

An Anatomical Destiny

Who you are and what you'll do with your life is not a straight path; it is not perfectly laid out in front of you with each step clearly labeled. The decision to become an astronaut over a ballerina or to like chocolate more than vanilla is not encoded into your DNA. These are choices. And while there is not a specific favorite color gene located in our long genetic coding, something is definitely there, influencing our decisions. This force behind all that we do is the same thing that shapes our genders- and not just anatomically. Women and men vary from each other on the smallest atomic level. This biological factor is much more important than outside societal factors when it comes to determining one's destiny.

There is an obvious physical difference between males and females. But different reproductive organs are just the tip of the iceberg when it comes to differences between males and females. Although Anne Campbell's argument in Taking Sides is not a very compelling one, she makes a very important point: there are chromosomal differences between males and females. The XX, XY formation leads to two very different outcomes. Men are naturally bigger all around, from their muscles to their nervous systems. The two different genders have different key hormones that cause the individuals to develop as they do. Men are driven forward by testosterone rather than estrogen, grow facial hair while women do not, and end up being inches taller than women. Besides men having larger brains, another difference has been located deep inside the hypothalamus: a cluster of cells, called the sexual dimorphic nucleus (SDN). Men have noticeably larger SDNs. Male-to-female transsexuals, however, have been

reported to have smaller, female-looking SDNs. This could possibly be why they feel as though they do not identify as the gender they physically are (Nova, Sex: Unknown, 2001).

It is argued that just having XX over XY does not make you automatically like high heels over sneakers. In fact, this is often not even the case. But how big of a role does society really play? Looking at societies around the world that are not nearly as developed as the rest show one repetitive theme over and over: men and women consistently do differing tasks. Men take on the physical hunting and building while women stay behind and take care of food gathering, child rearing, and home-related activities (“Sex Differences and Cultural Institutions”, R.G. D’Andrade, 1966). Men may be bigger and stronger and therefore the more obvious choice to do these physical activities, but women could do them as well. Perhaps there is something deep inside us that makes women gravitate towards one activity while men are propelled towards another.

Stereotypes must start somewhere; if the description didn’t fit, it wouldn’t catch on and become well-known. Enter now: the classic male stereotype. Tall, strong, aggressive, competitive, and independent. This is probably derived from man’s earlier day as the hunter who must be aggressive and willing to fight in order to survive, but those days are long gone. So why are men still viewed this way? Why are women still seen as kind, submissive, caring, nurturing humans? It is because men and women continue to act in these ways. *D* statistics on aggression show a range from 0.29 to 0.50, favoring men. Women scored higher on having moral behavior (such as resisting a tasty treat placed in front of them), with a *d* statistic of 0.27 to 0.41. (Bettencourt and Miller, as cited by Lippa,

2005). Women measured higher on smiling in social settings (0.63) and being more empathetic (0.27) (Eisenburg and Lennon, 1983, as cited by Lipka, 2005). All of these traits and more reflect the stereotypes now in place.

A very strong piece of evidence is the Bruce/Brenda case. This case study was the best that any scientists could ask for: twin brothers, one of whom was reared as a girl (there was a “constant” to compare to, so to speak). Bruce, or Brenda as he later became known, realized something was wrong once she hit puberty. She began dressing as a boy, liking stereotypical boy activities, and could not deny that she simply did not feel like a woman. Later, when the truth came out, Brenda rejected her assigned gender and lived her life as a man, now called David (Nova, Sex: Unknown, 2001). So what went wrong with David? He was told he was a girl and had the anatomical parts of a girl. But on a genetic level, he was still XY. Much is the case with other babies born around the same time period; when they were born with ambiguous reproductive organs, a gender was chosen. Many of the children, similarly to Bruce/Brenda, rejected the assigned gender, claiming that they too did not feel as though they were meant to be a male/female, and ended up switching back to their intended genders years later.

Clearly, there is a force behind everyone’s actions, behaviors, and decisions. Society simply can’t be the only reason that we grow to be men and women; the genes that dictate XX or XY must do much more than determine reproductive organs. There are chemical and genetic differences between men and women that predispose us to be a certain way. Choices that defy your gender’s stereotypes can be made, but deep down there is no denying that genes have “the last say” in everything that we do.

Works Cited

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