

Book report
Testosterone Rex
By Cordelia Fine

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Questions: Each answer must be 100-200 words

Introduction

Question: What is the Testosterone Rex view?

Answer: The testosterone rex view is an ideology that highlights the sex inequalities that have developed through biological, societal, hormonal, and cognitive evolution. For example, since males have historically engaged in physically demanding, testosterone boosting activities such as hunting and females have mostly engaged in more feminine activities and did most of the childcaring and nurturing in their respective societies, the sexes have evolved different natures. The testosterone rex view suggests that these differences are so profound that they dictate what each sex is good at. They also directly affect the human outcomes of each sex, such as the types of behaviors they exhibit.

Ch. 1 "Flies of Fancy"

Question #1: What was the hypothesis Angus Bateman was testing?

Answer: Bateman was testing a hypothesis from Darwin's sexual selection theory. He was testing the hypothesis that sexual selection acts more strongly on males than on females. If the hypothesis were to be proven true, it implies that there is a greater gap between the least and most reproductively successful males than that between the least and most reproductively successful females.

Question #2: Describe at least one of the problems with Bateman's study.

Answer: One problem with Bateman's study is that he conducted his experiment on the behaviors and actions of fruit flies to suggest things about human behaviors. It is obvious that fruit flies and humans are different and solely from analyzing differences in cognitive capacity and ability we can see that any correlation between flies and humans would not be viable. The main problem with Bateman's study is that he fails to address the external factors that may contribute to mating strategy for not only different species but for different groups and individuals within the same species. These external factors may include ecological and social influences.

Ch. 2 "One hundred babies?"

Question: There is a quote by psychologist David Schmitt giving a reason why evolution favors sexual diversity in males, but not in females. In relation to this, he claims that men can produce 100 offspring by indiscriminately mating with 100 women in a given year. What does Fine respond to Schmitt?

Answer: Fine responds by saying that for a man to impregnate 100 woman a year, he must be able to successfully access and mate with at least 100 women in a given year, which is essentially impossible. Fine states that a promiscuous man must have sex with more than 130 women in a given year to have a 90 percent chance of outperforming a man in a monogamous relationship to father a child in a given year. For a man to be

able to impregnate multiple women let alone a single woman through promiscuity is far less likely than for a man in a monogamous relationship to impregnate his partner due to the extreme difficulties of maintaining access to many different fertile women for mating purposes.

Ch. 3 "A new position on sex"

Question: What does the work of Hera Cook illustrate?

Answer: Hera Cook's work illustrates the changes in sexuality and sexual and reproductive autonomy through different eras due to changes in person, social, societal, and economical situations. She states that, in the Victorian era, where men were not pressured to support their children born out of wedlock and birth control techniques were not easily accessible, women turned to sexual restraint in order to control fertility and reproduction. This changed in the early twentieth century when birth control became more accessible. With the birth control becoming more accessible, women were able to express their sexuality like men, as they were able to have sex without having to commit to pregnancy prior.

Ch. 4 "Why can't a woman be more like a man?"

Question: What is de Vries's compensation hypothesis? And why is the study on birdsong (explained by Anne Fausto-Sterling) evidence in its support?

Answer: Vries's compensation hypothesis suggests that not all neurobiological differences between sexes always equate to difference in behavior. There can exist differences that act to compensate for the existence of other differences. The study on birdsong supports this hypothesis as it demonstrated that both male and female African forest weaver birds are able to sing equally despite males having significantly larger and denser "song-control" brain regions. This is possible because the genes associated with song-control region of the brain in female birds produce proteins at a much higher rate than in males. This is an example that supports Vries's hypothesis because it shows how the significant difference in brain regions is compensated by another difference.

Ch. 5: "Skydiving wallflowers"

Question: After reviewing several studies on risk taking, what is Fine's conclusion about women and men's risk attitudes?

Answer: Fine concludes that men and women have similar risk-taking attitudes but the risks that women take are often overlooked. The studies and surveys that measure the likeliness of each gender to take risks often don't include situations where the risk to reward ratio is equal for both sexes. These studies and surveys commonly use situations where men are more beneficial from taking the risks than women are, and they don't account for situations where women are more beneficial when taking the risks. These studies and surveys also tend to feature situations that are more familiar and knowledgeable to men, such as sports betting.

Ch. 6: "The hormonal essence of the T-Rex?"

Question: In page 131, Fine writes "cichlid testes are a social construction". What does she mean there?

Answer: Fine is drawing a conclusion based on the experiments and observations explained prior. She is stating that environment and social situations determine social behaviors, like aggression, in cichlids contrary to the testosterone rex view that suggest that testosterone is the sole catalyst for aggressive behaviors and thus the idea that the presence of testosterone alone results in aggressive behavior is a social construct. In the experiments and observations, a castrated territorial cichlid was placed into a tank with a similar-sized, intact, non-territorial cichlid. The castrated cichlid with flatlined testosterone levels continued to exhibit his dominant nature. On the other hand, when two intact cichlids of different sizes are put into a tank the larger cichlid dominates, showing that even though both cichlids were testosterone abundant and territorial, the presence of high levels of testosterone was not a deterministic factor that causes aggression. Instead, aggressive behavior depends on social situation and real estate conditions.

Ch. 7: "The myth of the Lehman sisters"

Question: What is the general idea of this chapter?

Answer: The general idea of this chapter focuses on the differences between men and women when addressing finances. The likelihood of risk taking when making financial decisions were discussed. For the most part, this chapter suggests that sex had little to no influence when determining the likelihood of financial risk taking. It might be worthy to highlight that, in some cases, women were more a bit more likely to try their luck. Also, it is probably important to note that a lot of data relevant to this chapter was solely collected from men. Therefore, many conclusions could not be reached on the topics of this chapter.

Ch. 8: "Vale Rex"

Question: What are the three assumptions that, according to Paul Griffiths, hide behind the common claim that children's toy preferences are innate? What does developmental science say about those assumptions?

Answer: According to Paul Griffiths, there are three assumptions that hide behind the common claim that children's toy preferences are innate. The first assumption is that boys' and girl's preferences reflect and evolutionary adaption. The second assumption is that the preference is innate. The third assumption is that, if the preferences are not universal, then at least they are typical of boyhood and girlhood. Developmental science says that these assumptions can but do not always suggest one another, and they can also be misleading. Toy preferences in children are not solely determined by genes. They are developed based on many external factors.

Summary

Summary of the book (200 words)

In the book *Testosterone Rex* by Cordelia Fine, the author argues against the testosterone rex view. The testosterone rex view is the ideology that suggests that through biological, societal, hormonal, and cognitive evolution, sex inequalities have developed so profoundly that they definitively determine human behaviors and other outcomes. Throughout the book, Fine continually refutes many claims made by research studies and surveys that suggests that biological differences between men and women is a major reason for the discrepancy in masculine and feminine behavior. She points out many flaws in these surveys and research studies. She even provides research studies that suggests that biological differences have very little effect on behavioral differences between the sexes. She greatly emphasizes that higher levels of testosterone do not equate to more masculine behavior. Instead, she proposes that other factors such as societal influences, upbringing, and personal experiences are more influential in the development of masculine and feminine traits. Fine also argues that due to societal norms, there are stereotypical gender roles in place which manipulate women to be feminine and men to be masculine. Her conclusion is that, contrary to popular belief, the differences between the sexes are minuscule and that researchers falsely claim that masculinity in men and femininity in women are results of biological evolution.

Critical Response

Critical response (200-400 words)

Although the author makes many valid arguments in her book and they aren't necessarily wrong, I believe that that vast majority of her claims and references are not viable nor are they conclusive. For example, I believe that the discussions on children's toy preferences in chapter 8 is not a viable argument for her thesis. Even though Fine doesn't discuss hormones in this claim, she does so in many other arguments. I want to suggest her to keep her arguments consistent and ask if hormones would affect these children's preferences. The issue here is that children at such a young age do not produce enough testosterone or estrogen to conclude that these hormones do not have significant influence on their preferences. It is more viable to assess adolescents who are undergoing puberty to make these claims since this is the time in life when testosterone and estrogen production are greatly increased in boys and girls respectively. Thus, any discussion of boys and girls under pubescent age in her book is negligible. I also believe that her thesis is hurtful to the validity of evolutionary science. To suggest that evolution has not attributed men with masculinity and women with femininity is outrageous. I'm not saying that women can't display masculine behavior and men can't display feminine behavior, but I am saying that, for the most part, men innately exhibit masculine traits and women innately exhibit feminine traits as a result of evolution. For men to be reproductively successful, they must be able to attract women and vice versa. Men must exhibit masculinity and women must exhibit femininity to increase their

chances to successfully reproduce as this is what each sex values in reproductive selection. This theme is proven repeatedly in many different studies on many different animal species. Again, I must repeat, I am arguing for the norm, and I believe that many of the author's arguments argue for exceptions rather than the norm. Overall, I believe that Cordelia Fine values feminist ideology and it is reflected in her book. She makes weak arguments and references weak evidence to support her claims. She cherry picks research studies and even distorts scientific research. I am unable to agree with her on her thesis due to these details, but I do want to commend her on her delivery as it is very well structured.