Busting Myths about Human Nature: Tackling Dangerous Misconceptions about Race, Aggression, and Sex

By Agustín Fuentes, Ph.D.

Being human is messy. We are simultaneously biological and cultural beings with complex schemata (our comprehensive, acquired and complex worldviews) and social lives that shape and populate our perceptions and philosophies. Humans have not evolved to have one particular way of being, and so there are a number of potential outcomes to the human experience. However, many of our assumptions about human beings limit the ways in which we can perceive and experience those potential paths.

In our society, from popular media, to political discourse, to “common sense,” there is a shared set of beliefs about human nature that shapes the way we see the world: common assumptions about race, aggression, and sex that are seen as just part of being human. While we might not always admit it in public, most people think that there is some set of biological differences between Asians, Blacks and Whites, and that if you strip away society and laws, humans become beasts, with survival of the fittest and the bigger, badder, more aggressive taking control. And of course, nearly everyone knows that it is natural that men and women want, and need, different things from sex and relationships. These ideologies are reinforced across a wide swath of societal contexts, but they are generally incorrect.

These beliefs are myths and they are based on misinformation, poor assumptions about biology, and a large dose of ignorance regarding what we actually know about our species. My recent book (Race, monogamy and other lies they told you: busting myths about human nature, 2012 UC Press) challenges what many people assume is common knowledge about what it means to be human. We can use information from a wide range of research in anthropology, biology, and psychology to bust these myths and replace them with more accurate stories about who we are and what we do.

But why are the myths of race, aggression, and sex so important to bust?

“A man should look for what is, and not for what he thinks should be.”

– attributed to the physicist Albert Einstein

We know that race matters in the USA: In tests of housing markets conducted by the US department of housing and urban development (HUD), black and Hispanic potential renters and buyers are discriminated against (relative to whites) nearly 25 percent of the time; USA poverty levels on the whole are 17.2%, but broken down are 11.5 for whites, 32.2 for blacks, 28.4 for Hispanics, 19.4 for other (primarily Asian), and infant mortality rate per 1,000 births is 5.7 for whites, 13.6 for blacks, and 5.6 for Hispanics, and 6.9 for the United States as a whole (See, “Labor Force Characteristics,” “Study: Immigrants’ Skin Tone,” and Kochhar, Fry, and Taylor, 2011).

The idea behind the Race myth is that humans are divided into biological races (black, white, asian, etc…) and that there are certain natural differences in these groups and they are reflected in the social statistics above. Whether we believe this “naturalness” to be true, or if we understand the social, historical and political nature of race, and the realities of human biological variation, shapes the way we act toward and perceive others, what we expect, and what we think we can achieve, as far as social equality, and whether or not we can build community in an increasingly diverse society.

The idea behind the myth of Aggression is the fallacy of nature and nurture being different things, and that our animal (or evolutionary) core is that of a primitive beast. If this is true then our nurture (cultural constraints) manages an inner nature (a primitive aggressive drive, especially true for men) that emerges whenever the grasp of civilization weakens.
But it is not true. Despite common assumptions that certain genes or genetic elements control or regulate the appearance and intensity of aggressive behaviors, there is no evidence for any one-to-one genetic controls, nor is there evidence for certain molecules or systems in the body that predetermine aggressive outcomes. Despite the popular tendency to do so, we cannot turn to our “nature” to explain genocide, rape, domestic abuse, or other forms of catastrophic violence.

While aggression is important in the social lives of many organisms, including humans, it is not the “driver” of social systems. If we believe it is, and it is the “go to” ultimate response in men, then we will accept a wide range of interpersonal violence as inevitable, and we will see war, rape, and murder as just part of the nature of human beings. But if these are all part of our potential, and not our nature, if they are context dependent and socially mediated, then a much broader range of responses and ways of living together become possible.

Finally, the idea behind the myth of Sex is that men and women are truly different in our natures, and that this difference emerges in our behavior, desires, and internal wiring. The relationships between, and within, the sexes and genders are constrained by such a view, and the possible range of ways to be and become human and express our sexual and social selves is extremely limited. Men can argue that rape is a natural part of their male heritage, and that sexual interests between the two sexes lead to constant struggle, but what if neither is true? We see that most politicians and CEOs are male and most kindergarten teachers are female, but does that reflect natural differences in capabilities between the sexes or gendered patterns of social, historical, and contextual nature? If differences in the sexes are present but less extreme and in different ways than we currently envision, the possibilities for human relations expand and, as in the two previous cases, our abilities to build communities and co-exist in sustainable ways in our increasingly crowded, diverse, and complex world could become slightly improved.

The big three myths about human nature are so prominent because they rely on our tendency to assume that culture + biology = us and that biology underlies our perceived differences between groups and sexes. Becoming human is not a simple addition problem. Our notion of what is natural, of what science tells us about humankind, and of what we accept as a reality of race, aggression, and sex are influenced by these myths and color how we see the world, and act in it.

Busting myths of human nature is not simple. There is generally no one single test to refute an entire myth and there is usually not even a simple right or wrong answer when assessing the parts of the myths. There are multiple points and complex sets of data and theoretical concepts. Myth-busting in human nature is neither flashy nor easy-it is very complicated. In the book I walk the reader through the myth-busting sequence, starting with the myths and then slowly and thoroughly showing how available data challenge, modify, or refute the assumptions underlying the core parts of each myth. I don’t have the space to do that here, so instead I offer the following brief summary.

There are eight take home points that emerge from the broad review I present in the book:

**Take home point #1: Humans are simultaneously biological and cultural; we are naturenutural creatures with a fascinating evolutionary past and present.**

We have complex world views and bodies that create and shape, and are shaped by, our perceptions and philosophies. We have not evolved to have one specific way of being, and thus there are a number of potential outcomes to the human experience. We are born into a world of existing social and physical ecologies, patterns and contexts which immediately become entangled with our biological structures becoming a central part of our process of biocultural development. It is abundantly clear that simple explanations for who we are and why we do what we do are usually wrong.

**Take home point#2: Culture matters**

Our culture is a central part of what makes humans unique. We can think of culture as a dynamic web of significance core to becoming and being human. Culture is both a product of human actions and something that influences that action; it is the context
that helps give meaning to our experiences of the world. This means that cultural constructs are real for those who share them. Some constructs are more pervasive than others, thus more important to understand as they affect how we live and act and treat others.

**Take home point #3: Evolution matters**

Evolution is largely misunderstood and misused in thinking about human behavior. Generally, evolution is change over time. Specifically, it is change in bodies and genomes across generations due to a variety of processes. These processes create, move, and shape biological variation in multiple ways. It is not all about fighting and survival, it is about interactions between organisms and environments and organisms and each other over time. Emerging evolutionary theory shows us that humans and their environments are mutually interactive in evolutionary processes, and helps us realize that social and ecological inheritance is very important. Evolutionarily relevant inheritance can be genetic, epigenetic, behavioral, and symbolic. Evolution is not goal-oriented nor does it produce endpoints: evolution is ongoing.

**Take home point #4: Genes do not equal human nature**

Our DNA alone does not determine who we are and how we behave, but it is a primary component in the development and maintenance of our bodies and behaviors. Genes contain the basic instructions for the building blocks (proteins) of biological systems, but our genome is so much more than that. Our DNA and our bodies and behavior are connected, but not in a one to one relationship; and the relationship they do have is shaped and influenced by evolutionary processes, ecological and social contexts, and histories.

**Take home point #5: Race is not what we think it is**

Human races are not biological units. There is substantial variation among individuals within populations, between different populations, and also among larger population groupings. Patterns of within- and between-group variation have been substantially shaped by culture, language, ecology, history, and geography. Race is not an accurate or productive way to describe modern human biological variation, but research into human variation does have important social, biomedical, and forensic implications. Race as it is usually used is a cultural construct that can affect our social realities. Racial inequality (racism) as a social reality can affect biology. Ethnicity is a valid way to ask questions about social histories and social and symbolic identification, but it is not biology and it is not race.

**Take home point #6: Humans are not aggressive by nature**

Humans have great potential for aggression and violence. There is variation in conflict styles and aggression across individuals, sexes, genders, societies, and timeframes. Aggression itself is not a uniform or consistent discrete trait, so “aggression” per se does not result from evolutionary histories. War is common in the human experience today, but it is not part of our evolutionary heritage. Human aggression, especially in males, is not an evolutionary adaptation: we are not aggressive big-brained apes. Males and females differ in some facets of aggression, and many of those differences have to do with physical size and the social and experiential contexts in which the genders find themselves. Genes do not control or determine the normative expression of aggression, but abnormal biological function can influence aggressive behavior. Humans are hyper cooperators and not naturally selfish. As a species we do not rely on aggression and violence more than cooperation, and there is no pattern of evidence to support a notion that humanity is aggressive and selfish by nature. Aggression is an important part of being human, but it is not who we are at our core.

**Take home point #7: Men and Women are not as different as you think**

There are important biological differences between the sexes and there are also important similarities, however there is a greater range of overlap in male and female bodies than most people realize. Behaviorally, males and females also overlap extensively. Humans, regardless of sex, seek to form pair bonds of both social and sexual sorts, but pair bonds and marriage
are not the same thing. Males and females, given the opportunity, will engage in sex across the lifespan in more or less the same rates and manners. These strong similarities in male and female bodies and behavior do not mean that gender differences are not real and important. Gender is a powerful cultural construct and the perception and expectation of gender differences impacts individuals and society. Males tend to control economic and political resources and women are heavily involved with the child rearing because they give birth and lactate, but males and females have the same behavioral ability to care for offspring. There is no biological or evolutionary mandate that only females care for young and only males care for economics and politics. These patterns of gender difference and the strength of the cultural assumptions about sex fool us into thinking that men and women are so different by nature.

**Take home point #8: Busting myths about human nature requires critical thinking and a lot of work**

Myths matter in our daily lives and they make sense to our shared worldviews, which is why they are tough to challenge. The information to bust most myths about humanity is largely available, but it exists across a range of academic disciplines, books, journals, media sources, and people. To tackle any of the myths about human nature one must compile this variety of information from different sources. Any single approach is not going to get you a sufficient set of information to achieve quality answers nor will it be able to integrate the kinds of datasets needed to truly bust powerful stories about why we are the way that we are. Myth-busting can alter the way we think about ourselves and the society around us; changing our minds is always a difficult and sometimes scary thing to do, but it is important.

**So what?**

As members of a society it behooves us to understand as much as we can about how and why inequality and suffering exist and how they are maintained. Today in the USA, and across the planet, much inequity is maintained precisely because the myths of race, sex, and aggression are accepted as common sense, as real and as natural when in fact they are none of those three things. It is the moral and ethical responsibility of educators and institutes of education, such as our university and universities across the country, to take the information generated within our ivory towers and synthesize it and disseminate it in manners that are accessible and usable to the public. It is also the responsibility of media outlets, especially news media, to consider more than just “flash” when thinking about in-depth reporting on what it means to be human and to make at least some attempts to include the possibility that answers are really complex and not so simple.

Einstein asks us to look for what is and it is our obligation to facilitate the spread of that knowledge to society on the whole. Injustice thrives on ignorance and we have the tools and the data to combat both: we need to be more active in doing so.


**Highlights**

- Humans are simultaneously biological and cultural; we are naturenatural creatures with a fascinating evolutionary past and present.
- Race is not what we think it is.
- Humans are not aggressive by nature.
- Men and Women are not as different as you think.

**About the Author**

Agustín Fuentes, trained in Zoology and Anthropology, is a Professor of Anthropology at the University of Notre Dame. His research delves into the how and why of being human. Ranging from chasing monkeys in the jungles and cities of Asia, to exploring the lives of our evolutionary ancestors, to examining what people actually do across the globe, Professor Fuentes is interested in both the big questions and the small details of what makes humans and our closest relatives tick.

**References**


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