



from the director's desk

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I am in a thicket of trees, and I cannot see the forest. For the past week, I have been wrestling with a theological problem, a question that eludes easy answers. It was triggered by a conversation at CBHD's recent consultation on synthetic gametes. This relates to procedures such as transferring the nuclear DNA from an egg with impaired mitochondrial DNA into an enucleated healthy egg, then fertilizing it. The resulting embryo has three parents, two female and one male.¹ After a day of exploring the "Ethics and Theology of Synthetic Gametes," we still lacked an understanding of the theological significance of gametes.

The concept is nested inside, or alongside, a cluster of more familiar theological concerns: the meaning of marriage, children as gift, human sexuality, and *imago Dei*. But just what *are* egg and sperm? Are they tissue like any other bodily tissue that can be freely donated (or sold)? Experience leads us to conclude otherwise, but how should we think about them theologically?

This is the kind of ethical aerobics that is at the heart of what CBHD does. We tackle the things that are not easy, and try to bring clarity to the complex.

This exercise is also at the heart of theology. Theological reflection engages contemporary culture and is informed by advances in learning in other disciplines in conversation with the timeless truths of Scripture. Until the 20th century, there was no need to consider the meaning of gametes extracted from the human body; the technology simply was not available. But, culture changed with the advent of artificial insemination, IVF, and other techniques. Meaningful theological reflection trails in the wake of reproductive upheaval.

My investigation has meandered from Google to Google Scholar to sexual ethics texts, Roman Catholic moral theologians, and Protestant theologians like Helmut Thielicke. I have had in-person and email conversations. From these, I'm going to share some preliminary thoughts, a cobbled-together structure to which I nail the sign, "Still under construction." Perhaps someone wiser will remodel or reinforce the work I am beginning here.

First, no commodification. We are familiar with the general principle rejecting commodification of the human body, including parts such as kidneys and wombs. Gametes seem to fit into this category, ergo, no selling of egg and sperm.

Second, do no harm. We do not sanction nontherapeutic procedures that impose a significant risk of harm or death of a human being. This protects embryos, but does not directly address the upstream, independent status of the gametes. The gametes are not a person that might be harmed, but in the process of donating eggs, a woman may be harmed by, for example, ovarian hyperstimulation syndrome.

Third, are gametes unique? The purpose of gamete donation seems to differ from donations of other body tissues. One may altruistically donate blood, tissue, or an organ to save the life or minimize the serious disease of another person. I would argue that gametes are different from blood, corneas, or kidneys. In one case, an existing person whose identity is certain is in need of life-saving repair. In the other, egg and sperm are desired for the purpose of creating an embryonic person whose identity is undetermined. That person is not created for their own good, but for the purposes of medical research or for the purposes of people other than him or herself. No actual person benefits medically from the donation (I am setting aside the benefit to the potential embryo of removing defective mitochondrial DNA and the potential emotional and psychological benefits to the intended parents if the three-parent embryo is adopted as an assisted reproductive technology.)

There is another difference between donating egg or sperm and donating blood or corneas. The recipient of blood or corneas does not become genetically related to the donor. My DNA can be detected in the recipient's blood only temporarily;² a new person is not thereby created, and the changed DNA is

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not passed along to the recipient's descendants. Furthermore, a recipient of traditional organ donation or bone marrow would not be considered to be the donor's offspring even though they might have some shared DNA. By contrast, sperm and egg donors are irrevocably genetically linked to any offspring. Perhaps the donors will be curious about their identity some day. The yearning may be even stronger for the donor's parents, who may view the recipient's children as their own grandchildren.³

If egg and sperm are indistinguishable from other bodily tissues, then guarantees of donor anonymity would be unnecessary. Concerns about potential contact from offspring point to the reality of gametes: they identify and connect us in singular ways with the recipients—or results—of our donation.

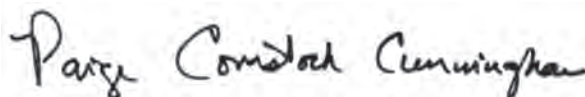
Gametes represent identification backward with the generations that preceded us, and identification forward with “generations yet unborn.” A person's egg or sperm, after all, are the result of countless generations of unique pairings of egg and sperm. Biological genealogies trace the unique trajectory of each person's genetic inheritance, which recent technologies have enabled us to trace with greater and sometimes surprising precision.

Our genetic identity is unique. Even identical twins have different DNA. Each of us, image bearers all, is a one-of-a-kind creation. And it is perhaps here that the most profitable theological reflection might be done. The person is more than the physical body, but the physical body is inextricably part of our humanity. Within the body, some organs are more closely “an expression of the unrepeatable identity of the person.”⁴ In the case of gametes or gonads, the expression is not merely symbolic, but is functional. That is what gametes do. While other cell types may carry our genetic identity, it is the purpose of gametes to pass this genetic identity along. The 23 chromosomes of a given gamete identify the offspring as the child of that parent. (Of course, adoption is a separate case, and poses counterarguments to my points. But perhaps our theology of

adoption is more robust than our theology of gametes; we do not need to mute adoption, but to emphasize gametes.)

So, I am left with the theological puzzle whether gametes are uniquely connected with personal identity in such a way that their generative potential may rightly be expressed only within the marital relationship. In an ontologically significant way, do they represent, or re-present, the parent from whom they are generated? Some theological traditions within the Christian church certainly affirm so. Or, can they be severed from the person in the same way as blood or corneas? If so, we would properly view them as something that morally may be donated, a radically different idea. Or, is there no other theologically-enriched framework within which we can or should understand the nature and purpose of gametes?

My preliminary assessment is that the burden of persuasion is carried by the first conclusion. But, I am wondering if there are not other ways that might better get at the difference, so I will keep digging. Do any theologians, armchair or professional, care to weigh in? We could use some help in “seeing the forest.”



- 1 Recent research raises the possibility of creating an embryo with a single male or female parent, as Dónal O'Mathúna notes in his discussion of the consultation in this issue of *Dignitas*.
- 2 Michelle N. Gon. “What happens to the donor's DNA in a blood transfusion?” *Scientific American*. January 23, 2009. <http://www.scientificamerican.com/article.cfm?id=donor-blood-transfusion> [sic]. A bone marrow donor's DNA remains in the recipient's blood, but does not affect gametes and therefore is not passed along to the recipient's offspring.
- 3 Alison Motluk. “My scattered grandchildren.” *The Globe and Mail*. Aug. 23, 2012. <http://www.theglobeandmail.com/life/family-and-relationships/my-scattered-grandchildren/article1286201/>.
- 4 Pontifical Academy for Life, Prospects for Xenotransplantation: Scientific Aspects and Ethical Considerations (September 26, 2001) (n. 11). http://www.vatican.va/roman_curia/pontifical_academies/acdlife/documents/irc_pa_acdlife_doc_20010926_xenotrapianti_en.html#Bioethical%20Issues.

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