just works.

¹ from Hillary Clinton's hallmark book of the same name

For you evolutionists out there, you will see that it fits even better. For you here is the first struggle between self-interested conservatives and communal liberals – 3 billion years ago.

3 Billion Years of Common Struggle

3 billion years ago, a few single cell organisms banded together. They quickly prospered and multiplied under the advantages of collective life. Immediately after, strains of opportunist cells evolved. They took advantage and seized opportunities to feed or breed.

3 billion years later, the genomes of organisms such as social amoeba (*Dictyostelium discoideum*) are still at it, trying to maximize the benefits of social life, and minimize free riders and welfare cheats that threaten their microscopic societies.

You are also a multicellular colony. Your tens of trillions of cells perform a vast array of tasks, like a giant mobile space colony in a hostile environment. Thousands of skin cells are now quietly dying to protect you from a myriad of lethal microbes that want to consume you. Meanwhile thousands more die in the factory of your digestive tract, producing the energy and raw materials that keep you running and whole. Meanwhile billions of brain cells live long lives in relative comfort. While each is as dumb as a thumbtack; collectively and without any sort of leadership, they perform a myriad of complex tasks such as reading this book.

Every day, uncounted thousands of cells decide they deserve more than their share. They quickly discover the penalty for such cancerous treason is death, with killer T cells carrying out the sentence.

Emerson's "primal antagonism" is of a depth far below the human constitution. The recent addition of advanced human culture hasn't changed the essential game, but it has vastly increased its complexity.

The genetic code in those tiny microbes could neither see nor think. But this primitive genetic code started the game of individual versus collective. This is the same mix as the social code of modern *Homo sapiens*. Liberals covet the benefits of social life and want to rush towards a future of ever larger and more cooperative society. Conservatives fear the threats and want to retreat to yesterday's smaller, more competitive society. Meanwhile cheats wearing the cloaks of both sides play every angle for their own benefit.

So if you are looking for a role model of a highly evolved society, I suggest the nearest mirror. Here you will see 50 trillion cells working in unison with no one in charge. It wasn't easy, it certainly wasn't quick, and it requires constant effort by every cell to ensure the system isn't hijacked. But there you are.

The one question that every reader started asking from the moment they looked at the cover was: "Is this guy a liberal or a conservative"? Many insist that this question be answered before they risk exposing their minds to potentially seditious thought.

Personally I think one's opinion isn't worth much if it was formed while hiding from the ideological slings and arrows of open discussion. Choosing softball with your political pals doesn't make you a loyal patriot, it makes you a drone. I loathe both flavors of partisan blather and fail the litmus tests of either side, so I don't really know myself. But if the issue is the contents of one's intellect instead of the color of his jacket, shouldn't this be irrelevant?

But in one way this is relevant. The reflexive reach for *ad hominem* ammunition in this *ad hypothesis* contest reveals our nature. This question of the man versus his ideas raises the eternal duality that often divides right from left, or to paraphrase Emerson, the conflict between old genealogies and new ideologies. Is man primarily a human vessel ferrying genes into the future or a cultural vessel carrying ideas? The answer you will discover is yes. Here is how E.B. White saw this topic of writing, and the politics to be found in one's genes:

All writing slants the way a writer leans, and no man is born perpendicular.

Foreword

In addition to the central role of environmental factors, genetics is vital in molding people's traits and predispositions—not only physical appearance but also social behaviors and even political attitudes. The rapidly growing scientific evidence in support of this point is understandably discomfiting, particularly to those who prefer to view their political attitudes as rational, *de novo* responses to events and occurrences. If political differences of opinion have their origins in genetically-based, physiologically-distinct ways of experiencing the world, it may not be possible to conclude authoritatively that our own political views are correct and those of our interlocutors are not—a troubling implication if ever there was one.

What accounts for the relevance of genes to politics? Why are some people predisposed toward one set of political beliefs while others are predisposed toward quite another? To what end has nature produced individuals who experience the same environmental events in physiologically distinct ways? Existing scholarly disciplines have not answered these questions particularly well. Mainstream sociology, economics, and political science stress environmental factors, thereby completely ignoring major terms in the larger equation. Even those disciplines best equipped to address these questions—evolutionary psychology and behavioral genetics—are making little progress. Evolutionary psychology emphasizes human universals, such as mating preferences or the presence of social hierarchy, that are thought to arise because they are adaptive in a Darwinian sense. Natural selection should drive out variation in many situations. Behavioral genetics, on the other hand, places these individual variations directly in its crosshairs. It is better-positioned to address the fascinating differences apparent in even casual observation of people but, unlike evolutionary psychology, it does not have a big-picture theory of distal causes. Variation is believed to be due to genetic patterns and environmental experiences but the reasons for the existence of particular genetic variations are rarely delineated. In short, behavioral genetics empirically documents substantial and important individual variations while evolutionary psychology provides a powerful theory for commonality.

In *The Origin of Political Species*, Robert Haston offers a brave and creative explanation for political differences, an explanation that draws evolutionary psychology and behavioral genetics closer together.

Haston's beginning point is the persistence across time and space of two conflicting sets of political attitudes. In 1841, Ralph Waldo Emerson noted both that conservatism and liberalism were quite at odds with each other and that they had been similarly described (with different labels of course) around the world and throughout time. He went on to surmise that "such an irreconcilable antagonism, of course, must have a correspondent depth of seat in the human constitution." Haston believes these different political "species" are due to profound differences in evolutionary experiences, with one of these species similar to the human condition before the explosion of modern human culture and the other similar to the human condition after this explosion.

Readers may or may not be persuaded by Haston's provocative arguments. I have doubts myself. Evolutionary explanations in general have long been held up as "just-so" stories and Haston's claims in particular raise additional concerns regarding why the politics of some humans reflects the cultural explosion of 60,000 years ago but the politics of others remains, even after thousands of generations of living alongside the results of that explosion, strangely unaffected by it. Finally, the study of human differences must be careful to address these differences without passing normative judgment and the notion that one political species represents what humans were like before we became fully human is bound to put that species on the defensive. In sum, I believe that what we call liberals and conservatives in the modern United States differ from each other and not just in the environmental experiences they have had, but I am not at all sure these differences spring from the specific evolutionary sources outlined by Haston.

Fortunately, Haston's purpose in this unique and thought-provoking work is not to persuade readers that his particular explanation for political differences is correct in its entirety. Rather, his purpose is to encourage recognition of the existence of fundamental political differences, to promote further exploration of the reasons for the existence of different political species, and to inspire inter-species reconciliation—three goals I heartily endorse.

John R. Hibbing –
Foundation Regents Professor of Political Science
University of Nebraska-Lincoln

It seems to me
that we should see
about a new philosophy

now that we
know the reality
of our own machinery

PART I: ORIGINS



GENESIS

Look back through time toward the light from the dawn of modern man. There you will find another story of Cain, Able, and we their children.

Tugan sits on the shores of what will be called South Africa many thousands of years later. He has left the rest of his clan back amongst the crude shelters at camp.

Tugan did this for three reasons. He didn't want to see Roka the alpha male or his cronies. His arms and legs were bruised by blows and cut by spear jabs. These were painful reminders of how much Roka didn't want to see him either. Most of all, he just wanted to get away and get back to experimenting with cord and stitching hides. He had been trying different tools such as thorns or fish spines to punch holes, and different thread from sinew or twisted zebra tail hair.

That's what started it all – sewing hides. While watching a weaverbird stitch up his snug little nest with his long sharp bill, Tugan looked at his crude tent and decided that he could tighten it up; at least enough to keep the snakes out, and maybe the bigger bugs.

Young boys were playing nearby, pretending they were stalking or attacking big game. Tugan stitched a wildebeest hide into a rough costume, and jumped into the fray. They screamed with delight as he dodged their mock attacks. A female came out of the brush and screamed too, but because she thought he was an actual wildebeest for a moment. He thought that if a human can be fooled, why not a stupid wildebeest? He decided to try it out on the next day's hunt; so he set about making the disguise more realistic. He sewed the bottom together and even put sticks in it to form a backbone and legs.

The next day half the males hid in thick brush downwind of a herd while the rest of the males drove the herd towards them. Hopefully, one would be lucky enough to skewer a beast with a spear, disabling the animal enough for the tribe to descend on it.

Tugan pulled the wildebeest cape over his head. Roka the alpha male saw him and was furious. He had commanded all the others to follow in his footsteps. Simply acting different was tantamount to mutiny. He

wasn't a complete idiot; he saw how Tugan's trick might work. But instead of thinking what a great idea this was, he took it as an insult, a threat to his authority. To Tugan, this was just a new thing for the tribe to try out. He was happy to help in his own odd way. To Roka, this was like stepping up to a bull, lowering your head, and pawing at the ground.

Roka dared not act and spook the herd. The herd saw spotted some of the men on one side and trotted straight towards Tugan. One of the lead animals seemed to notice him, but instead of bolting in panic, he shied away slightly. The disguise was working. The following wildebeest were coming even closer. As Tugan readied himself to lunge, Roka came screaming out of his cover. First he made a vain attempt at the scattering herd, and then a beeline at Tugan.

Roka shouted: "Your stupid tricks have cost us a kill again! Thanks to Tugan here, the whole the tribe will once again go hungry. One of the other males started to speak but was cut short by Roka's flinty stare. Then Roka's buddies joined in, and started beating Tugan and cutting him with their spears as a show of their loyalty. Roka strode up and made a spear jab right at Tugan's heart. Tugan know that the next time he displeased the Alpha Male it would be his last. Tugan was certain that if it weren't for the disease that killed so many recently, or the constant need to defend their prime waterfront habitat from the hill tribes, Roka would have killed him right there.

Tugan's friend Ramo stood back silent. After the others had left, he came to him, saying: "He was wrong. I saw the whole thing. You would have speared that Wildebeest. I would have said something, but who am I? I am just the guy who makes people laugh. I am not powerful and none of my relatives are.

You are smart Tugan, but you are stupid. You are smart about things like how to turn into a Wildebeest, but you are dumb as a turtle when it comes to people. You make me mad Tugan. He picked up the costume Now we can't use this! This was a great idea, and you have ruined it.

Well I have my own great idea, I will take it back and use it to make fun of you – Look I am Tugan, Wildebeest Man!" Then he started grunting and acting just like a Wildebeest. It made Tugan mad, but Ramo

was so good at it, he couldn't stop himself from laughing; which hurt his split lip; which made them both laugh harder.

Ramo said: "See then I will give it to the older boys. They will surely try it out. Maybe many moons from now someone might use it, one of the youth that has not been through the right of manhood, BUT NOT YOU Tugan!"

You won't be able to think up any new ideas if Roka puts a hand axe in your skull. From now on, come to me first. Even though I am just a skinny little funny man, I am safe. That is because they like how I play like a crazy puppy and I don't threaten them.

Tugan keeps replaying the scene in his head: "Ramo was right. You were expecting to be the hero of the day, instead your smart idea nearly cost you your life." He thinks of what his wife Luva (who was even better at dealing with people than Ramo) would have said, probably something along the lines of: "Do you want to have Roka kill you and leave me and your children with nothing?" He thought to himself how he may be a relative genius at crude disguises, but even the dumb Betas instinctively know what he forgot. Rewarding the whole tribe means nothing if you threaten the Alpha male's status in the process. The unspoken rule is allegiance or death.

Tugan sat there with his hides, his thread, his needles and his leather bag full of tools. "Maybe people are like tools. We need many kinds. Roka is like my spear, strong and deadly. The Betas are like this tar. They glue us together.

So he thought how he might get what he wanted without becoming an outcast. "What if I get a little bit of food at a time? The marshes are full of fish and frogs. I will sneak food in a little at a time and be humble about it. I can ask the others to help me with my new ways. I will say I need their strength, speed, or patience." But for now Tugan tucked his tail between his legs and headed home.

You could tell from a distance that Luva had already heard. Luckily Ramo told her, so she didn't belabor the point. He was glad that she heard it from his friend. The thought of him getting killed by the Alpha (which would have made his family outcasts) stung his heart.

When she was done, she said “This might cheer you up.” She put one of her shell necklaces around his neck. Tugan said it is beautiful, but the other males already nearly killed him because he was different. Sticking out right now wasn’t the game plan. She said that she gave Roka’s wife one, and Roka was now proudly wearing it. She said: “But that is nothing, do you know who *really* likes my necklaces? Come into the tent.”

She reached into her bag and brought out a large hand axe. It was beautiful beyond description, some sort of pink stone that was almost clear like water. It was perfectly symmetrical and the edge was very fine. The back was so smooth you wouldn’t need a leather shield to use it. “Where did you get this?” Tugan said. “There is no rock near here like this. Tell me you didn’t get this from the enemy.”

“I didn’t get it from the enemy. I leave my necklaces on a rock near the river, and when I come back, I find these.” She produced other smaller tools, and a strange soft red rock, which she spat on and then rubbed off a dark red stain on her hand.

“But they might capture you and take you prisoner.” Tugan said. Luva asked: “Would you rather do it – they would kill you. This is better left to the women”. Tugan hissed “No one should be doing it! If the enemy doesn’t kill you then Roka will kill you for treason! Luva said: “Someone has to do it. Our tribe is not large. We need more allies, not more enemies! Today it is necklaces and pretty stones; tomorrow it may be all kinds of things we don’t have here. Look at how you search for supplies. Imagine what you could get from the hills and the forests beyond. The ocean tribes where the sun rises and sets are just like us, they offer us nothing, nothing but the opportunity of death.” Tugan knew what she meant. Only last year the enemies to their west had attacked them. His father who had been injured in the hunt couldn’t make it to the small cave above the shore that they sheltered in. They watched in horror as the enemy closed in and killed him. Oh how he wanted revenge. His mind started racing with the thoughts of better weapons. He thought again of his bag full of tools and how more people with new tools and

new skills would not just protect them; they would enable them to slaughter those animals that killed his father.

They spent the last few hours of the day with Ramo and his wife Kelo, who was a great storyteller. Her grandfather had been the one who always told the tribe's stories. She said that her daughter Laniki was going to be the best storyteller ever. Ramo agreed; he said: "The other day I saw her writing with a stick on the ground. She would draw these figures, one after another, like this." Ramo drew the outline of a bird with big claws, then a fish under a wavering line, then two little birds, and then the unmistakable crescent shape of a moon. "Laniki, come here, what is this?" Laniki said: "You know what that is Papa. Eagle catch fish, feed babies, go to sleep."

As Tugan set off towards the marsh, he kept thinking about it. It was like you could say words, and freeze them in the air. Someone could come along and listen to you with their eyes. To someone who was always under the threat of attack, the idea of being able to communicate without risking your life opened a world of opportunity.

Just as he sat down to work on a trap that he could drive fish into, a dark shadow and chill winds stirred him. A long coal-black smear, higher than any thundercloud and stretched across the entire horizon was rolling in like a giant wave. He ran towards camp, but the wind quickly outpaced Tugan. It hit him hard enough to knock him down. Then blackness engulfed his world. He rose and looked up at the midmorning sky. The grey patch where the sun used to be cast little more light than a full moon.

A quarter of the way around the world, the Mt Toba super volcano had exploded, leaving a hole that will become the world's largest crater lake. It shot out an unimaginable amount of dust and ash into the air. It will stay dark for months, and be much colder and drier for at least a decade.

Tugan rushed back to camp. Luva and the girls were already cowering in the shelter. Tugan dived in and peered out the flap. Through the flying blackness he saw the rest of the tribe trying to hold their shelters down and keep them intact against the stinging wind. Some have already collapsed.

Tugan secured the flap with pieces of bone. He thought back to how Roka, his pals, and their mates had been having great fun regarding his avocation. Since women typically worked animal hides, they pantomimed acting like a receptive female to other men. They certainly weren't laughing now. As his family fell asleep, beyond the sound of the wind tugging vainly at their tight little dome, he could hear the others coughing and groaning, and their children crying in the dark.

The wind slackened around dawn. Ash continued to fall like heavy gray snow. Tugan opened his tent to a colorless wasteland. The others had spent a sleepless night, and were now trying as best they knew how to shore up their ramshackle shelters.

Roka had a solution of his own. As soon as Tugan had gone down the rise to relieve himself, Tugan and his two favorite wives and children marched over and occupied his shelter. He regretted having made it so roomy. Tugan thought that at least he didn't kill him or even beat him for it.

Tugan seized the moment to claim his shelter. One of the beta males whose shelter had been blown to pieces came up to take it. But he was weak from lack of sleep. His face and chest were smeared with phlegm and ash, and he was struggling to suppress another coughing fit. Tugan called his bluff and he backed down. Since Roka's shelter was made with the largest and freshest hides, Tugan was able to secure it by nightfall. By tomorrow night, he could make it better than his old one.

But then he thought that Roka would probably just take his back. Tugan smirked to himself that he was learning about people too. So instead he set about shoring up the other shelters. There were now supplies to go around. Some had taken up refuge in the sea cliffs. Two of the tribe's elders, a tubercular female, and two infants died before the second dawn. They wouldn't be the last.

A volcanic winter started descending onto what would have been the start of the rainy season. Tugan made a small fire circle inside his hut and opened a chimney flap in the roof. Instead of shivering the night away, wasting energy that the dying plants and thinning herds were already denying them, his family would stay warm.

Tugan had learned from the hunt fiasco. The disguise was a good hunting tool, but flaunting your new prowess in front of the Alpha was not. Tugan, Ramo, and some friends went out used it to ambush and kill a wart hog. They butchered it and hid what they couldn't sneak in right away.

Wart Hogs who feed on roots and tubers were doing well for now, only to be bested by predators and carrion feeders preying on the starving grass eaters. The tribe had driven Hyenas off of some kills, but the land flora and fauna was dwindling fast.

Meanwhile, the aquatic life in the coastal marsh was comparatively unaffected. Sitting by the shore listening to his empty stomach growl, Tugan watched a giant stork spear a large fish. He noticed how it didn't easily slip off his narrow bill. He remembered how he had tried using a stork's bill as an awl. Aside from being too weak to penetrate strong hides, the hide would stick on the way out because the bill had small barbs on it.

He took two thin bone awls and notched barbs along them. Then he cut a long slender sapling and wrapped the points onto it. As fate would have it, the marshes were abundant with two species of large fish. They were too big for the heron to swallow, or even the great eagles to carry off. They had evolved in an environment where all they had to do was stay out of the reach of the occasional leopard that might chase them in the shallows. Suddenly a new species of biped – a 70 kilo predator with a three meter reach waited for them.

The sight of Tugan returning to camp with a fish as big as his leg caused a calamity of enmity from above and praise from below. Roka was quietly furious with this further threat to his status, but there was little he could do. The clan was hungry. Killing Tugan or driving him off would threaten their existence.

But Tugan had learned not to expect to be heralded as a hero. The bulk of his rank would still be based on how much he intimidated those below him, how well he manipulated those around him, and how thoroughly he ingratiated himself to those above him; just as it is now in your typical office.

But that didn't matter compared to his survival in the long run. In the end, his predictably short life didn't matter either. He would never rise high enough to warrant a second mate, but mate he would. This is what mattered. His preciously mutated genes would not only survive, but prosper amongst his fat and happy clan.

The genes of his artistic diplomat wife and his actor and comedian friend would too; so would the talent for language and writing that his wife's side of the family had. Of course, the genes of traditional warriors such as Roka would prosper alongside them. For a thousand generations, the most effective use of technology, diplomacy, language and even art was to conquer other societies; or as the book and TV series described *How Art Made the World*. This was the first information age.

Consider the Roman Empire, an empire of engineers and architects as much as warriors. It seems we are closing out that tradition, for just like the mountain tribes offered ochre and quality stone, the peoples of the world offer each other a myriad of supplies, talent, and knowledge. We are slowly coming to a world where all its inhabitants are worth more to you alive than dead. At the very least, after two centuries of failure, nations are wising up to the reality that the only profit in war goes to war profiteers.

Just like the instincts for curiosity and experimentation had been rising amongst his ancestors across the Pleistocene, the instruction set to make brains like Tugan's or his wife's would continue to spread across generations. Future generations would see clouds of wading birds in flight or spiders in their webs and be stirred not by ancient instincts of hunger, fear, or animistic worship. They would instead imagine carving wood like a falcon's wings to fly up and strike the gangly birds from the sky. They would imagine giant spider webs of twine strong enough to snare forest deer. They would secure a future for Tugan's progeny along with the rest of his clan; a future that included spreading across the globe like wildfire.

Our species' destiny was inevitable. For millions of years, it had been slowly becoming more intelligent, approaching critical mass. Recent research points toward precursors of this explosion. The ability to create

complex speech seems to have evolved approximately 150,000 years ago (Eichler). Just like Laniki, some among the millions of *Homo sapiens* of the day would evolve such abilities.

The last ingredient would likely be any event that created a new environment. A half million years of drastic climate swings had already been favoring those who could learn and advance culture over those who waited numerous generations to adapt.³ Drastic and sudden changes would tilt the field away from those endowed with genes for the old staid environment and toward those that could better deal with the new changing environment.

Such a climactic change would be a perfect opportunity for a portion of the species whose brain held the genetic lottery ticket—just the right compulsion to experiment with just the right technology; and as fate would have it – at just the right place and time.

Yet this would only start the reaction. What would guarantee its spread would be that such technology would create its own environment, an environment where only the technologically advanced could survive. This would be the moment of critical mass that ignited the true explosion of modern man. Man ceased to be primarily a victim of change and quickly became the planet's major agent of change. This would become a far more powerful and far more lasting force than super volcanoes or even ice ages.

While the spark that ignited this was genetic, the speed and power of this event which continues today is due to an evolution of an entirely different sort; not the evolution of genes, slowly changing at the rate of generations, but of the overnight evolution of *things* – technology and tactics that could spread at the speed of foot travel. Even if neighboring clans were enemies, they could still spot Tugan stalking the shallows with that long two pointed spear, or see the smoke rising from the top of his shelter.

The happy ending of vindication, honor, and prestige Tugan desired would not come to his offspring or even their hundredth descendants. The foundation of our genes had been laid down over a million

generations. It would be thousands of generations before we even started to turn away en masse from this call.

This tale probably has a familiar ring, particularly to the kind of reader who would enjoy reading a book about genetics and politics. This is because such scenes set around Upper Paleolithic campfires of domineering Alphas, kiss up-kick down Betas, and the new class of creative “Gammas” continue to be acted out in the schools and workplaces of we 21st century *Homo sapiens*. They say history repeats itself. Of course it does, because thanks to our DNA, we continue to repeat ourselves, over and over and over again.

This tale isn't some personal rhetorical flourish; it simply condenses the latest theories of modern science. *Science Illustrated* recently featured a typical article: *Why did the Neanderthals Die Out?* It featured three theories: Creativity (including trade and larger social organizations) gave humans the advantage, the Neanderthals couldn't adapt to rapid change caused by climate, and the Neanderthal lost in combat. To me they are complimentary. A bigger society with more advanced culture could better adapt to change and raise a bigger army.

Now consider these characteristics as social instincts. Which of our modern tribes hold the denizens of culture, those who want bigger and bigger social organizations, that love rapid change for the sake of change itself? Who has prevailed simply by outnumbering the opposition again and again?

The transition from focusing on the family to it takes a village to raise a child has left its mark across every culture. The Iroquois had a proverb for their tribal councils: "in every deliberation, we must consider the impact of our decisions on the next seven generations⁴." I am sure that like today, there were plenty then who disagreed with such pie in the sky progressivism.

Bibliography

- Ambrose, S. H. (2003). Did the super-eruption of Toba cause a human population bottleneck? Reply to Gathorne-Hardy and Harcourt-Smith." . *Journal of Human Evolution* , 45: 231-237. .
- Arnhart, L. (2005). *Darwinian Conservatism* . Charlottesville: Imprint Academic.
- Bishop, B. (2008). *The Big Sort: Why the Clustering of Like-Minded America Is Tearing Us Apart* . Houghton Mifflin.
- Boehm, C. (1999). *Hierarchy in the Forest: The Evolution of Egalitarian Behavior*. Cambridge, MA: Harvard University Press.
- Bonano, G. A. (2006). Conservative Shift Among High-Exposure Survivors. *BASIC AND APPLIED SOCIAL PSYCHOLOGY* , 28(4), 311–323.
- Brack, & Zhang. (2007, April). *The Population Biology of Conservatives and Liberals*. Retrieved 07 04, 2008, from neuropolitcs.org: <http://neuropolitcs.org/defaultapr07.asp>
- Brockman, J. (2003). *The New Humanists: Science at the Edge (One Half a Manifesto)*. Sterling.
- Brooks, A. C. (2007, August 20). *Our Religious Destiny*. Retrieved April 18, 2008, from Wall Street Journal: <http://online.wsj.com/public/article/SB118757440909802546.html>
- Brooks, A. C. (2006). *Who Really Cares: The Surprising Truth about Compassionate Conservatism* . Basic Books.
- Carmen, I. H. (2007). From Genes, to Mind, to Politics: Finding the Yellow Brick Empirical Road. *Paper presented at the annual meeting of the Midwest Political Science Association, Apr 12*. Palmer House Hotel, Chicago, IL,.
- Carmen, I. H. (2007). Genetic Configurations of Political Phenomena: New Theories, New Methods. *The Aannals of the American Academy of Political and Social Science* , Vol. 614, No. 1, 34-55.
- Dall, S. R. (June 22, 2004). Behavioural Biology: Fortune Favours Bold and Shy Personalities. *Current Biology* , Vol. 14, R470–R472, .

- Daly, M. W. (1999). *The Truth About Cinderella: A Darwinian View of Parental Love*. Yale University Press.
- Dawkins, R. (1976). *The Selfish Gene*. Oxford University Press.
- Dawkins, R. (1991). *Viruses of the Mind*. Oxford, United Kingdom.
- De Waal, F. (1982). *Chimpanzee Politics: Power and Sex among Apes*. Baltimore: Johns Hopkins.
- De Waal, F. (2006). *Primates and Philosophers How Morality evolved*. New jersey: Princeton University.
- Dennett, D. (2007). *Breaking the Spell: Religion as a Natural Phenomenon* . New York: Viking Adult.
- Diamond, J. (1999). *Guns, Germs, and Steel: The Fates of Human Societies*. New York: Norton.
- Diamond, J. (1992). *The Third Chimpanzee*. New York: Harper Perennial.
- Eichler, E. E. (2007). Completing the map of human genetic variation. *Nature* , Volume 447, Issue 7141, pp. 161-165.
- Emerson, R. W. (1849). *Nature; Addresses and Lectures*.
- Feldman, M. W. (1997, November 21). Twin Studies, Heritability, and Intelligence. *Science* , Vol. 278. no. 5342 pp. 1383 – 1387
DOI: 10.1126/science.278.5342.1383a.
- Fowler, J. H. (2007). Genetic Variation in Political Participation. *American Political Science Association*. Chicago: American Political Science Association.
- Fowler, J. H. (2008). Two Genes Predict Voter Turnout. *Social Science Research Network* , <http://ssrn.com/abstract=1032632>.
- Grant, P. R. (2006). Evolution of Character Displacement in Darwin's Finches. *Science* , Vol. 313. no. 5784, pp. 224 - 226 14 July .
- Gregory, T. R. (2008, 01 06). *Statsitics*. Retrieved 01 06, 2008, from Animal Genome Size Database:
<http://www.genomesize.com/statistics.php>
- Greuel, P. J. (1971). The Leopard-Skin Chief: An Examination of Political Power Among the Nuer. *American Anthropologist* , Vol.73(5):1115-1120.
- Haidt, J. (2007b). The New Synthesis in Moral Psychology. *Science* , 316, 998.

- Haidt, J. (2007). When Morality Opposes Justice: Conservatives have moral intuitions that liberals may not recognize. *Social Justice Research* , DOI: 10.1007/s11211-007-0034-z.
- Harpending, H. C. (2006). Natural History of Ashkenazi Intelligence. *Journal of Biosocial Science* , 38: 659-693 Cambridge University Press .
- Harpending, H. C. (2007). Recent acceleration of human evolution. *Proceedings of the National Academy of Sciences of the United States of America* , December 26, vol. 104 | no. 52 | 20753-20758.
- Hawks, J. (2000). Population Bottlenecks and Pleistocene Human Evolution. *Molecular Biology and Evolution* , 17:2-22.
- Hettema, J. M. (2003). A Twin Study of the Genetics of Fear Conditioning . *General Psychiatry* , 60:702-708. .
- Hibbing, J. R. (2005). Are Political Orientations Genetically Transmitted? *American Political Science Association* , May 153-168.
- Hitchens, C. (2007). *God is not Great*. New york: Hachette.
- Horan, R. D. (2005). How Trade Saved Humanity from Biological Exclusion. *Journal of Economic Behavior & Organization* , Volume 58, Issue 1, Pages 1-29 .
- Houweling, A. R. (2008). Behavioural report of single neuron stimulation in somatosensory cortex. . *Nature* , 451, 65–68.
- Jost, J. T. (2003). Political Conservatism as Motivated Social Cognition. *Psychological Bulletin - American Psychological Association, Inc.* , , Vol. 129, No. 3, 339–375.
- Keeley, L. H. (1997). *War before Civilization: The Myth of the Peaceful Savage* . Oxford University Press.
- Klien, R. G. (2002). *The Dawn of Human Culture*. New York: Wiley and Sons.
- Kurtz, S. (2007, 2 15). *Marriage and the Terror War*. Retrieved 01 06, 2008, from National Review Online:
<http://article.nationalreview.com/?q=OWYyMDhkOWYwOWU4YWZlMTkwMWEzMDY0MTA0MGM0YmY=>
- Lanier, J. (2000, 12). *One-Half of a Manifesto*. Retrieved 06 28, 2008, from Wired:
<http://www.wired.com/wired/archive/8.12/lanier.html>

- Levy, S. (2007). The Diploid Genome Sequence of an Individual Human. *PLoS Biology* , e254 October | Volume 5 | Issue 10 | e254.
- Lieberman, D. E. (2002). Review: Whither the Evolution of Human Growth and Development? *Evolutionary Anthropology* , 11: 246–248.
- Linden, D. J. (2007). *The Accidental Mind: How Brain Evolution Has Given Us Love, Memory, Dreams, and God*. Belknap .
- Little, A. C. (2007). Facial appearance affects voting decisions. *Evolution and Human Behavior* , #28 18-27.
- Manning, R. (2004). *Against the Grain: How Agriculture Has Hijacked Civilization* . New York: North Point Press.
- McGinnis. (1997, 12 22). *The Origin of Conservatism - Evolutionary theories suggest that conservative politics are necessary to govern a fallen man*. Retrieved 1 6, 2008, from The National Review:
<http://www.nationalreview.com/22dec97/mcginnis122297.html>
- Miller, D. W. (2008, 1 1). *10 Questions For Dennis Miller*. Retrieved 1 1, 2008, from Time Magazine:
<http://www.time.com/time/magazine/article/0,9171,1101031222-561278,00.html>
- NIU. (n.d.). *CURRICULUM VITAE LARRY ARNHART*. Retrieved 1 6, 2008, from Northern Illinois University:
<http://polisci.niu.edu/polisci/faculty/cv/arnhart.html>
- Pinker, S. (2002). *The Blank Slate: The Modern Denial of Human Nature* . Penguin.
- Quintana-Murci, L. (2008). Natural selection has driven population differentiation in modern humans . *Nature Genetics* , doi:10.1038/ng.78.
- Rahman, Q. (2005). A specific sexual-orientation-related difference in navigation strategy. *Behavioral Neuroscience* , 119, 311-316. .
- Richerson, & Boyd. (2005). *Not by Genes Alone - How culture transformed human evolution*. Chicago: University of Chicago Press.
- Robin Dashwood, M. H. (Director). (2006). *How Art Made the World - BBC Productions* [Motion Picture].
- Rubin, P. H. (2002). *Darwinian Politics*. Rutgers University Press.

- Sagan, C. A. (1992). *Shadows of Forgotten Ancestors*. New York: Random House.
- Sherval, R. K. (2008). Association of a single nucleotide polymorphism in neuronal acetylcholine receptor subunit alpha 5(CHRNA5) with smoking status and with 'pleasurablebuzz' during early experimentation with smoking. *Addiction*, Volume 103, Issue 9 (p 1544-1552).
- Short, P. (2000). *Mao: A Life*. New York: Henry Holt and Company.
- Singer, P. (2000). *A Darwinian Left*. Yale University Press.
- Smith, D. L. (2007). *The Most Dangerous animal*. New York: St. Martin's Press.
- Spivey, N. (Director). (2005). *How Art Made the World* [Motion Picture].
- Storm, I. (2007). *Liberal and Conservative Religion as Different Socio-Ecological Strategies*. Retrieved 12 30, 2007, from David Sloan Wilson, Selected Publications: <http://evolution.binghamton.edu/dswilson/publications.html>
- Suwa, G., & Kono, R. T. (2007). A new species of great ape from the late Miocene epoch in Ethiopia. *Nature*, 448, 921-924 (23 August 2007).
- Swaddle, J. P. (2002). Testosterone increases perceived dominance but not attractiveness in human males. *Proceedings of the Royal Society B: Biological Sciences*, 269(1507): 2285–2289.
- Todorov, A. B. (2007). Predicting political elections from rapid and unreflective face judgments. *Proceedings, National Academy of Sciences*.
- Watson. (2007). Brain Activation during Sight Gags and Language-Dependent Humor. *Oxford Press: Cerebral Cortex, Volume 17, Number 2, February 2007*, pp. 314-324(11), 314-324.
- Westen, D. (2007). *The Political Brain - The role of emotion in deciding the fate of the nation*. Cambridge, Mass: Public Affairs.
- Wilson, D. S. (2002). *Darwin's Cathedral: Evolution, Religion, and the Nature of Society*. Chicago: University of Chicago Press.
- Wilson, D. S. (2007). *Evolution for Everyone*. Delacorte Press.
- Wright, R. (2000). *Non Zero*. New York: Random House.

Endnotes

¹ Nursery school personality and political orientation two decades later Jack Block &, Jeanne H. Block *Journal of Research in Personality*.

² *Interpersonal Amplification of Risk? Citizen Discussions and Their Impact on Perceptions of Risks and Benefits of a Biological Research Facility*

Andrew R. Binder *Risk Analysis* Journal online: 29 OCT 2010

³ According to Richerson and Boyd: “Social Learning may be an adaptation to Pleistocene climate fluctuations” 2005 p131

⁴ William and Mary University 7 Generations Program:
<http://www.wm.edu/offices/oces/communityengagement/pre-orientation/index.php>