

Science, God, and Sexual Orientation

Devin Baker

Department of Biology; College of Arts and Sciences
Abilene Christian University

Sexual orientation is a modern and complex term for sexual attractions and behaviors that have been experienced throughout history. Science and religion have both taken stances on the origin and ethics of sexual orientation. Research done in both fields has begun to shed light on the fact that there is an innate biological cause for sexual orientation, and that the Bible might offer a more positive view on non-heterosexual orientations than previously thought.

Religion fears being undermined by science, and science dislikes ideas that lack relatively irrefutable evidence. The relationship becomes even more strained when both are used to take a stand on a hotly disputed topic. Sexual orientation has been debated by both circles, but a thorough examination of both reveals that sexual orientations other than heterosexuality have scientific founding, and are only proscribed in the Bible in very contextual and debatable circumstances.

The Biological Perspective

A plethora of studies have been conducted over what the scientific cause for sexual orientation could possibly be; I will review some of those that are representative. The first potential cause for a certain sexual orientation is the Fraternal Birth Order (FBO) effect. It is based on the observation that the odds of being homosexual increase for a male with each older brother that he has. The cause of this is hypothesized to be the result of an immune response on the part of the mother during her pregnancies which triggers a prenatal change in the brain.¹ When the cells or cell fragments of the male fetus enter the mother's circulation, her body recognizes them as foreign substances due to the male-specific antigens. Considering them to be antigenic, the

mother's immune system develops antibodies which enter the fetal compartment. At this point, the antibodies cross the blood/brain barrier into the fetal brain and affect how the immature brain develops. These anti-male antibodies alter sex-dimorphic brain structures, specifically those relevant to sexual orientation causing him to be homosexual.² Memory immune response causes the antibodies generated to be significantly higher in number and better at binding which would occur every time the mother carried a male child. This then increases the likelihood each time that the sexual orientation of the child will be affected as the mother has more male progeny.

To better understand this model, one can look at Hemolytic Disease of the Newborn as an analogy for the maternal immune response hypothesis. When a mother is Rh negative and has an Rh positive child, she may develop an immune response to the Rh factor as is foreign to her body. With each Rh positive child she bears, the likelihood that the immune response will occur increases creating a birth order effect. The immune response of this model affects the fetus in a variety of ways that can be mild or severe.

Another potential determiner of sexual orientation is the level of hormones

¹ Bogaert and Skorska, 2011,

² Bogaert and Skorska, 2011,

to which the fetus is exposed. In males, the prenatal testosterone surge is the most important point for the development of gender identity. Support for this explanation was found in phenotypic women, or XY chromosome women. When the androgen receptor, located on the X chromosome, has been mutated to be androgen insensitive the subjects perceive themselves to be feminine despite the Y chromosome. They also report few gender identity problems and identify as female and heterosexual in sexual attraction, fantasies, and experience. This means that in spite of having normal synthesis of androgen and testis differentiation, the phenotype displayed has the normal female external and behavioral appearance. So in the case of male fetuses it shows that direct androgen action on their brains is required to develop the identity of a human male, as well as male heterosexuality. This is also in agreement with the findings that in females, following the period of aromatizing testosterone into estrogen, the exposure of the mother to diethylstilbestrol (DES) during pregnancy increases the likelihood of bisexuality or homosexuality.³

Further support of the likelihood of sexual orientation having a biological basis is shown in clinical observations that link lesions or tumors in the brain to changes in orientation. Both the temporal lobe and the hypothalamus seem to be potential areas of further research based on observations made. Tumors on the temporal lobe and the hypothalamus have also been connected to shifts in orientation causing a person to be a homosexual. Studies done in animals have worked to replicate these observations and have shown that lesions in the preoptic area of the hypothalamus have changed the sexual orientation of the animals.⁴ In patients with Klüver–Bucy syndrome, it was

noted that the lesions to the temporal lobe caused the patients to experience change in orientation from heterosexual to homosexual.⁵

Psychological and environmental factors are also thought to play a role in a person's sexual orientation. Some studies have shown that the behavior of the parents will determine the orientation of the children, such as in Bieber and colleagues.⁶ The claim presented was that households with weak fathers and domineering mothers often lead to the male children becoming homosexual. The study was later found to be flawed due to small and unrepresentative sampling. Attempts to replicate the results have failed leaving this particular hypothesis without support. Other studies research the influence of parenting styles and how traits such as lovingness or rejection can influence sexual orientation. The majority of these studies have not been replicated in recent years, and may not be a conclusive factor in sexual orientation.

The behavior of children and its relationship with their orientation has also been an area of research with findings indicating that orientation tends to influence behavior rather than the other way around. One of the most consistent findings was that exhibiting gender nonconforming behavior as a child is usually an indicator of a homosexual orientation.⁷ Male children preferring dolls, colors defined as feminine ones, and exhibiting behaviors closer to those of female children are examples of gender nonconforming behavior. Studies as recent as 2008 have replicated the findings through use of childhood videos donated by volunteers. A study done by Reiger and colleagues demonstrated that the pattern of gender nonconformity was seen, regardless of gender, in pre-homosexual children and

³ Swaab, 2004, ; Bao and Swaab, 2011,

⁴ Swaab, 2007,

⁵ Swaab, 2007,

⁶ Bieber et.al. 1962

⁷ Jenkins, 2010, p. 280

that it continued into their adulthood.⁸ Research along these lines serves to point out that behavior often serves as a potential indicator of orientation and may not be the cause of it as some people believe.

Childhood abuse or trauma is also thought to be a cause of non-heterosexual orientations. A study by Zhou compared the rates of early childhood abuse across orientations, including heterosexuals, homosexuals, bisexuals, and mostly heterosexuals (a minority group that is rarely considered). The results noted that heterosexuals experienced different form of adverse childhood experiences (ACEs) at significantly lower rates than homosexuals, bisexual, and mostly heterosexuals.⁹ This study showed that the correlation between sexual orientations and ACEs was not that ACEs lead to non-heterosexual orientations, but the opposite. As previously mentioned, children of non-heterosexual orientations often display gender nonconforming behavior which potentially puts the children at higher risk for ACEs, because “gender nonconformity has been shown to lead to elevated risks of victimization.”¹⁰

The Theological Perspective

The main backing for declaring homosexuality a sin comes from plain sense readings of the Bible. Whether the passage is simply alluding to the evils of homosexuality, or just blatantly states it, there are multiple instances in the Bible that show condemnation of homosexuality according to some. At least, that is how it seems from a plain or common/vulgar interpretive reading done in a modern context. What people often forget, though, is that the Bible was written in the context of cultures that existed thousands of years ago, and it has been translated from ancient languages that are studied more often than

spoken. This leads to very few people understanding the original meaning and context in which the Bible, leaving the rest to rely upon modern interpretations and sermons given by their church leaders. To understand the true (e.g. the *real* literal) meaning behind the verses, they must be read in light of their cultural context.

One highly referenced occurrence of homosexuality is that of Sodom. While many know the story as the men of Sodom wanting to have sex with Lot’s two guests (who were actually angelic), the condemnation was not focused on the homosexual nature of their desired actions. What was truly being frowned upon was the attempt to break the sacred bond between a man and his protected guests and, more importantly, the desire of the Sodomites to rape the guests. The concept of hospitality in the ancient East was culturally important, and dishonoring the bond of hospitality was unthinkable. When the men of Sodom threatened to dishonor this bond, Lot offers up his own daughters to protect his guests. This is a rather crude and heartless “solution,” but women in this age had little value or standing and were inconsequential compared to the importance of protecting your guests. Luckily for Lot’s daughters, the guests struck the Sodomites blind and the girls were spared.

The real crime committed by the men of Sodom was their desire to rape the guests. This is their true sin, as they justify their actions of harming another human being, and of treating human beings as objects to be used and discarded. This is in direct contrast with the commandment to “love thy neighbor as thyself” which Jesus later will uphold as one of the two greatest commandments. The sin does not lie in the fact that the encounter was to be a homosexual one, but in the reality that it

⁸ Reiger et.al. 2008

⁹ Zhou, 2015,

¹⁰ Ibid.

would be a violent, forced encounter that would dehumanize its victims.¹¹

To reinforce the idea that rape (or the intent to do so) was the sin committed in Sodom, the lesser known story of Gibeah is told in Judges 19. The story begins similarly to that of Sodom, where a traveler is invited to enjoy the hospitality of a local man's home. Later in the night, men of the town come to the door demanding the guest to be brought out. To satiate their desire, a concubine is offered up in his place, and unfortunately for her there were no angelic men to save her. She was abused and raped through the night, and her master found her on the doorstep. She was dead, or nearly so, and he cut her into twelve pieces and sent them to all the coasts of Israel.

The abuse of the poor woman proves that sexual orientation was not the issue here, as they settled for a woman when, if the story was about condemning homosexuality, why would they initially desire a man? The issue is their depravity and their complete disregard for human life. Through their actions they turned a human into an object from which they could force sex upon, and then turn the human into an object that they could abuse and direct their sadism towards. The human body was created in the image of God, and these men desecrated it for their own enjoyment. Like Sodom, the sin committed the desire to dehumanize and desecrate a person.¹²

Two other verses often used to support an anti-homosexual perspective are Leviticus 18:22 and Leviticus 20:13.¹³ When read in a literal and modern sense, the verses seem to be very supportive, considering it to be "detestable" and an "abomination." When considered in light of the culture that the verses were written for, there is a different message. As seen in the stories of Sodom and Gibeah, women had very little value in

those times and occupied a very low spot in the social order. To be treated like a woman would be considered a huge insult and a great dishonor given their status.

Understanding this then leads the verse to be understood as "Don't sleep with a man as you would with a woman, because that is terribly insulting to his honor." The verses are less about homosexuality and more about maintaining the order set in the patriarchy, keeping men and women in very separate levels of power. Besides keeping a man's honor intact, these verses also showed the distinct cultural shock that occurred when sexually reserved peoples ran into societies that used sex as a form of temple worship.¹⁴

In other cultures, sex was a much more fluid concept and it was heavily tied into various religions. Sex was a part of temple life, especially in regards to deities of fertility, because it was thought that the best way to ensure growth and fertility in life was through imitating the act. Both men and women acted as sacred or cult prostitutes as a way of performing religious ceremonies. Some cultures even felt that it was a sacred obligation of all women to offer themselves sexually to the deity. In Babylon, it was customary for women to go to the temple of Aphrodite and wait for a man to choose them for sex. Once the act was completed, the obligation was fulfilled and the women went home. When women were not available men, usually eunuchs, would take their place. Whether it was heterosexual or homosexual, intercourse was an integral part of worship for sexually liberal cultures.

There are more positive examples of same-sex relations that occurred in the Bible. Jonathan and David have the most well-known relationship, and Ruth and Naomi are thought to have had a relationship but lack evidence to fully

¹¹ Gagnon, 2001, p. 91; Horner, 1978, p. 56

¹² Thatcher, 2015, p. 207

¹³ Seow, 1996, p. 76

¹⁴ Gagnon, 2001, p. 100

support the idea.¹⁵ The relationship between Jonathan and David has been defended by some as a very strong friendship between two men, but the circumstances surrounding their relationship would imply that they were indeed lovers.

The first of these circumstances would be Jonathan himself. While little is known about his physical appearance, he is a prince and a hero of battle which qualifies him to be an object of desire in the form of heroic love. As for David, he began as a skilled musician who later proved himself in war. Besides the appealing qualities each man possessed, they both lived in the shadow of the Philistine culture which accept homosexuality.¹⁶ They also met each other in a social context that accepted warrior or heroic love.¹⁷ To add to this, in 1 Samuel 18:1-4, Jonathan makes a public declaration of covenant with David, saying that he loved David as himself. Furthermore, when Saul yells at Jonathan in a fit of rage he mentions knowing that Jonathan chose the son of Jesse (David). Horner studied different interpretations of this verse (1 Samuel 20:30), and found that the best translation is, "For, do I not know that you are an intimate companion to the son of Jesse?" (Horner, 1978, p. 32). For Jonathan's own father to feel the need to call him out on this, would imply that the relationship between Jonathan and David was both physically and emotionally intimate. By this point, Saul has reached his limit with the relationship and plots to kill David which leads to David fleeing. The final encounter between Jonathan and David is noted in 1 Samuel 20:41-42, where the men kiss and weep. It should be noted that David was married to Jonathan's sister at this time, but made only the time to see Jonathan before he fled.

Years pass and Jonathan dies in battle. David writes an elegy (2 Samuel

1:19-27) in remembrance stating that, "thy love to me was wonderful, passing the love of women." (II Sam. 1:26, *Jerusalem Bible*). David was no stranger to the love of women, so for him to write this he clearly had to have serious and long-lasting feelings for Jonathan.

Ruth and Naomi are another potential couple, though they remain under more speculation than Jonathan and David. The book of Ruth begins with the death of Naomi's husband and sons. Naomi urges her daughters-in-law to return to their families so that they might be cared for, but Ruth refuses to leave Naomi. In her refusal, Ruth makes the vow seen in Ruth 1:16-17. This vow would likely be accompanied by a chopping motion across the opposite arm or across the neck to symbolize that they would suffer the loss of a limb or death if she went back on her vow.¹⁸ The weightiness of her motions and vow are overshadowed by the willingness of Ruth to give up her family and religion; These are of the upmost importance of someone from a Bedouin culture.

With Ruth having dedicated herself to Naomi, they return to the people of Naomi's deceased husband where they live alone together for some time. This is quite rare for women in that time period, as there was a societal system in place to ensure that unmarried or widowed women would be able to find a place in someone's family so that they could be taken care of. Due to encouragement from Naomi, Ruth does seek out a husband so she will have a man to provide and protect her. She ends up marrying Boaz, who commends Ruth on the fact that she is not chasing after young men who would have more sexual desire than an older man such as himself. While Boaz finds this to be a virtue, it could also be due to the fact that a woman who is in love with

¹⁵ Thatcher, 2015, p. 211; Horner, 1978, p. 27

¹⁶ Horner, 1978, p. 28

¹⁷ Thatcher, 2015, p. 211

¹⁸ Horner, 1978, p. 42

another woman might prefer to marry a man who had little sexual desire. They do have a son together, but Ruth and Naomi are the ones who seem most congratulated. In Ruth 4: 13-17, Ruth is praised as being more valuable than multiple sons, and her child is considered to be the son of Naomi, not Boaz. The story of Ruth and Naomi will likely still remain a speculation as time passes, but gives potential evidence for a homosexual relationship. Given that the daily activities of women were often overlooked by the male authors of the Bible, little is known about what might have occurred between the women. Anything sexual that did occur was likely not to be

discussed with other women, much less with men.

Conclusion

Sexual orientation is a complex topic that still needs more research conducted. Scientific research has shown that sexual orientation likely has a biological origin, though it has yet to definitively prove what that origin is. The exegesis of Biblical texts pertaining to homosexual relations shows that when the stories are correctly interpreted, homosexuality is seen in a more positive light. Homosexuality is not against God or the Bible, and if it is, then perhaps God made an error in our biology.

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