The testosterone paradox: how sex hormones shape the academic mind

Roy Barzilai

Abstract
The polarizing divide that gapes ever wider between the two main political parties in the United States is purportedly based on rational discourse about various important issues: healthcare, taxation, and national security, to name a few. However, if we delve deeper into the evolved psychological forces that shape our mindsets and culture through history, we will find that these matters are actually symptomatic of one underlying primary human motivation: Sex. I argue that sex differences in the brain seem to shape the ideological gulf between the respective social groups each side represents. And most significantly, it is the male sex hormone testosterone that is the primary hormone affecting our sexual evolution. Not only does testosterone fuel the passion for reproduction and play a critical role in the length of human lives, but it is also an integral component to the mechanism of human civilization—its triumphs and its tragedies.
Keywords: sex hormones, cultural evolution, evolutionary psychology.
1. Introduction

Since the 2016 contentious presidential elections—Hillary Clinton vs Donald Trump—gender wars have been the primary contributing factor to escalating political conflict, personified in these two leading figures. Destructive forces are pitting each side against the other with profound allegations: the feminist left wing accuses Trump supporters of racism, sexism, and xenophobia, while the more characteristically masculine right wing condemns the Democrats as radical communists who hate their nation, traditions, and heritage. We are on a path toward a cultural divorce, as the heated debate is rapidly deteriorating into uncontrollable anger and even outright violent conflict. Some alarmed observers warn that we have witnessed similar periods in the course of history that led to great conflicts, such as the American Civil War and the French Revolution.

The political right in the US represents the strong, masculine personality type, which stands for what President Trump calls an “America First” vision for the world: a policy in which the interests of the American people are prioritized exclusively, protecting the nation with closed borders in addition to cultivating national identity and traditional values. This is opposed by the left wing’s globalist, inclusive, and communal vision for humanity, which demands altruistic sacrifice for the universal good, favouring empathy and social bonding to achieve a global multicultural community by eliminated borders and nationalist identity. It is important to comprehend how the masculine-feminine dichotomy displays itself in cultures and to investigate the mechanisms of these deeply embedded impulses in human existence.

2. The role of sex hormones in human history

To understand the forces that drive the life cycles of human cultures and form the engine of history, it is important to look at the most fundamental building blocks of human neuroscience. Our hormones are the impetus for our history. Hormones regulate and control the way the human mind perceives the world and forms social organisations and political order accordingly. Hormones drive waves of social mood, shaping the evolution of our social life, the fluctuations of religious doctrines, cultural crusades, and sexual norms.

As Homo sapiens, the rational man, we have a dual nature. The mind is characterized by the faculty of reason, but humans are also social mammals, driven by animal instincts for survival, procreation, and social status. As individuals, sex is a defining feature of our personality and gender characteristics. As social animals, it also shapes our social structure, the model for the organization of our society, and plays an essential role in our biology as
The testosterone paradox: how sex hormones shape the academic mind

sexually reproducing organisms. This dual nature of the human condition is at the core of the conflicts and the cultural storms evident in contemporary culture. Just like the ageing human body falls to disease, such as cancer, and somatic cells start to die while deadly cells multiply, weakening the body from within, so civilizations age and deteriorate precipitously when extreme ideologies arise (e.g., National Socialism) or famine or other extreme conditions challenge their homeostasis. The mental state in which people are susceptible to such ideologies of death is caused by hormones in a similar manner that hormones signal the cells of an ageing body to execute programmed death and bring to the end of an organism’s life cycle.

3. Sexual and social organization

Indicative of this ageing civilization are the demographic problems facing Western societies. Birth rates are declining, population size is shrinking, and the massive Baby Boom generation of senior citizens now facing retirement will not be able to be supported by the disappearing labour force with fewer young people. Indeed, falling fertility rates are a signal for collapsing testosterone levels throughout such periods of cultural decline. These trends bring our society into a schizophrenic mode, in which the masculine and feminine sides battle one another in competition for cultural domination, rather than complementing each other in a harmonious relationship, as man and woman joined together in traditional marriage union might do. This breakdown in social and group cohesion across gender lines, in conjunction with the decline in the traditional masculine leadership role, threatens to fracture the social bonding that holds us together.

The rise of complex human societies requires shared intentionality, the cultural transmission of knowledge, and the division of labour, and these are facilitated by the mechanism of social bonding. This defining attribute of ultra-sociality in humans, connecting people into close social networks that cooperate together based on shared values, is a property that enables humanity to achieve greatness. Hence, the feminine characteristics of empathy and love are essential for the benefit of our society. However, if the structure of our social bonding is too highly empathized, too tight, it can thwart the freedom and flexibility required for the individual to exercise independent will and action by taking personal responsibility. Such a social system becomes inflexible, leading to social bondage and stagnation. In this way, the group can undermine the individual drive for creativity and rationality and block a path for objective knowledge. Therefore, we must seek a hormonal balance between the feminine side of self-sacrifice and social bonding with the masculine side of independence and rational self-interest.
4. Diminishing testosterone: an endocrine crisis

The decline in testosterone levels in the past thirty years has been documented in studies worldwide. Utilising data from long-term studies that looked at serum testosterone levels in American men between 1987 and 2005, Travison et al. reported a drop in total testosterone by 20% in those years and close to a 50% drop in free testosterone.\(^1\) Similar studies in Denmark and Finland conclude similar decreases, with reports calling such declines “alarming,” particularly from an evolutionary standpoint.\(^2\) The Finnish population tested between 1972 and 2002 showed that men born between 1942 and 1951 had notably lower testosterone levels than men in the same age range (60 - 69) who had been tested years earlier, men born between 1913 and 1922.\(^3\)

A further indication of collapsing testosterone levels is the array of data concerning significant decreases in semen quality. Sperm counts and semen volume between 1940 and 1990 have been shown to have lowered by 50%.\(^4\) Another study showed that between 2001 and 2011, there was a 38% decrease in sperm quality, accounting for a 2% decline per year in men between 18 and 25 years old.\(^5\) These levels are approaching a critical point at which conception becomes much less likely. In an overview of these concerns published in the *Wall Street Journal*, the data on declining testosterone and subsequent sperm quality has been studied from nations with “large databases and the ability to track health records,” making the research longitudinal with sizable populations to assess.\(^6\)

The causes of declines in testosterone levels and subsequent semen quality are debated in the literature. At this stage of discussion, I will forgo a review of those possible causes, as the immediate focus is the effect. The effects of declining testosterone levels include compromised fertility viability, increased

---


\(^3\) Ibid.


depression and mental disorders in men, increased rates of certain types of
cancer, and diminished ability to cope with the stressors of modern life.

Lower testosterone leads to lower levels of serotonin, causing anxiety and
depression and the rise of violence in society. Conversely, testosterone
stimulates dopamine activity in men, which fosters focus and goal orientation,
feelings of well-being, and vitality. Moreover, testosterone levels correlate
with what is called crystallised intelligence in men between the ages of 50 and
70 years old. The same population of men whose testosterone levels have
declined up to 50% between 1987 and 2005. These are often very productive
years in men’s lives. It is the period of life when men are among the power
brokers of a culture—its thought leaders in academia and religion, heads of
industry, media, and politics. In those years, men are guiding their offspring
and others in subsequent generations. While this is also the case for women of
this age group, the data being assessed concerns males, hence the emphasis on
the endocrine crisis in modern males.

This endocrine crisis affects the worldview of a culture: declining
testosterone, which links to depleted serotonin and diminished dopamine,
creates a mindset more prone to passivity and fear and violence. Such
weakened psychological vitality makes entire populations susceptible to
group-think, to a herd mentality, and to manipulation by controlling forces. As
noted above, though empathy is an important quality in humans, if the
feminine, empathizing mind is not balanced by the masculine systemizing
mind, the drive for individual excellence in society is muted, at times even
totally squelched. Therefore, looking back through history, it can be
postulated that when cultures are suppressed by tyrants—including the tyranny
of the crowd—when creativity and ingenuity and prosperity are supplanted by
fear and reserve and paucity, it is very likely that this is the effect of declined
testosterone levels.

5. The endocrine crisis in academia

The current period of conflict provides scientists with the incredible
opportunity to examine our political strife from a broader social-science
perspective to evaluate the inherent forces that drive social conflict and
transformation. This would require an integration of the natural sciences—
primarily biology and neuroscience—with the humanities in order to reach a
more comprehensive understanding of our mind-body connection and how
evolved sexual reproductive strategies drive the organization of our society.

7 Johannes Schroots, “On the Dynamics of Active Aging,” Current Gerontology and
8 Carleson et al.
Roy Barzilai

culture, and political ideologies accordingly. There are highly respected thinkers who have endeavoured some aspects of such a project, such as a biologist E.O. Wilson and psychologist Jonathan Haidt; yet they, like others, only go so far in their investigations. The academic culture that underpins the social environment in which researchers work and publish creates a feedback loop with the culture. The very lens through which we see the world affects our perceptions of the world and therefore how we organise socially: what gets researched and what doesn’t, what kinds of art and entertainment are produced, what journalists report, and thereby what the public comprehends as “truth.” The decline in testosterone evidenced throughout the past few decades is concurrent with an academic culture that is increasingly hostile to the principles of open discourse and exhaustive investigation.

Unfortunately, although the public tends to think of academic science as purely empirical and objective, we are biologically designed to operate under self-imposed and socially induced restraints, even regarding our core belief system and ideology. Our very human nature as social animals that form cohesive social groups for survival often prohibits individual scientists from pursuing an independent course of inquiry that contradicts the mainstream line of thinking. This is not different from the kinds of accusations and persecution that can lead to excommunication when heresy is detected in religious groups. As social mood declines, humans cannot overcome the increased feelings of irrationality. They come to distrust their own minds and the world around them and become reduced to instinctual, animalistic, group behaviour on par with other mammals and even social insects, such as ants and bees.

The view of man as both an independent and a rational being tends to coincide with a culture in which a rise in testosterone levels raises our feelings of self-esteem, our internal locus of control, and an optimistic, rational view of human nature. During the period between the 1950s and 2000, there was a rationalist view of man in both psychology and the social sciences, and an individualistic view that regarded man as an autonomous unit, in which the mind of the individual is not part of overly subject to social group pressure. This view, referred to as *methodological individualism*, also reigned supreme in the study of biological evolution, in which the individual was considered the unit of selection. However, the cycles of history are fractured into sub-cycles of different degrees, and within this overall positive trend in a social mood, there were sub-periods of decline, primarily during the recession of the 1970s. During this period of negative social mood, in 1978 social scientist Herbert Simon received a Noble Prize in economics for his work on bounded rationality, his concept that our rationality is limited during decision making, constrained by our finite mind and time resources.

The mainstream view of individual selection in biology, along with reason and atheism versus religion, were represented by evolutionist Richards
Dawkins, who published the *Selfish Gene* in 1976. Dawkins presented his thesis that genes are the unit of selection in individuals, in a similar fashion that *memes*, a term he coined for ideas that spread through human society, are the unit of selection in human cultures. The contrast between the overall positive trend in social mood post-WWII until 2000 and the negative sub-degree trend during the 1970s is evident in Dawkins’ overall approach. While he championed reason, individualism, and science, on the one hand, his newly introduced concept of memes, on the other hand, challenged pure reason and free will, because the meme associates human cognition with the biologically determined mechanism of social groups.

During the 1970s, some other dissenting voices to the individualistic paradigm emerged, but they were few and usually silenced by the majority. One such scientist was Harvard biologist E.O. Wilson, who published his book *Sociobiology* in 1975, discussing humans as social organisms like ants or naked mole-rats—a concept that was not well received at the time. Another dissenting academic to the individualistic view was the evolutionary biologist David Sloan Wilson who promoted the view of multilevel selection, rather than the individual as the sole unit of selection. This determines that evolution operates on the level of individuals within groups, but also in group selection—groups as a whole system competing against other groups for survival, resources, and propagation of itself.

The societal decline in testosterone and other “happy chemicals” in our brains since its peak around the year 2000 has resulted in the effect of a decline in social mood. Our collective mind feels depressed and disillusioned with reason, perceiving ourselves too fragile and incompetent to deal with the challenges presented by the times. Jonathan Haidt presented his own model of *social intuitionism* in 2001, in which moral positions and judgments are primarily intuitive. They are only rationalized, justified, or otherwise explained after the fact, and are taken mainly to influence other people to form cohesive coalitions in the social dynamics of group behaviour. The idea that the faculty of reason only follows our intuition diverged from the prevailing rationalist model of morality, such as of Lawrence Kohlberg’s stage theory of moral reasoning, which was the accepted model in prior decades.

Since the social mood has declined, both individualism and reason have suffered severe blows in our collective consciousness and view of human nature. Currently, the view of man as a rational, independent being is attacked from every side, similarly to how Locke’s rationalist view of man during the eighteenth century Age of Reason was subsequently attacked by Hume and Rousseau. Locke believed in the *blank slate hypothesis*, which states that the human mind is born with no innate ideas, thus validating the optimistic view

---

of man as a rational being who possesses the absolute power of free will. The opposite view, called innate ideas, binds our brains—and our fates—to biological factors, which are associated with the limitations of the material world and animalistic impulses as the basis of behaviour.

6. The radical triumvirate

There are no ideological forces more destructive to the benevolent view of man advocated by the Enlightenment than the unholy trinity of feminism, Marxism, and Eco-feminism. It seems that with the decline in testosterone, which is responsible for creating dominance hierarchies and social order, this triumvirate seeks to demolish a rationalist world order by bringing anarchy and chaos to the social system. Established social structures grounded in the biology of the sexes, such as the heterosexual family, gender differentiation, and the sexual division of labour, are attacked in by the progressive vanguard of contemporary academia and media as irrelevant, primitive, and anachronistic, controlled by a “patriarchy” that defies the laws of human progress with outdated traditions. Yet, these powers are blind to the irony that Camille Paglia calls a “delusion” when she writes, “Sexual freedom, sexual liberation—a modern delusion. We are hierarchical animals. Sweep one hierarchy away, and another will take its place, perhaps less palatable than the first.\(^{10}\)

The prevailing elite ideology of feminism and cultural Marxism views the human personality as a subjective social construct that has no objective biological basis. It is, for example, in complete denial of the role testosterone has in creating the biology of sexual differentiation in the human brain. Moreover, the Marxist-feminists adhere to aspects of Darwinian evolution that attack the biblical view of mankind as a dominant being, created in the image of a transcendent God, above all other animals and above physical nature itself. Hence, by advancing their version of the evolutionary worldview, they seek to reduce the status of man to simply another animal, residing on earth and limited to the material world. In the socialist, utopian, egalitarian version of evolution, evolutionary psychology has no place. The idea that our brains evolved through adaptations to ancestral, environmental conditions clashes with the ideology that there are no innate genders, racial differences, or superior cultures or religions; and this is accomplished particularly by attacking Western culture as having a superiority complex.

Marxist feminism, thereby, is similar to the Platonic dualistic worldview that regards its ideals of an egalitarian, utopian, communal society as products

\(^{10}\) Camille Paglia, *Art and Decadence from Nefertiti to Emily Dickinson* (Yale Nota Bene, 2001), 4.
of the mind, not impeded by the limitations of the body. Any mention of biological factors that result in gender and race differences are strictly prohibited in this intellectual atmosphere; in fact, increasingly they are punished. Jonathan Haidt describes the phenomenon of such insular thinking and how it generates a kind of group trance, in which “moral claims come to feel as objectively true as the claims of physics and math.”

Likewise, Steven Pinker critiques the feminist lockdown on the scientific inquiry about sexual difference in the human brain:

_At some point in the history of the modern women’s movement, the belief that men and women are psychologically indistinguishable became sacred. The reasons are understandable: Women really had been held back by bogus claims of essential differences. Now anyone who so much as raises the question of innate sex differences is seen as “not getting it” when it comes to equality between the sexes. The tragedy is that this mentality of taboo needlessly puts a laudable cause on a collision course with the findings of science and the spirit of free inquiry._

This aversion to academic freedom in science is an enormously troubling characteristic of the current culture, and its effects are already broad reaching. In failing to publish much new research on the societal decline of testosterone, the highly feminized academic establishment ignores research, for example, that indicates the loss of masculine development among adolescent boys, who should have experienced puberty with rising male hormones levels. Young men between the ages of eighteen and twenty-four in the UK report that even the term “masculine” has negative implications. Only 28% of the men polled self-reported as “feeling masculine,” and only 2% identified as “completely masculine.” This stands in contrast with men over sixty-five, 56% of whom reported feeling completely masculine. In concert with their propaganda campaign over the past decades to vilify masculinity in general, feminist academics ignore or suppress research that supports positive aspects of testosterone. A German study indicates the correlation between higher testosterone and a higher incident of honesty in the ninety-one male participants. Co-researcher Dr Armin Falk suggested that the significantly

---


higher incident of pro-social behaviour (i.e., honesty) in those men treated with testosterone might be due to “increased pride and the need to develop a positive self-image in participants.”\textsuperscript{14} While this outcome is hardly news to people who understand the very positive benefits of robust testosterone, what’s alarming is that the study results are reported as surprising and contrary to some long-held canon regarding the anti-social behaviour of higher testosterone—as if that is a truth that certain newer studies are only now refuting. In fact, what this depicts is the bias inherent for decades in most research concerning testosterone, and that is a direct result of the encroaching Marxist-feminist ideology that has come to grip the research community.

As the triune influence of feminism, Marxism, and Eco-feminism has saturated the thought leaders of our society, perhaps no one consequence is more stunning than the swiftly growing phenomenon of gender identity politics in all manner of “transgenderism.” Perception and politics have driven science and contorted public opinion into not only tolerance or acceptance of gender variation but enthusiastic promotion thereof. Camille Paglia is very straightforward in criticizing the current “transgender mania” and in recognising it as a characteristic of a culture’s late phases.\textsuperscript{15} Bringing her broad historical knowledge to bear, she explains that she has seen this cycle before; and what she describes is clearly the phase of cultural decline caused by falling testosterone levels:

\textit{I found in my study that history is cyclic, and everywhere in the world, you find this pattern in ancient times: that as a culture begins to decline, you have an efflorescence of transgender phenomena. That is a symptom of cultural collapse.}\textsuperscript{16}

Moreover, Paglia calls the “wildly inflated claims” of transgenderism propaganda.\textsuperscript{17} The lies promoted to reinforce this mania include the anti-biological idea that sexual reassignment surgery and therapy can actually change the cellular DNA coded with a person’s sex.

\begin{flushright}
\textsuperscript{14} Christine Hsu, “Is Testosterone the New Truth Serum? Male Sex Hormone Found to Promote Honesty in Men?”
\textsuperscript{16} Ibid.
\textsuperscript{17} Ibid.
\end{flushright}
7. Conclusion

The terrible irony we find ourselves in is simply this: The condition of diminished testosterone creates the societal mood and perceptions that resist a comprehensive investigation into conditions caused by the diminished testosterone. The more persuaded people are by the propaganda, the more intractable they are, unwilling and unable to see objective truth. The clarion call in the wake of the Holocaust has been “never forget,” but if we don’t understand a situation, we cannot remember—or rightly remember—what led to it or what exacerbated it, and therefore we are stymied in how to cure or prevent it.

References


Carleson et al.

Camille Paglia, Art and Decadence from Nefertiti to Emily Dickinson (Yale Nota Bene, 2001), 4.


