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Pathways to genetic parenthood for same-sex couples

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ABSTRACT

Researchers are pursuing various ways to synthesise human male and female gametes, which would be useful for people facing infertility. Some people are unable to conceive children with their partner because one of them is infertile in the sense of having an anatomical or physiological deficit. Other people—in same sex couples—may not be individually infertile but situationally infertile in relation to one another. Segers *et al* have described a pathway towards synthetic gametes that would rely on embryonic stem cells, rather than somatic cells. This pathway would be advantageous, they say, for same-sex couples even though it would not offer those couples 50%–50% shared genetics in their children but only 50%–25%. It is unclear, however, why this approach should be preferred morally speaking since it represents a falling off from the kind of shared genetics in children that are functionally a gold standard in parents' expectations generally. Despite raising concerns about whether genetic relatedness is necessary or sufficient as a condition of parental interest in children, Segers *et al* cede the sociocultural importance of that standard. If so, same-sex couples seem entitled to press a case for some measure of research priority that would offer the same level of access to that social good as everyone else.

What should same-sex couples want when looking to have children? Genetic relatedness seems to loom large in contemporary expectations, to judge by the interest in what synthetic gametes might offer.[1] By contrast, Segers *et al*[2] express doubt that genetic relatedness between parent and child amounts to—from a moral point of view—anything terribly important. In consequence of this judgment, the scope and ambitions of contemporary fertility medicine to secure genetic relatedness of children seems beside the moral point. Segers *et al* concede that they tilt at windmills in pressing this kind of point against overwhelming interest in genetically related children. Portraying these inclinations as intractable to revaluation gives Segers *et al* the permission to disengage from any doubt about the place of genetic relatedness in familial relations and simply enter into discussions of innovations in securing genetically related children for parents.

In particular, Seger *et al* maintain that same-sex couples have been overpromised on the possibility of sharing an equal genetic contribution to their children, namely, to secure for themselves the 50%–50% shared genetic contribution to children that is possible for opposite-sex parents. Of course, if that shared genetic contribution is suspect as an ideal for opposite-sex couples, it is not clear why it should be less suspect than for same-sex couples. Even so, nothing about a homosexual orientation by itself undoes psychological inclinations towards having genetically related children. Moreover, same-sex couples will be like everyone else in being interested in the rewards culture and the law confer on genetically related children. Genetically related children still amount to a cultural gold standard as an aspirational ideal. Segers *et al* decline therefore to offer any engagement with those queer perspectives that call into question the very interest in having children and/or having children under the heteronormative terms implied in that gold standard.[3] They accept the interest of same-sex couples at face value and go on to identify pathways towards genetically related children. The best prospect on the horizon, they say, won't be able to offer a shared 50%–50% contribution to children, but only 50%–25% genetic contribution.

Rather than betting on the success of a technique that would derive sperm from woman 1 through somatic cell manipulations and unite that sperm with the ovum of woman 2 to produce an embryo, Segers *et al* recommend a technique they see as more promising and less risky: use the ovum of woman 1 and a male donor's sperm to produce an embryo; take stem cells from those embryos; synthesise sperm from those cells; use this sperm in the conception of a second embryo, relying on ova from woman 2. The resulting child will have a 25% genetic contribution from woman 1 and a 50% genetic contribution from woman 2. For a male same-sex couple, use the sperm of man 1 and a female donor's ovum to produce an embryo; take stem cells from that embryo; synthesise ova from those cells. Use these ova in the conception of a second embryo, relying on sperm from man 2. This child will have a 25% genetic contribution from man 1 and a 50% genetic contribution from man 2. Segers *et al* think that this approach is more likely to succeed than techniques that would synthesise gametes from somatic cells. No matter that the pathway would not offer equal genetic contributions, it would still offer same-sex partners shared genetics in their children.

In a sense, this account is too descriptive for its own moral good. Because Segers *et al* engage the interest of same-sex couples at face value, they do not ask whether same-sex couples are simply replicating indefensible moral values by seeking to have genetically related children in the way opposite-sex couples do. I myself think that there are good enough reasons for people to want genetically related children, but Segers *et al* express their doubts only to bend to the *force majeure* of sociocultural opinion. But if we take seriously the doubt that genetic relatedness ought not matter between parent and child—and that it should not matter in either direction—it is at least an open question whether same-sex couples would be complicit with some degree of moral harm in their reliance of synthetic gametes, however derived, to have genetically related children.

Segers *et al* say it would be unjust to exclude same-sex couples from any clinically useful fertility technique.[4] I don't disagree with that, but I also wonder whether a stronger case might be made: that as a matter of research and/or clinical practice, same-sex couples ought to be given priority in finding ways to secure genetic relatedness in children. After all, if that kind of relatedness is socioculturally and psychologically important enough to override searching questions about the ethics of fertility medicine in general, then it would seem to be important enough to theorise in relation to same-sex couples' inability to secure it for their families. Segers *et al* do note that it is plausible to assume that gamete synthesis relying on human embryonic stem cells is likely to emerge ahead of gamete synthesis relying on other techniques. If so, same-sex couples could no longer be conceptualised as inherently infertile; any infertility would be only situational and not an immutable effect of human anatomy and physiology.

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The exact prospects for synthetic gametes remain, of course, a matter of discoveries still ahead. Some techniques of gamete synthesis will be safer and more effective than others. Some may have to be written off altogether, maybe leaving behind altogether the prospect of same-sex couples to have children sharing their genetics in a 50%–50% way. What remains unresolved by this mostly descriptive account of Segers *et al* is any sense of whether—all things considered—same sex couples aren't owed better. If we do not step away from the fulcrum of valuing children precisely in relation to their genetic relatedness to children, it seems to follow that same-sex couples have as much moral entitlement to that same degree of relatedness in a prima facie way. Any investigation of this issue might lead to research priority to overcome obstacles to that kind of shared genetics, so far as possible. Of course, Segers *et al* might have gone an entirely different way here as well. They might have argued that same-sex couples are—because of their situational infertility—blessedly free of having to have genetically related children, and they ought not trade that incapacity for techniques that only conform them to the values that indefensibly frame shared genetic relatedness as a gold standard for parent–child relationships. In fact, the incapacity for a 50%–50% genetic relationship might have been urged as a model for other kinds of parent–child relationships, perhaps even as a critique of the ambitions of fertility medicine as a whole.

I don't doubt that some same-sex couples would be happy to accept a 50%–25% genetic contribution to their children, especially if the alternative is to wait for a 50%–50% option that might never materialise. The choice of who contributes 50% and who contributes 25% would be discretionary, moreover, and it would not necessarily have to be one parent only who contributes 25%. Nothing in this approach to gamete synthesis means that the roles could not be switched, with one parent being the 50% contributor to one child, while being the 25% contributor to the other children. I am not persuaded, however, that in a moral sense this 50%–25% outcome is good enough. At the very least, it's unclear why—as a matter of moral theory—same-sex couples should have to 'settle for' anything less than the same shared genetics in their children as is available to opposite-sex couples. It's plausible in some ways that opposite-sex couples are owed research priority towards securing shared genetics in their children simply as a matter of access and equity and also—more searchingly—as a matter of compensatory justice, for past road blocks imposed against having children. As it often does, biology might stand in the way of human hopes, but then again we won't know for sure unless we test it against our moral ambitions.

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