

YOUR SPERM IS MINE! DO ARTIFICIAL GAMETES CHANGE THE ETHICS OF POSTHUMOUS SPERM RETRIEVAL AND CONCEPTION?

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ABSTRACT

A number of cases have arisen over recent decades in which sperm has been extracted from dead and dying men without their prior consent. These extractions are undertaken in order to allow the man's partner to become a mother, or his parents, to become grandparents. Currently, the techniques used to perform such extractions are highly invasive, requiring either the use of an electric probe inserted in the anus to stimulate ejaculation, or surgical removal of all or part of the testicles. However, the development of artificial gametes may make it possible to produce sperm from skin cells, in which case the interventions required are far less invasive. In this paper I consider whether artificial gametes would offer a morally preferable way of producing sperm from dead or dying men without their consent. I evaluate the role played by bodily integrity, and reproductive autonomy in such cases. I suggest that artificial gametes would be less problematic than current techniques. And I argue that concern for reproductive autonomy does not ground a right not to become a parent. Nevertheless, I show that, whatever technique is used in order to derive sperm from dead or dying men, it is rooted in a morally problematic tendency to reify such men. That is, their bodies become the means to achieving the reproductive ends of some third party. Thus, even if sperm could be obtained through minimally invasive techniques, we should still regard such interventions as being a cause for moral concern.

KEYWORDS

Artificial gametes, Perimortem sperm retrieval, Reproductive autonomy, Reification, Bodily integrity

INTRODUCTION

In 1995, a British man named Stephen Blood became desperately ill with meningitis. His wife was informed he would not regain consciousness and that he was dying. While Mr Blood was being supported on a ventilator, Mrs Blood asked doctors to take some of his sperm so that she could have his child after he had died. Two samples were taken, one during the time that Mr Blood was dying, one shortly after he was declared dead. The samples were stored, frozen, in a clinic until such time as Mrs Blood would be ready to use them. However, Mrs Blood was told by the UK's Human Fertilisation and Embryology Authority (HFEA) that since Mr Blood had not consented to have sperm taken, the samples could not lawfully be used. Indeed, consent is also required for the storage of sperm in the UK, so even to continue to store the samples appeared to be in breach of the law. Mrs Blood indicated that she would contest the ruling. The sperm remained frozen during the lengthy legal proceedings which followed. Ultimately, Mrs Blood was permitted to take the sperm abroad, which she did. After travelling to Belgium for insemination, she successfully conceived a child, and then, subsequently, another.¹

The prospect of harvesting gametes from a dead or dying person is no longer as novel or medically ground-breaking as it was when Stephen Blood lay dying. Several more such extractions have been undertaken in the UK, and many more in other countries.^{2,3,4,5} Nevertheless, such cases continue to raise ethical and legal concerns. Should prior consent be a requirement in perimortem gamete harvesting? What role, if any, does reproductive autonomy play here? Can we accept one person's consent on behalf of another in these situations? Do partners, parents, or others, have a 'right' to their loved ones' reproductive material?

1 Blood D. *Flesh and Blood: the human story behind the headlines*. Edinburgh: Mainstream Publishing, 2004.

2 Kramer AC. Sperm retrieval from terminally ill or recently deceased patients: a review. *Can J Urol* 2009; 16(3):4627-4631

3 Macrae F. The women hoping their dead husbands can still give them a family. *Daily Mail* 2012.

<http://www.dailymail.co.uk/health/article-2081151/The-women-hoping-dead-husbands-family.html> (accessed on 25th March 2014).

4 See, for example, Kroon B, Kroon F, Holt S et al. Post-mortem sperm retrieval in Australasia. *Aust NZ J Obstet Gyn* 2012; 52(5):487-490, and Williams D. Over my dead body: the legal nightmare and medical phenomenon of posthumous conception through postmortem sperm retrieval. *Campbell L. Rev* 2011; 34: 181.

5 Unknown author. Fight to use dead husband's sperm. *BBC News Online*. 8th October 2008 <http://news.bbc.co.uk/1/hi/england/7659430.stm> (accessed on 25th March 2014).

In this paper, I examine the ways in which the development of artificial gametes might affect such cases. Since artificial gametes could be generated from skin cells, only minimally invasive methods would be needed in order to obtain them. Yet the issues about consent and reproductive autonomy still remain. I will show why the question of invasive intervention is so important in this context, and suggest that the more theoretical concerns related to reproductive intentions and reproductive autonomy are not as persuasive as the question of bodily integrity. Nevertheless, I conclude that there are good reasons to be cautious about using material from comatose or dying patients to fulfil the reproductive aspirations of others.

I should note here that perimortem egg harvesting is also feasible and has been requested in similar circumstances to sperm harvesting.⁶ However, there are far fewer documented cases of egg harvesting, while the incidence of sperm harvesting appears to be on the rise. Moreover, cases in which egg harvesting might be desired would be further complicated by the question of who might gestate the resulting offspring and therefore generates a somewhat different set of issues. I therefore focus on sperm rather than eggs here.

'Artificial gametes' is a term used to denote cells that have acquired the functionality of sperm or eggs, through manipulation. They are also sometimes referred to as 'synthetic' gametes, or 'in-vitro-derived gametes'. Scientists have been working on the development of artificial gametes for several decades, with some degree of success, and it seems feasible that their use in reproduction may one day be feasible. Gametes have been derived from both mouse cells and human cells. In some cases, the cells used were embryonic stem cells,⁷ in others, somatic cells have been used to create 'induced pluripotent stem cells' (iPSCs) from which gametes are then derived.⁸ Using this technique, skin cells obtained from mice have given rise to gametes which were then used to generate live, fertile offspring. To date, no human offspring have yet been born, and indeed regulatory and legal frameworks rule this out in many jurisdictions. For the purposes of this paper, I use the idea of artificial gametes primarily as a conceptual tool to explore the kind of perimortem gamete harvest undertaken on Stephen Blood. Thus, I do not

6 Greer DM, Styer AK, Toth TL et al. Case 21-2010: A Request for Retrieval of Oocytes from a 36-Year-Old Woman with Anoxic Brain Injury. *N Engl J Med* 2010; 363(3): 276-283.

7 Zhou Q, Wang M, Yuan Y, Wang X, Fu R, Wan H, Xie M, Liu M, Guo X, Zheng Y, Feng G, Shi Q, Zhao XY, Sha J, Zhou Q. Complete meiosis from embryonic stem cell-derived germ cells in vitro. *Cell Stem Cell*. 2016; 18:330-340.

8 Smajdor A, Cutas D. Nuffield Council on Bioethics Background paper on Artificial Gametes. 2015. Available at <http://nuffieldbioethics.org/wp-content/uploads/Background-paper-2016-Artificial-gametes.pdf> (last accessed September 2018)

necessarily endorse the idea that artificial gametes will or should ever be used in human reproduction.

PERIMORTEM SPERM HARVESTING AND POSTHUMOUS HARM

Since a dead or dying body is incapable of producing sperm in the usual way, a probe is inserted into the anus. Electric current is then applied rhythmically, with the voltage being increased until ejaculation occurs, usually into the bladder. A catheter is inserted through the penis and into the bladder, to siphon out the sperm, which is then treated to remove traces of urine. Other methods are equally invasive. For men who are not being ventilated, the electroejaculation method may not work. One technique that is used in such cases, is to cut into the testicles: ‘... surgical bilateral resection in bloc of the proximal part of vas deferens, testicle and epididymis.’ After the testicular tissue is extracted, spermatid fluid can be obtained ‘by milking the epididymis and vas deferens ...’.⁹ Other cases involve the entire excision of the testicles: castration. Both the electroejaculation technique and the surgical excision of part of, or all of the testicles, raise important questions. Clearly, harvesting sperm from dead or dying men is not simple, and if it is to be done at all, it will require significant intervention.

Some would argue that the dead cannot be harmed, either through interventions on the body, or through failure to respect wishes they had expressed prior to death.^{10,11} For the purposes of this paper, I do not attempt to claim that the dead *can* be harmed. However, it is important to note that in many other instances, both morally, culturally and legally, there are strict prohibitions on what can and cannot be done to people’s bodies after death. Those who deny the possibility of posthumous harm may face difficulty in explaining why consent for organ retrieval is important, why people’s wills should be respected, or why we should not eat, mutilate, exhibit, or have sex with corpses. Thus, there would be far reaching consequences if we simply accepted that once a person is dead, his or her body and known intentions

9 Lorenzini F, Zanchet E, Paul GM, Beck RT, Lorenzini MS, Böhme E. Spermatozoa retrieval for cryopreservation after death. *International braz j urol.* 2018 Feb; 44(1):188-91.

10 Callahan JC. On harming the dead. *Ethics* 1987; 97.2: 341-352.

11 Harris J. Organ procurement: dead interests, living needs. *J Med Ethics* 2003; 29.3:130-134.

become morally irrelevant.¹² A final point to make here is that some of the cases that have been reported involve the extraction of sperm during the perimortem period. This includes not just the time after which the man is declared clinically dead, but the period during which he is dying.

If we accept the idea that there are at least some moral constraints on the ways in which we treat the dead, and on the ways in which we respect or disregard their wishes, the concept of consent becomes important. In the following sections I will discuss consent with regard to bodily integrity, and with reference to reproductive autonomy.

CONSENT AND BODILY INTEGRITY

I have noted that sperm cannot currently be obtained from a dead or dying body without significant medical intervention. But what if the comatose body *were* capable of producing sperm in the ‘usual’ way? In this case, things would be simpler: a wife could simply engage in sex with their dead or dying partner, avoiding the need for complex medical procedures. However, there is an obvious problem here. That is: sex without consent is *rape*. The picture becomes clearer if we envisage the situation with the sexes reversed. What if a husband wanted to impregnate his brain dead wife through intercourse? It is feasible that women in this state could be impregnated, and pregnancies have been sustained to term in brain dead women.¹³ It seems very clear in this example that the process involved would quite simply be rape.

Was Mr Blood raped? He was anally penetrated without his consent, while unconscious, with the aim of gaining access to his reproductive materials. In recent years there has been a spate of cases in which women (and occasionally men) have been raped while unconscious, or while lacking the capacity to consent.^{14, 15} The point here is that the victim of such assaults does not have to

12 Orr RD, Siegler M. Is posthumous semen retrieval ethically permissible? *J Med Ethics* 2002; 28.5: 299-302.

13 Armstrong S, Fernando R. Brain death and somatic support. In van de Velde M, Scholefield H, Plante L eds. *Maternal Critical Care: a Multidisciplinary Approach*. Cambridge: Cambridge University Press. 2013, pp. 174-178.

14 Roberts R. Brock Turner: Former Stanford swimmer appeals sexual assault conviction. *Independent*. December 2019. Available at <https://www.independent.co.uk/news/world/americas/brock-turner-swimmer-olympic-hopeful-sexual-assault-stanford-university-woman-unconscious-a8090006.html> (last accessed 1st November 2018)

15 Heyes CJ. Dead to the world: Rape, unconsciousness, and social media. *Signs: Journal of Women in Culture and Society*. 2016 Jan 1; 41(2):361-83.

be conscious in order for us to conclude that s/he has been raped. Of course, there is an important difference in terms of the motivation behind the acts in the two cases. The intervention performed on Mr Blood was not reproductively rather than sexually motivated per se. Nevertheless, I suggest that there is enough in common between these two examples to cause serious concern.

One of the reasons that rape – that is non-consensual sex – is regarded as being unethical is that it causes harm to the person who is raped. The harm involved may be complex. Rape sometimes causes physical damage, but not invariably. Yet even in cases where there is no physical damage, we regard it as a crime, precisely because it violates the victim's bodily integrity. But perhaps in such cases, we regard it primarily as a crime because of the emotional and psychological harm it causes, rather than because of the violation of bodily integrity per se. How, if at all, do such concerns apply in the case of Mr Blood? Any surgical intervention is likely to cause some physical harm; however, usually the justification for medical intervention is that the prospective benefits of surgery outweigh the harm. Yet in Mr Blood's case, the intervention was not carried out in order to secure any medical benefit for him. This is not simply because he was dying, but because the procedure carried no therapeutic value at all, but only risks such as pain, high blood pressure, rectal rupture, and a number of other complications.¹⁶ Since Mr Blood was dying, he was not likely to *suffer* – at least, not consciously – the physical harm that might have ensued. Perhaps rupturing the anus of a dying man in an attempt to harvest his sperm should not be seen as harm per se, especially if it is not *experienced* by him.

Mr Blood also could not be expected to suffer the kind of emotional and psychological harm that can be caused by the procedures undertaken on him. These might include trauma, flashbacks, humiliation and shame. Because of all this, it could be argued that whatever moral wrongs are involved in rape or assault do not apply in this kind of case. However, again, it is worth considering how we might regard such interventions in the case of women who are comatose or dying. There are several documented cases of women who have been raped while in a persistent vegetative state.^{17,18} These women were not expected to recover. Like Mr Blood, they would not *suffer* directly from

16 https://www.baus.org.uk/_userfiles/pages/files/Patients/Leaflets/Electroejaculation.pdf

17 Ber R. Ethical Issues in gestational Surrogacy. *Theor Med Bioeth* 2000; 21:153–169.

18 Bruni F. Woman, 29, Still in 10-Year Coma, Is Pregnant by a Rapist. *The New York Times*. January 1996. Available at <https://www.nytimes.com/1996/01/25/nyregion/woman-29-still-in-10-year-coma-is-pregnant-by-a-rapist.html> (last accessed 1st November 2018)

any physical harm, or from emotional trauma. Nevertheless, I think it self-evident that cases of rape in this context are morally wrong. The moral wrongness lies in the fact that the person's bodily integrity has been violated. Here, the question of consent is crucial. There is a vital distinction between consensual sex and rape, and between surgical interventions and assault. That distinction rests on consent. When consent is absent, any physical intervention risks violating the bodily integrity of the person in question.

Yet we do accept that in some circumstances, it is acceptable to carry out medical procedures in cases where the person is unable to consent. Examples of this might be where a person's life or health is at serious risk, and the patient is unconscious. We do not wait for the patient to recover consciousness, but operate as necessary. However, the justification for such interventions relies on two circumstances which are not applicable to the case of sperm harvesting. Firstly, the patient must be expected to *benefit* from the proposed intervention. Benefit here is understood in narrow, clinical terms. The intervention should save the patient's life, or cure, or mitigate some direct threat to the patient's health. Secondly, interventions are restricted to those that are urgently required while the patient is unconscious. Thus, if a patient suffers from a ruptured appendix and is unconscious, doctors may be justified in operating to remove the appendix. Should they notice that the patient has uterine fibroids while operating, they are *not* entitled to remove them, since they can wait till the patient recovers from the specific medical emergency, and defer the less urgent procedure until later, when they can gain consent.

To date, the discussions about perimortem sperm harvesting have been somewhat compromised by the fact that the infringement of bodily integrity without consent has been conflated with the question of the dead or dying man's reproductive autonomy. I suggest here that there is at least good reason for jurisdictions to ban sperm retrieval without consent, as it is currently practised. But if we are able to separate the two questions of bodily integrity and reproductive autonomy, would it still be wrong to harvest a dead or dying man's sperm after he is no longer able to consent to this?

HOW DO ARTIFICIAL GAMETES AFFECT THE ISSUE OF BODILY INTEGRITY?

Currently, egg and sperm cells can only be obtained from people's reproductive tissues. It is this that makes invasive procedures a necessity. However, artificial gametes could in theory be derived from other cells. I consider here the possibility that skin cells could be used to generate gametes.

One of the first things to note is that to obtain any cell from a human body might be thought to necessitate intervention on that body. However, this is not necessarily the case. Skin cells are discarded continuously from our bodies. It might be possible to obtain cells from, for example, a patient's toothbrush, or even from the sheets on his bed, or by means of obtaining a swab from his mouth or skin. Some of these possibilities do not involve touching the patient's body at all. However, I focus here on the idea that in order to collect good quality cells, some intervention is likely to be required. For example, a skin swab.

Does the procedure of obtaining skin cells without consent violate bodily integrity in the same way as current methods of sperm harvesting do? Some might take a hard line here, and simply say that any touching without consent is morally unacceptable. However, this would rule out a swathe of other activities that are carried out on people who are unconscious, dead or dying, including the cleaning, dressing and removal of the body itself. Some physical interventions are either trivial, or are justified in accordance with the motivation behind them. Cleaning and preparation for funeral processes and burial or cremation might be thought to be justifiable. Taking a skin swab might be argued to be trivial. While I do not go so far as to make this claim, I suggest that the moral wrongness of non-consensual touching can be viewed on a spectrum. At the extreme end are invasive surgical procedures, rape and physical assault. At the lesser end are those activities I have outlined, including such minimally invasive procedures such as obtaining a skin swab.

To conclude here: the development of artificial gametes may bring about an era in which it is possible to obtain sperm from dead or dying men, through minimally invasive physical intervention. While one might still regard this intervention as being a violation of bodily integrity, it does not raise such immediate and serious moral concerns as the techniques currently in operation. I therefore move on to consider – apart from the physical intervention – what ethical considerations should inform our judgement as to whether the creation of gametes from dead or dying men without their consent is permissible.

REPRODUCTIVE AUTONOMY AND POSTHUMOUS PARENTHOOD

Reproductive autonomy is commonly regarded as a matter of profound significance in people's lives. The nature and scope of reproductive autonomy

has been debated at length^{19,20,21} but it is generally understood to entail that people should not be forced to become parents without their consent. Some also understand it to encompass access to abortion and fertility services. For the purposes of my discussion, the issue of forced parenthood is clearly the primary concern. Here, it seems that there is a problem, however. This is largely because, although consent to become a parent is regarded as being theoretically important, in practice, men's wishes in this regard are frequently overridden. A man's reproductive autonomy – his wish *not* to become a parent – may conflict with a woman's. That is, if she is pregnant, the man's interest in not becoming a father is not deemed sufficiently weighty to justify forcing her to have abortion. Conversely, a man whose partner is pregnant, and wishes to abort, has no power to prevent her from doing so (this of course refers to jurisdictions where abortion is legal). Thus, if reproductive autonomy entails that people should not become parents against their will, it is routinely breached in the case of men. In fact, reproductive autonomy in men looks so meagre in comparison with reproductive autonomy in women, that it might be questioned whether we can really be talking about the same thing in both cases.

Here, of course, the issue of bodily integrity re-emerges. On a relatively narrow view of reproductive autonomy, what we respect when we allow women to continue a pregnancy, in contravention of the father's wishes, is simply their right not to be forcibly subjected to abortion. That is, it is bodily integrity that is being respected rather than reproductive autonomy *per se*. Likewise, when a woman is permitted to abort a foetus against the father's wishes, this might be construed not so much as reproductive autonomy, but as a narrower right to abortion. The woman has no obligation to allow her body to be used, or inhabited, by a foetus, without her consent. Both of these have implications for men. Men as well as women have rights to bodily integrity, and this entails that they should not be subjected to invasive procedures on behalf of third parties. Thus, someone who is pregnant cannot be forced to have an abortion. Likewise, a man who, for example, has a life threatening condition, cannot be forced to undergo treatment simply because his wife wishes it. In the abortion case, it is harder to find parallels between the sexes. Still, we could put a theoretical claim thus: no person has the obligation to carry an unwanted

19 Robertson, J. A. (1994). *Children of choice*. Princeton: Princeton University Press.

20 Dworkin, Ronald, 1993, *Life's Dominion*, New York: Knopf.

21 Harris, John, 1998, "Rights and Reproductive Choice," in Harris and Holm 1998, pp. 5–37.

pregnancy to term. In today's world, this applies only to women. But in the future we may see cases in which it could apply to men too.

The development of artificial gametes may allow for a scenario in which sperm could be created through minimally invasive intervention on the dying man's body. But the problem of reproductive autonomy remains. Is there anything relevant to reproductive autonomy *apart* from the interest that people have in maintaining their bodily integrity? Given what I have suggested above, I would argue that there are good grounds to dispute the necessity of reproductive autonomy as a separate moral category over and above bodily integrity. Since, as noted, men's reproductive autonomy is already minimal, it seems strange to ascribe to dead or dying men a degree of importance over the prospect of reproduction, that they would not be entitled to, were they still alive.

It is worth considering here a case that raises the question of reproductive autonomy, *without* relying on artificial gametes, and in a situation where there is no contact with the body at all. That is, where men have consented to create embryos with their female partners, and these embryos are already in storage. There have been a number of such disputes over recent decades.^{22,23} In most cases, where the man withdrew his consent, the embryos were destroyed. It is necessary to point out here that although there are some parallels with posthumous parenthood following gamete harvesting, it is not a perfectly matching situation, since the men in question clearly retain their capacity and exercise it in ways that follow their own wishes. Nevertheless, the fact that such wishes are given weight, is significant, and may encourage us to feel that similar considerations should affect our judgements in perimortem sperm harvesting cases.

So, what moral basis is there for destroying embryos in storage on the grounds that the genetic parent does not wish to become a father? We need to push a bit further to see how, if at all, reproductive autonomy applies to such cases. One widely reported case involved a woman, Natallie Evans, who had created embryos together with her partner, prior to receiving treatment for cancer, which left her infertile.²⁴ The couple subsequently split up, and the

22 Allin MJ. Joint reproductive autonomy: does *Evans v Amicus Healthcare Ltd* provide for a gender-neutral approach to assisted reproductive rights?. *Medico-Legal Journal*. 2015 Jun;83(2):98-103.

23 Schlesinger T. What Do We Do with These Embryos-Disposition of Frozen Embryos upon Separation or Divorce. . *Louis BJ*. 2016; 63:30.

24 Smajdor A. Deciding the fate of disputed embryos: ethical issues in the case of Natallie Evans. *Journal of experimental & clinical assisted reproduction*. 2007 Dec; 4(1):2.

man revoked his consent for the ongoing storage of the embryos, and for any reproductive use of them. After a lengthy dispute, the embryos were eventually destroyed. Here, both parties might have claimed that considerations of reproductive autonomy should have favoured their claims. For the woman, this was her last chance to have offspring that would be produced with her own gametes. Reproductive autonomy in her case might be thought to imply that she had a right to become a parent. However, her reproductive autonomy was thwarted, while the man's interest in *not* becoming a parent was respected. In neither case did bodily integrity play a role. Clearly, in this case, there was no solution that could have respected the reproductive autonomy of both parties. Should non-reproduction be the default option where there is dispute as to whose interests should prevail? It is not clear why this should be the case. And certainly, if it *were* the case that the non-reproductive path is always better in situations of uncertainty, this would seem to undermine the prospect of perimortem gamete harvesting altogether.

The man who successfully fought for the destruction of his embryos may have been motivated by several factors. But before exploring these, it is worth making the point here that couples' reproductive wishes do not always, or even usually, coincide. Being in a relationship, storing gametes, even embarking on the first steps towards IVF are not sufficient to indicate an ongoing willingness to become a parent, as this case clearly shows.

The reasons for wishing to avoid parenthood may include a reluctance to procreate with a person with whom one does not want to share such a significant responsibility. Fathers may also find themselves financially and legally liable for the upkeep of offspring. Currently, there is a presumption in the law that men must provide for offspring whom they have conceived, regardless of whether their consent was obtained. Men do not have the right to withdraw from this responsibility. The exception to this is in cases of sperm donation, provided that it is undertaken within the regulatory framework. Ad hoc arrangements are risky for sperm donors for precisely this reason. The law will not necessarily recognise a man's status as a donor rather than as a financially-liable father *unless* he has gone through the required formal channels. Of course, for men who are dead or dying, the problem of being financially responsible for offspring will not affect them directly. Nevertheless, it might have an impact on the ways in which their assets are distributed after their death.

The wish not to become a father may go beyond mere concern about adverse financial impacts. Natallie Evans' ex-partner, in explaining his insistence that their embryos be destroyed, emphasised that he did not want to

live with the knowledge that somewhere out there, he would have genetic offspring – even if it were possible for him to have no financial, legal or other obligations associated with them. This is a highly significant argument, with far-reaching implications. Here, the prospect of artificial gametes acquires a still greater importance. This is because, in a world where gametes could be created from skin cells, our control over our genetic legacy is vastly limited. Anyone could in theory obtain gametes from any other person. Any right that we have not to live in a world that contains our genetic offspring, would be very difficult to police. Some might view this as a sufficient reason to call a halt to the development of artificial gametes. Certainly, if we agree that genetic control is important, it seems that the advent of artificial gametes would have to be hedged about with swathes of legislative and regulatory restrictions to avoid illicit gamete creation.

But again, when we probe a little further into the question of genes and rights in this context, it seems less clear that we can or should regard ourselves as having rights over the uses of our genes to create offspring. If it is true that we should (all other things being equal) respect people's interest in not allowing children to come into existence who are genetically related to them, it seems that we should be concerned not just about fathers and mothers, but also about grandparents, siblings, aunts, uncles, and perhaps many more. People become siblings, aunts, grandparents, etc, without their consent all the time. In some cases, this will have no ramifications for them financially or in other practical ways. But in many instances, people who give no consent may find themselves in a position where they are expected to function as caregivers, or where they have to share their resources and living spaces. Despite these very real impacts, we tend never even to consider the idea that these people might have interests in exercising choice over whether children who are genetically related to them should come into the world.

We might attempt to explain this by saying that it is only *parents* who have a genuine interest in preventing the existence of genetically-related offspring. Yet it is not clear that there is any principled basis on which such an exception could be made. Of course parents are usually expected to raise 'their' genetic children. But this is not invariably the case. And if it were a case of having the right to forestall the creation of people for whom one would acquire caring duties, as observed above, we should for consistency extend that right to all those affected, not just to parents. In the case of Natallie Evans' partner, his objection was not grounded primarily in concerns over financial, care-giving or legal obligations, but on the *psychological distress* he would suffer in knowing that children were born who were genetically related to him. Given

this, it seems that such psychological distress ought at least to be of some concern as it relates to others who would share genes with offspring.

An alternative way to preserve the parental exception argument could be to claim that it is reasonable to favour parents' claims over those of others, simply because parents share *more* genes with offspring than, for example, siblings, grandparents or aunts and uncles do. And that it is this that gives rise to their correspondingly greater interest in determining whether these close genetic relationships should come into existence. However, again, this seems unconvincing. As noted above, we routinely override fathers' interests in this respect. If the right not to have unwanted close genetic relatives in the world is really such a powerful moral consideration, it simply seems bizarre that we are so ready to disregard it in such cases. A further problem here is that – if it is the closeness of genetic relationships that grounds parental exceptionalism in such cases – it seems that twin siblings should have the right to consent or refuse to their twin's reproductive plans. Identical twins share the same genes; thus, when one twin reproduces, the other twin is, from a purely genetic perspective, equally the parent to the resulting offspring.

Finally, if people have an interest in preventing the existence of others who will be genetically related to them, it is questionable what happens to this interest *after* the birth of such people. It seems that we *must* conclude that if a child exists who is my (unwanted) genetic offspring, in some sense, that child's existence is *per se* a wrong to me. Thus, all other things being equal, I have a justification for wishing that that child should cease to exist. While we might agree that other moral considerations outweigh my interest in bringing this about, there is still the *prima facie* fact that I have such an interest. This in turn would suggest that genetic parents have, or should have, special rights over cases where, for example, there is a dispute about whether life-saving treatment should be undertaken. And this would be the case independently of any caring role they might have, since the basis for this interest is genetic relationships, rather than social parental roles *per se*. Where there is a position of equipoise as to whether it would be right to prolong a child's life, genetic parents' interests might then be taken to have an important role, perhaps over and above that of the child's social carers. I acknowledge that such situations might very rarely arise. But it seems that we would have to acknowledge the theoretical possibility that the wrongs suffered by genetic parents of unwanted children could play a part in these cases.

In view of all these issues, the supposed right (or interest) in preventing the creation of people who share some of our genes appears highly questionable. We cannot well explain why only some genetic links generate this right, nor

what happens to it after the birth of children. While adults may have good grounds to resent the fact that they become parents against their wishes, I suggest that these grounds are more plausibly understood to relate to the financial and legal burdens that may ensue. Alternatively, if the birth of the child follows some other moral wrong – such as deception, or coerced physical intervention, parents may justifiably resent that. I conclude therefore that reproductive autonomy does not ground a right not to become a genetic parent, either in the case of living people, or in those who are dead or dying. Does this mean that we can use artificial gametes with impunity where men are dead or dying? In the next section I will argue that there are good moral reasons to answer this question in the negative.

MOTIVATION – USING OTHERS AS A MERE MEANS

In my discussion of bodily integrity and posthumous harm, I noted that one may distinguish between rape and other non-consensual penetrative acts on the basis of what motivates them. Clearly, the aim of gaining sexual pleasure from an act involving a dead or dying body, in the absence of consent, is reprehensible. Whereas, for example, a similar, or even identical act might seem justifiable if its main purpose is to benefit the person whose body is being penetrated. This shows that intention, or motivation is important in ascertaining the morality of bodily interventions. Likewise, I argued that any non-consensual touching may be placed on a scale of purely physical severity. Anal penetration, or castration, would appear towards the more significant end of this spectrum, while taking a skin swab, for example, would appear on the less significant end. Acts that are both highly invasive and unethically motivated are, on this analysis, morally worse than those that are either ethically motivated or physically insignificant, or both.

I have established that taking a skin swab is a procedure that belongs to the less invasive end of the spectrum. Therefore, on a *prima facie* basis, we can say it would be less bad than obtaining sperm through either of the means currently in use, as described above, assuming that the motivation in both cases is the same. For the purposes of this argument, I accept this assumption (though there might be grounds to suggest that an easier route towards gamete harvesting might open the way for a wider variety of motivations behind the act). So – in both cases we have interventions performed on a body without the person's consent, motivated by the same ends. Is this motivation in itself something we should be morally concerned about? My answer to this is: yes.

Some motivations (such as gaining sexual pleasure) are not only insufficient to justify non-consensual physical intervention, but are ethically wrong. Others (saving a person's life) are not wrong, and may indeed be morally commendable. Again, it seems that these could be viewed as having a place on a spectrum. In this case, the spectrum provides a mechanism for us to separate and rank motivations in comparison with each other.

Is the motivation behind perimortem gamete creation more akin to rape, or to life-saving medical intervention? Here, I will argue, possibly controversially, that in terms of intention, the aims of perimortem gamete harvesting show some of the same features as those behind rape, whereas parallels between perimortem sperm harvesting and life-saving medical intervention are harder to argue for.

One of the reasons we accord bodily integrity such importance in moral deliberations is that, as well as being thinking beings, we are bodies. Bodies are things that can be used and abused in a variety of ways. Such abuses may not only be bad for us *qua* bodies, but may permeate our moral nature, so that abuser and victim are both damaged, not just physically but *morally*. This concept of *use* is central here. The most obvious theoretical basis on which to argue for the wrongness of using one another's bodies comes from Kant, who famously stated "Always act in such a way that you treat humanity, whether in your own person or in the person of any other, never merely as a means to an end, but always at the same time as an end."²⁵ This statement is known as the Formula of Humanity (FOH). While the scope of Kant's injunction has been widely deliberated, it seems clearly to place limits on the ways we act upon the *bodies* of others. Thus it is usually understood to forbid prostitution, slavery, the commodification of bodies and body parts, as well as coercion more generally.

One of the key areas of dispute among those who engage with Kant's philosophy is the distinction between treating someone *partially* as a means and *merely* as a means. Kant does not rule out the former, but only the latter. Therefore, to establish what differentiates the two is extremely important. Consent plays a significant role here, in ways that we can see if we revert to the rape analogy. People who have consensual sex with each do so at least in part because of the pleasure it will bring them. They are also likely to hope to give pleasure to their partner. At the very least, the fact that the two participants have consented helps us to conclude that sex is not *necessarily* the use of

25 Kant, I. (1948) Groundwork of the metaphysics of morals. (First published 1785.) In: Paton H (ed). The moral law. London: Hutchinson, p. 91.

another as a mere means.²⁶ So a key issue here is consent. As soon as we intervene on people's bodies without their consent, the likelihood that we use them as a mere means increases drastically. (Here I would suggest that consent is neither a necessary nor sufficient condition to demonstrate that someone is *not* being used as a mere means, but that its absence is at least, always a good reason to think carefully about whether they are.)

In the case of gamete harvesting without consent, it is clear that the intervention is undertaken to further the ends of some third party. The eager spouse's request, the tearful protestations of the parents of the dead man, are an essential component of the process by which we move from treating the man as an end in his own right, to that where he becomes a means to someone else's ends. In the case of gamete harvesting, the fact that the man's body is being treated as a means is further emphasised by the fact that it is *tissue* from the body that is extracted or removed, and that tissue is used to bring about the fruition of the requesting parties' reproductive aspirations. Now, of course it is usually argued in such cases that the man would have wished this. That is, that it is *not* using him as a mere means, because the man himself would have *shared* these reproductive aspirations. However, here again the lack of consent means that we cannot ascertain these facts. In the absence of consent, the only *known* factor is the reproductive aspirations of the spouse or parents. This, then, is the motivating factor. To my knowledge *no* cases of gamete harvesting have been undertaken by people who simply wished to fulfil the dead man's wish to become a father. Rather, the spouse wishes to become a mother; the parents wish to become grandparents. These are the known facts of such cases, and they are a poor basis on which to feel certain that the man's body is not being used as a means of achieving the ends of others.

However, a further problem arises when attempting to apply Kant's reasoning to the question of dead or dying men's bodies. That is, for Kant, it is precisely the ability to function as a moral agent that generates the importance of the Formula of Humanity. For this reason, scholars have debated as to whether, or how far, this injunction should be taken to apply to those who lack cognitive capacity. It is not clear whether the injunction should apply to those who are, in fact, dead. Here, I acknowledge the fact that Kant's own works do not provide an authoritative answer. But another way of interpreting the central moral point of the FOH may offer a way forward.

²⁶ I acknowledge here that Kant himself had very different views on sex, specifically, from those I am suggesting here...

The moral wrongness of treating others as a mere means to one's ends also features in the work of philosophers on 'reification'. Axel Honneth, for example, discusses the ways in which human beings tend to turn a reifying gaze on other beings. Such a gaze is morally problematic, since it encourages us to value others in terms of their potential to benefit us.²⁷ Honneth contrasts reification with recognition, which involves responding to others in ways that implicitly acknowledge and affirm that they are *not* mere things. Reification, I would suggest, is precisely what happens in perimortem gamete harvesting. The dying man's body becomes a vehicle through which benefits can be secured for others. He becomes a potential source of raw materials. He can be opened, operated upon, and in a sense, redistributed. Valued not for what he *is* but for what he can be used to produce.

Where Honneth's approach differs from Kant's is in the fact that Honneth does not place such emphasis on the nature of the entity that is reified. Rather he focuses on the moral agents who choose to adopt the reifying gaze, which he regards as being morally dubious *whatever* degree of capacity or incapacity the reified entity may have. Taking this a step further, the wrongness of reification does not stem from any specific attribute, or property of the object that is reified. Honneth's conception of reification could thus be applied to animals as well as to humans, and even to plants and objects. On this view, then, it is morally problematic to treat *anything* as a mere means to our own ends. This might at first seem unacceptably sweeping, but I suggest there are reasons to think it is more plausible than it initially appears, particularly in the context that I am discussing.

If we concede that there is no hard distinction between the mind and the body (that is, we reject dualism), we must accept the idea that we *are* our bodies. This remains the case while we are dying and after we are dead. I do not cease being *me* when I die. It is simply that I am dead. I am still present for as long as my body continues to exist. My interests may be vastly different, or even non-existent, but I am still *me*. Many people assume that the 'I' somehow vanishes with death. But as I suggest, this is simply incompatible with a physicalist view of personal identity. To suppose that after my death 'I' have vanished, though my body remains, harks back to a Cartesian notion of separate bodies and souls. Some mystical, ethereal thing inhabits the body as a mere vehicle. It then leaves that vehicle as empty flesh upon death. While of course some people *do* regard the mind/body relationship as being precisely

27 Honneth A. Reification: A recognition-theoretical view. Tanner Lectures on Human Values. 2006; 26:89.

this, I suggest that many people who regard dead bodies as mere things are thoughtlessly straying into Cartesian territory that they would repudiate in any other context.

To look at this in a slightly different way, when we love someone, we rarely love them as a purely conceptual being. We love their bodies. We care when their bodies are damaged, mutilated or disfigured. We care about these things even if the loved one's direct interests are not affected. (For example, in the case of brain dead women who have been raped, their loved ones, and others, will suffer not because of the trauma the women experience – they do not experience it – but because the loved one's body has been treated as a mere means). To treat another person's body, then, as a means by which to further one's own ends, is morally problematic because it *reifies* that person. And the wrongness of this reification does not evaporate when the person in question is dead.

Some might view my arguments as being unacceptably restrictive. There are two key objections here. Firstly, if reification is always morally wrong, it seems that we cannot treat anything as a mere thing – even objects. This appears patently ludicrous. Secondly, if a dead body is still the same person as it was when alive, and if it is wrong to reify it, this may suggest that many of the other things that we habitually do to dead bodies, such as organ retrieval, are morally wrong. I will address these objections in turn.

Reification as a moral concept has a very broad scope, especially in the way I have interpreted and applied it here. While Kant's FOH is conveniently narrow, Honneth's view of reification is all-encompassing. However, there is a difference between the two approaches that may help to resolve the apparent over-demandingness of my position. That is, Kant stipulates that we may *never* treat humanity as a mere means; in his deontological moral framework, it is forbidden. Reification, on the other hand, might be better conceptualised within a virtue-based system. (Here, I diverge from Honneth's account; he does not specifically discuss reification as a vice, nor its counterpart – recognition – as a virtue.) Thus, on my interpretation, reification is a disposition that human beings commonly exemplify. It is not invariably wrong to reify (just as it is not invariably wrong to be angry, afraid, or impatient). But it will almost always be something that should generate moral *concern*. And to the degree that we can cultivate virtue-based dispositions, it will make sense to cultivate recognition rather than reification. Just as it makes sense to cultivate geniality and courage, even though we know there may sometimes be occasions when the virtuous individual will *not* exemplify these qualities. Another point to be made here, more directly in connection with Honneth's work, is that

reification is a 'social pathology'. As we habituate ourselves to the appraisal of others as potential means of benefit to ourselves, we entrench ourselves further in a warped worldview. Looking at Honneth's ideas in this way, it does not seem entirely unreasonable that the habit of appraising mere *things* in this way should be recognised as a symptom of that social pathology, and thus something to be avoided.

The second objection is that, if my argument holds, it would suggest that many activities we currently undertake with dead bodies are unethical. Most obviously, it seems that my position cannot accommodate perimortem organ donation, exhibitions of plastinated corpses, or the donation of bodies to medical science. In all of these cases, it seems that there is an inescapable component of reification. The body is used by others in order to yield medical or scientific benefits. I would suggest that we do, and should, feel uneasy about many of these practices. However, the unease can be mitigated if we know that the person's consent was gained in advance. In all the instances given above, consent is usually regarded as being important if not imperative. Again, then, this seems to lead to the conclusion that where we have no consent, interventions undertaken on people's bodies, for the benefit of others, are very likely to involve reification. Artificial gamete harvesting, on this view, is of moral concern, even if minimally invasive, not because the dead person's right not to become a genetic parent is being violated, but because his body is being treated as a repository of things that have value to others in furthering their own reproductive aspirations.

CONCLUSION

I have argued that perimortem gamete harvesting without consent, as currently practised, is morally wrong because it involves significant physical intervention on the dead or dying man's body which, without consent, would in other circumstances be tantamount to rape or assault. However, with the possible development of artificial gametes, the invasiveness of the procedure would be so minimal as to appear almost trivial. In such circumstances, the issue of reproductive autonomy might still offer a reason for thinking we should refrain from gamete creation where no consent has been obtained. However, I have argued that reproductive autonomy is better understood as falling within the scope of concern for bodily integrity. The assumption that individuals have a right or even an interest, in preventing the creation of other people who will share their genes, is flawed. Nevertheless, the motivation behind perimortem gamete creation, whether it involves artificial gametes or

not, reveals a tendency to reify the body from which the cells or tissues are obtained. This, I suggest, means that to obtain gametes from men who are unable to consent is, and should remain, a matter of moral concern.

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