Are Our Physical Bodies Sacred?

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respondent in a study reported Friday in *Obstetrics and Gynecology*. When I birthed my children, I was born into fatherhood." This introduction to the *NPR* article "Transgender Men Who Become Pregnant Face Social, Health Challenges" reveals the complexities inherent in the 21st Century normalization of sex-reassignment procedures. According to the article, "He is one of 41 participants in a study of how it feels to be male and pregnant, a study the authors think may be the first of its kind. … The study came about because a medical student working with Kerns, Alexis Light, found herself fielding questions from transgender male friends about whether they'd be able to conceive and what pregnancy would be like."

Our traditional view of biology and its limitations are undergoing a radical transformation. Science is discovering the key to transforming some of nature's most fundamental truths. According to a *Humanity+* article titled "Total Gender Change within a Decade," medical technology may "be able to change the gender of anyone to the opposite gender, with full reproductive abilities of the new gender" by the end of the decade.³ Realistically, this may be optimistic; nevertheless, huge strides are being made in realizing this vision.

For some time now, surgeons have been capable of transforming both male and female external sex organs into their counterparts. These are functional, "Among FTM [female-to-male] individuals who have undergone sex reassignment, orgasm is possible and, in fact, ability to reach orgasm often increases. In addition, satisfaction with the surgery tends to be very high (>80%), and frequency of sexual activity usually increases as well." Suffice it to say that these procedures are far more advanced and effective than most people might imagine. These are not merely cosmetic adjustments, and some other surprising medical advances have given some hope that an individual's internal sex organs may also be reassigned in the near future.

In 2013, scientists used skin cells to create eggs which were then fertilized and used to develop baby mice. *The Scientific American* wrote that this study "suggested that men's skin cells could be used to create eggs, and that sperm could be generated from women's cells." This was soon demonstrated to be true when scientists used human skin cells to create primitive sperm cells that were successfully injected into the testes of mice. Additionally, *Live Science* reports that "Scientists have tricked male

¹ Henig, "Transgender Men Who Become Pregnant Face Social, Health Challenges,"

² Ibid.

³ Ice, "Best of H+: Total Gender Change Within a Decade."

Lehmiller, "Sex Question Friday: How Does Female-to-Male Sex Reassignment Surgery Work?"

⁵ Cyranoski, "Lab-Made Egg and Sperm Precursors Raise Prospect for Infertility Treatment."

⁶ Hewitt, "Scientists Turn Skin Cells into Sperm Cells, but Raise Provocative New Questions."

fish cells that were destined to become sperm into switching sex and becoming eggs instead." Perhaps most importantly, Grant Jacobs reports:⁸

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In a stunning paper Henriette Uhlenhaut and 14 others show that if adult mice lose a Foxl2 gene, ovaries become testes. ... These researchers raised mice in which they could delete the Foxl2 gene by treatment of tamoxifen, a compound that competes to block the estrogen receptor. ... The surprising and unexpected result was that when *adult* mice were induced to lose their Foxl2 gene, their ovaries changed into testes! ... [T]his research shows that the ovary has to maintain constant suppression of the key testis development gene Sox9 by Foxl2; if not ovarian granulosa and theca cells change to become testicular Sertoli and Leydig cells, respectively.

Uhlenhaut and colleagues observe that the full set of genes associated with testis development becomes active and these XX (genetically female) mice produce similar amounts of the male sex hormone testosterone as XY (genetically male) mice.

Moreover, stem cell research has afforded the possibility that sex organs might be grown from an individual's genetic tissue. This could be as simple as using stem cells mixed with a patient's body fat to grow breasts or to increase mass. More significantly, custom-designed sex organs can be grown in a laboratory and then transplanted into the body. Already this has been successfully accomplished, according to a *New York Daily News* article titled "Woman with Lab-Grown Vagina Talks About Life-Changing Procedure." The article reports, "A woman who participated in a ground-breaking study where doctors used cells to grow vaginas in a lab said she now leads a normal life thanks to the surgery. The unidentified patient was one of four Mexican women with Mayer-Rokitansky-Küster-Hauser (MRKH) syndrome, a rare genetic condition that causes the vagina to be absent or underdeveloped ..."

In February 2016, Cleveland Clinic became the first U.S. medical center to perform a uterus transplant into a woman of reproductive age. The possibility of uterus transplants combined with the ability to grow genetically customized sex organs in a laboratory, and the possibility of manipulating an individual's genetic makeup to transform ovaries and testes offers promise to those who hope for the possibility of undergoing a complete gender change. Alternatively, the transhumanist community envisions a day when the function of internal sex organs will be replaced with technology, thus allowing transsexuals to focus entirely upon appearance and sexual experience. Here too, scientific advances have made this a realistic future scenario. Science blog *io9* reports, "As time passes, we're inching closer and closer to the day when it will finally become possible to grow a

⁷ Than, "Sperm Cells Turned into Eggs."

⁸ Jacobs, "Deleting a Gene Can Turn an Ovary into a Testis in Adult Mammals."

⁹ Begley, "All Natural: Why Breasts Are the Key to the Future of Regenerative Medicine."

¹⁰ Taylor, "Woman with Lab-Grown Vagina Talks About Life-Changing Procedure."

¹¹ Cleveland Clinic, "Nation's 1st Uterus Transplant."

baby entirely outside the human body."¹² Cornell University's Hung-Ching Liu has worked toward achieving a tissue-based inner lining of an artificial uterus, and a primitive attempt at developing an artificial placenta has resulted in goats being "kept alive for up to 237 hours in amniotic tanks through a process called extracorporeal membrane oxygenation" (emphasis removed).¹³

"Transhumanism and Transgenderism enjoy a close relationship due to mutual interest in enhancement technology." Transhumanists George Dvorsky and Dr. James Hughes co-authored a paper titled "Postgenderism: Beyond the Gender Binary." According this paper's abstract: 15



Postgenderism is an extrapolation of ways that technology is eroding the biological, psychological and social role of gender, and an argument for why the erosion of binary gender will be liberatory. Postgenderists argue that gender is an arbitrary and unnecessary limitation on human potential, and foresee the elimination of involuntary biological and psychological gendering in the human species through the application of neurotechnology, biotechnology and reproductive technologies. Postgenderists contend that dyadic gender roles and sexual dimorphisms are generally to the detriment of individuals and society. Assisted reproduction will make it possible for individuals of any sex to reproduce in any combinations they choose, with or without "mothers" and "fathers," and artificial wombs will make biological wombs unnecessary for reproduction. Greater biological fluidity and psychological androgyny will allow future persons to explore both masculine and feminine aspects of personality. Postgenderists do not call for the end of all gender traits, or universal androgyny, but rather that those traits become a matter of choice. Bodies and personalities in our postgender future will no longer be constrained and circumscribed by gendered traits, but enriched by their use in the palette of diverse self-expression.

Clearly, the questions associated with gender fluidity, sex-reassignment, and sex roles in reproduction span far more territory than how individuals perceive themselves, an individual's mental health, and social tolerance. The 21st Century's obsession with sex-reassignment procedures are fundamentally redefining the concept of humanity. As bioethicist Dr. Leon Kass, who formerly served as Chairman of the President's Council on Bioethics, warns in his book:¹⁶



Human nature itself lies on the operating table, ready for alteration, for eugenic and

¹² Dvorsky, "How to Build an Artificial Womb."

¹³ Ibid

¹⁴ Pellissier, "Transgender and Transhuman - the Alliance, the Complaints and the Future."

¹⁵ Divorsky, et al. "Postgenderism: Beyond the Gender Binary."

¹⁶ Kass, Life, Liberty and the Defense of Dignity.

neuropsychic "enhancement," for wholesale redesign. In leading laboratories, academic and industrial, new creators are confidently amassing their powers and quietly honing their skills, while on the street their evangelists are zealously prophesying a posthuman future. For anyone who cares about preserving our humanity, the time has come to pay attention.

He also warns, "All of the boundaries are up for grabs. All of the boundaries that have defined us as human beings ..."¹⁷

At the heart of these transformative issues is the question, "Is the human body sacred?" In other words, how far are humans permitted to travel along the path of biological alteration and enhancement? It is futile to focus our attention on the question of whether contemporary sexreassignment procedures mutilate healthy tissue or increase health risks because science is advancing such that we may soon be able to safely reprogram the body on a genetic level and transform our sex organs with a minimal degree of invasive and reconstructive surgery. Instead, we must appeal to a higher and unchanging standard for determining our moral authority. As Christians, we can appeal to no higher authority than the Bible. What then does the Bible say about our physical bodies and our authority to design our sexuality?

Simply put in relation to this study: Our theology determines our sexuality. According to the Bible, we as human beings are unique from the animals in that we have been created in the image of God. Precisely what is involved in serving as imagers of God has been greatly debated by theologians throughout the centuries, but one thing that has not been debated is the fact that mankind is created in God's image. This is the clear teaching of Genesis 1:26–28:



Then God said, "Let us make man in our image, after our likeness. And let them have dominion over the fish of the sea and over the birds of the heavens and over the livestock and over all the earth and over every creeping thing that creeps on the earth." So God created man in his own image, in the image of God he created him; male and female he created them. And God blessed them. And God said to them, "Be fruitful and multiply and fill the earth and subdue it, and have dominion over the fish of the sea and over the birds of the heavens and over every living thing that moves on the earth."

The Hebrew word translated as "man" is *adam* and means "human being" or "the human race." [footnote] Baker, *The Complete Word Study Dictionary*, H#120, 15. [/footnote] Thus, Genesis 1:27 reveals that God made mankind in His own image, and mankind was created as

Wesley Smith, "A Conversation with Leon Kass: Science Doesn't Trump All," San Francisco Chronicle, October 20, 2002, Source: Smith, "Stupider and Worse?"

consisting of male and female genders. Somehow, our sexuality—the fact that we are gender-based creatures—is an integral part of our being created in God's image.

Clearly our sexuality is not the only aspect of being imagers of God because most animals are also created as sexual creatures, being male and female, but they are not created in the image of God. It is precisely because of the similarities between human and animal that so many theories exist regarding the image of God. Some have argued that just as God consists of three distinct Persons, so also we are comprised of three—being body, soul, and spirit—and yet we are one. There are several other theories, but all of these theories are based upon deductive reasoning. The one and only aspect of being created in God's image that can be derived from the Genesis creation account is the fact that mankind has been created as sexual beings. In other words, God's only explanation of what being created in His image constitutes is that He created mankind as male and female. Interestingly enough, because God Himself is neither male nor female, and because male and female are quite different from one another both physically and emotionally, the image of God must be most complete in the combination of the two. In this sense, the image of God is greatest when male and female complement one another in unity. This unity is described in Genesis 2:23-24, "Then the man said, 'This at last is bone of my bones and flesh of my flesh; she shall be called Woman, because she was taken out of Man.' Therefore a man shall leave his father and his mother and hold fast to his wife, and they shall become one flesh." This union is known as "marriage." Regardless of whether we fully understand how this can all be true, we are compelled to accept that our being created in God's image includes our sexuality because it is the clear teaching of God's Word.

The implications of this are significant. If the sexual design of our bodies is created by God as at least a partial reflection of Himself, then our sexuality is sacred. This too is evidenced within the text in Genesis 2:21-22, "So the LORD God caused a deep sleep to fall upon the man, and while he slept took one of his ribs and closed up its place with flesh. And the rib that the LORD God had taken from the man he made into a woman and brought her to the man." The sacred design of man in this text is obscured by the translation. The Hebrew word translated as "rib" is tsela which, in the 41 other occurrences of this word in the Old Testament, always refers to the side of something. In nearly every instance, it refers to the side of sacral architecture, such as the Ark of the Covenant, or the temple. Thus, Genesis 2:21-22 references Adam's body as sacral architecture in its account of how gender was established.

There are many things about our bodies, our design, and our relationship to God's image that we do not understand. Rather than succumb to the allure of exploring these grey areas, we as Christians should hold fast to what God has revealed. As Deuteronomy 29:29 says, "The secret things belong to the LORD our God, but the things that are revealed belong to us and to our children forever, that we may do all the words of this law." Our bodies are sacred, and God has designed our bodies to best accomplish our specific purpose and role. Sometimes our bodies are corrupted by the influence of sin, and they are in need of restoration, but this is a far cry from reinventing our biological design. When this line is crossed, we find ourselves in the precarious position of having defaced God's sacred architecture.

¹⁸ The Hebrew word *tsela* (Strong's H#6763), occurs 41 times in 33 verses: Gen. 2:21–22; Ex. 25:12, 14; Ex. 26:20, 26–27, 35; Ex. 27:7; Ex. 30:4; Ex. 36:25, 31–32; Ex. 37:3, 5, 27; Ex. 38:7; 2 Sam. 16:13; 1 Kings 6:5, 8, 15–16, 34; 1 Kings 7:3; Job 18:12; Jer. 20:10; Eze. 41:5–9, 11, 26.

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