



Creating life after death: should posthumous reproduction be legally permissible without the deceased's prior consent?

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ABSTRACT

Scientific advances enable to retrieve and use gametes of a deceased person, thereby creating a child after the death of a genetic parent. This article reviews and compares legislation governing posthumous reproduction in the United States, the United Kingdom, Australia, and Israel. It shows that each country has its own distinctive features, yet three common elements exist—legal ambiguity, a requirement for prior consent, and permission for the partner, but not the parents, to retrieve and use the deceased's gametes. The article demonstrates that courts often do not follow the legal requirements, and thus there are no clear guiding principles regarding posthumous reproduction. The article then discusses three justifications for permitting posthumous reproduction in the absence of the deceased's prior consent. The first justification relates to an interest in 'genetic continuity', which reflects people's desire in leaving a 'piece' of themselves in the world and maintaining a chain of continuity. The second justification concerns the 'respect-for-wishes' model of autonomy, according to which people must be treated in a way that we assume they would want to be treated. The third justification touches upon the interests of the deceased's partner and parents, as well as of the resulting child.

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INTRODUCTION

Posthumous reproduction raises a wide range of legal and ethical issues that are among the 'most challenging, difficult and sensitive that are likely to be encountered in the field of medicine, let alone reproductive medicine'.¹ These issues include, *inter alia*, the ownership of gametes, the inheritance rights and benefits of posthumously conceived children, and the social construction of families. This article focuses on a simple but important question: Should posthumous reproduction, in the absence of the deceased's prior consent, be legally permitted? This question has become crucial, due to the increasing number of requests on the part of partners² and parents seeking to retrieve and use the deceased's gametes for reproduction.³

The article proceeds as follows: part I explores the 'practice' of posthumous reproduction in four countries: the United States, the United Kingdom, Australia, and Israel. These countries were chosen mainly because they have a relatively high number of cases of posthumous reproduction. In addition, broadly speaking, the four countries belong to the Judeo-Christian ethical tradition⁴; thus, there is a proper ground of comparison between them. This part examines both law and case law governing the practice of posthumous reproduction and discusses three common elements among the designated countries—legal ambiguity, a requirement for prior consent, and permission solely for the partner to retrieve and use the deceased's gametes.

Part II calls for permissive rules to govern posthumous reproduction and offers three justifications for permitting it in the absence of the deceased's consent. The first justification relates to an *interest in 'genetic continuity'*, which reflects people's desire in leaving a 'piece' of themselves in the world and maintaining a chain of continuity. The second justification concerns the '*respect-for-wishes*' model of autonomy, according to which people must be treated in a way that we assume they would want to be treated. One of the greatest preoccupations regarding death relates to minimization of the hardships experienced by loved ones.⁵ Hence, if asked whether partners or parents should have the opportunity to have a child or grandchild with their gametes, should that person(s) desire it, individuals tend to respond positively. The third justification touches upon the *interests of the deceased's partner and parents, as well as of the resulting child*. The article argues that when a relationship generated strong expectations of procreation, partners may rely on such expectations, and therefore should be entitled to use the deceased's gametes. It further claims that the interest of the deceased's parents in grandparenthood should be legally recognized. Last, the article stresses that as

¹ Gulam Bahadur, *Death and Conception*, 17 HUM. REPROD. 2769, 2769 (2002). See also Gulam Bahadur, *Ethical Challenges in Reproductive Medicine: Posthumous Reproduction*, 1266 INT. CONGR. SER. 295 (2004).

² In the article, the term 'partner' is used as an umbrella category for a married and unmarried spouse.

³ Joshua M. Hurwitz et al., *Posthumous Sperm Procurement: An Update*, 78 FERTIL. STERIL. S242 (2002); RAY D. MADOFF, IMMORTALITY AND THE LAW: THE RISING POWER OF THE AMERICAN DEAD 44–6 (2010).

⁴ Robert M. Veatch & Carol G. Mason, *Hippocratic vs. Judeo-Christian Medical Ethics: Principles in Conflict*, 15 J. RELIG. ETHICS 86 (1987).

⁵ Rebecca Collins, *Posthumous Reproduction and the Presumption Against Consent in Cases of Death Caused by Sudden Trauma*, 30 J. MED. PHILOS. 431, 435 (2005).

long as the resulting child has a life worth living, coming into existence per se does no harm to him or her.

I. THE PRACTICE OF POSTHUMOUS REPRODUCTION

Regulatory frameworks governing posthumous reproduction vary across countries. On the one hand, some countries, such as Germany and France, ban posthumous reproduction.⁶ On the other hand, certain countries either allow it with some limitations or do not regulate it at all. This part traces the regulatory frameworks of four such countries: the United States, the United Kingdom, Australia, and Israel. Although each country has its own regulatory framework and distinguishing features (eg cultural history and political values), three recurrent elements could be identified. The first element is *legal ambiguity*, namely there are no clear legal principles governing posthumous reproduction. The second element is a *requirement for prior consent* on the part of the deceased. Finally, the third element indicates that *permission to retrieve and use the deceased's gametes is granted only to that person's partner*. Given the limited space available, the analysis below includes examples of some of the four countries.

A. Legal ambiguity

The practice of posthumous reproduction is characterized by legal ambiguity. First, none of the designated countries has laws that directly address *both* the retrieval and the use of the deceased's gametes. Second, even if countries do have guidelines on posthumous reproduction, those are not legally binding, and therefore are occasionally not enforced. Third, judges tend to distinguish between gamete *retrieval* and gamete *use*. The reason for this division pertains to the urgency of the retrieval procedure. The gametes must be retrieved within 36 to 72 hours after death to maximize the likelihood of successful fertilization,⁷ meaning that prolonging the related legal proceedings is not possible in such instances. Therefore, the courts postpone the question of gamete use for a later date. The distinction between retrieval and use often leads to inconsistent and unclear outcomes; in some cases, the court might permit the retrieval but prohibit the use.

For example, in three Australian states—Western Australia, Queensland, and South Australia—posthumous gamete *retrieval* is typically governed by the law on organ donation.⁸ The relevant laws state that the removal of a tissue may be authorized for 'therapeutic purposes or for medical or scientific purposes'.⁹ Courts have interpreted the term 'tissue' to include gametes and have thus concluded that gamete retrieval for

⁶ Kelton Tremellen & Julian Savulescu, *A Discussion Supporting Presumed Consent for Posthumous Sperm Procurement and Conception*, 30 REPROD. BIOMED. ONLINE 6, 7 (2015); Yael Hashiloni-Dolev, *Posthumous Reproduction (PHR) in Israel: Policy Rationales Versus Lay People's Concerns, a Preliminary Study*, 39 CULT. MED. PSYCHIATRY 634, 636 (2015).

⁷ Shai Shefi et al., *Posthumous Sperm Retrieval: Analysis of Time Interval to Harvest Sperm*, 21 HUM. REPROD. 2890, 2892 (2006); Irit Rosenblum, *Being Fruitful and Multiplying: Legal, Philosophical, Religious, and Medical Perspectives on Assisted Reproductive Technologies in Israel and Internationally*, 36 SUFFOLK TRANSNAT'L L. REV. 627, 632 (2013).

⁸ Benjamin Kroon et al., *Post-Mortem Sperm Retrieval in Australasia*, 52 AUST. N.Z. J. OBSTET. GYNAECOL. 487, 488 (2012); Nicola Peart, *Life Beyond Death: Regulating Posthumous Reproduction in New Zealand*, 46 V.U.W. L. REV. 725, 745–49 (2015).

⁹ *Human Tissue and Transplant Act 1982 (WA)* s 22; *Transplantation and Anatomy Act 1979 (Qld)* s 22; *Transplantation and Anatomy Act 1983 (SA)* s 21.

the purposes of reproduction falls into the category of ‘medical purposes’. The laws further state that an officer for the hospital must be satisfied that the deceased would not have objected to the removal.¹⁰

In most cases, courts have based their decisions on the fact that the deceased, while alive, expressed his or her wish to have children. A case that demonstrates the courts’ reasoning is *S v The Minister of Health*.¹¹ S and her husband were married for 4 years when he unexpectedly died. Soon after his death, S submitted an application to the Supreme Court of West Australia for the retrieval and storage of his sperm. The Court accepted S’s application on the basis of the Human Tissue and Transplant Act 1982. The decision was based on several factors: the couple was undergoing in vitro fertilization (IVF) treatment; they had an appointment to retrieve S’s eggs and her husband’s sperm; and S was not aware of any objections that her husband made regarding the retrieval and storage of his sperm. The Court indicated, however, that the decision did not concern the use of the retrieved sperm and that S would have to obtain another order to utilize the sperm. This same approach was adopted in several other cases.¹²

As the decisions of the Australian courts make clear, posthumous gamete retrieval—as compared to posthumous gamete use—is perceived as the less controversial of the two procedures. Since the procedure of the retrieval is urgent, leaving no time to examine the evidence in depth, courts tend to approve requests for retrieval, leaving unresolved the question of whether the gamete use should also be permitted. The judges have upheld the position that if gametes are not retrieved, family members would be unable to seek relief in the future.

While the three Australian states have quite similar policies regarding gamete retrieval, they differ in terms of their regulations on the use of the retrieved gametes. In Western Australia, for example, such usage is prohibited by Direction 8.9, which is not legally binding.¹³ Ironically, courts that permit posthumous gamete retrieval do not refer to this Direction, and thus authorize retrieval with the understanding that the ultimate fertilization of the deceased’s gametes may face legal impediments. In South Australia, posthumous reproduction is formally permitted only in circumstances in which the sperm (the provision does not cover eggs) was retrieved before the person’s death and in which the deceased consented to the posthumous use of his sperm.¹⁴ The law does not include a provision on cases involving a request to use a sperm that was retrieved after a person’s death. In Queensland, no regulations govern the use of retrieved gametes. Thus, courts have often operated in accordance with the Ethical Guidelines on the Use of Assisted Reproductive Technology in Clinical Practice and Research, published by the National Health and Medical Research Council.¹⁵ These guidelines do

¹⁰ *Id.*

¹¹ *S v. Minister for Health (WA)* [2008] WASC 262.

¹² See eg *Re Floyd* [2011] QSC 218; *Re H, AE* [2012] SASC 146; *Ex Parte C v Minister for Health (WA)* [2013] WASC 3; *Re Leith Dorene Patteson* [2016] QSC 104.

¹³ *Western Australia, Gazette*, No. 201, Nov. 30, 2004, 5435.

¹⁴ *Assisted Reproductive Treatment Act 1988 (SA)* s9.

¹⁵ Australian Government, National Health and Medical Research Council, *Ethical Guidelines on the Use of Assisted Reproductive Technology in Clinical Practice and Research* (2017), https://www.nhmrc.gov.au/files_nhmrc/file/guidelines/ethics/16506_nhmrc_-_ethical_guidelines_on_the_use_of_assisted_reproductive_technology-web.pdf (accessed May 24, 2018).

not have legislative force and there are no legal consequences for failing to comply with them. Section 8.22 requires clearly expressed directions on the part of the deceased, indicating his or her consent to posthumous gamete use. If the deceased had not left clearly expressed directions, posthumous use of the gametes may be permitted only if it is the request of the partner and there should be evidence that the deceased would have supported the procedure.

Australia's legal situation is not unique. Likewise, the United States lacks laws that directly address gamete retrieval and use in cases in which the gametes belong to a deceased person. It should be noted that the Uniform Probate Code and the Uniform Parentage Act, for instance, have some relevance to posthumous reproduction as they determine the rights and liabilities associated with this practice. The Uniform Probate Code requires that the deceased's consent to posthumous reproduction must be proved, either in writing or via other clear evidence.¹⁶ In addition, the resulting child is treated as in gestation at the time the parent died if that child (i) was in utero no later than 36 months after the person's death or (ii) was born no later than 45 months after the person's death.¹⁷ The Uniform Parentage Act determines that in the absence of consent, the deceased is not considered as a parent of the resulting child.¹⁸ Such laws may be perceived as an *indirect* effort to regulate posthumous reproduction; however, they are only used in instances where the child has already been born and the issues at stake have primarily revolved around inheritance rights and social security privileges.

In the absence of federal or state laws, decisions regarding posthumous gamete retrieval and use are often made at the discretion of medical professionals and private fertility clinics. To that end, hospitals and clinics have introduced various protocols and guidelines.¹⁹ In some cases, which seem to be quite rare, medical professionals demand a court order.²⁰ Similar to Australia, the Uniform Anatomical Gift Act (UAGA), which governs organ donation, is used by courts in some instances. The Act indicates that the term 'part' includes 'organ, eye, or tissue', and that sperm would be 'part' under the Act because it is a tissue.²¹ One case that was decided on the basis of the UAGA (as adopted by the State of Iowa²²) is *In Re Daniel Thomas Christy*.²³

Daniel Christy suffered severe head trauma in a motorcycle accident. At the time, he was listed as an organ donor. When it was clear that Daniel was near brain death, his fiancée and his parents started to consider the possibility of retrieving his sperm. They asked the hospital to perform the procedure; however, in the absence of a court order,

¹⁶ UNIF. PROBATE CODE § 2–120 (amended 2010), 8 pt. 1 U.L.A. 130 (2013).

¹⁷ *Id.* at 131.

¹⁸ UNIF. PARENTAGE ACT § 707 (amended 2002), 9B U.L.A. 85 (2017).

¹⁹ See eg Sarah M. Bahm, Katrina Karkazis & David Magnus, *A Content Analysis of Posthumous Sperm Procurement Protocols with Considerations for Developing an Institutional Policy*, 100 FERTIL. STERIL. 839 (2013); American Society for Reproductive Medicine, *Posthumous Collection and Use of Reproductive Tissue: A Committee Opinion*, 99 FERTIL. STERIL. 1842 (2013).

²⁰ Susan M. Kerr et al., *Postmortem Sperm Procurement*, 157 J. UROL. 2154, 2154 (1997).

²¹ UNIF. ANATOMICAL GIFT ACT § 2 (amended 2006), 8A U.L.A. 87–8 (2014). In the two previous versions of the UAGA, the definition of the term 'part' did not specifically mention that sperm is perceived as a tissue. The definition was the following: "'Part' means an organ, tissue, eye, bone, artery, blood, fluid, or other portion of a human body." See UNIF. ANATOMICAL GIFT ACT § 1 (Unif. Law Comm'n 1968) and UNIF. ANATOMICAL GIFT ACT § 1 (UNIF. LAW COMM'N 1987).

²² IOWA CODE § 142C.1. et seq. (2018).

²³ *In re Daniel Thomas Christy*, No. EQVO68545 (Johnson Cnty., Sept. 14, 2007).

the hospital refused to do so. Daniel's parents submitted a request for an emergency order. The court accepted that appeal, referring to the UAGA.²⁴ The court held that under the UAGA, the term 'anatomical gift' also includes sperm donation. It argued that such a donation could be granted by either the donor himself or, if he did not refuse to make such a donation, his parents.²⁵

Unfortunately, a few of the cases dealing with gamete retrieval and use have been published. Therefore, it is difficult to understand the reasoning and the legal grounds that courts have used to authorize gamete retrieval and use. Nonetheless, media reports suggest that some courts have adopted a lenient approach. In one case, a woman submitted an application to retrieve her fiancé's sperm. The judge granted her request, ruling that 'there is no basis ... not to let them do this ... this is all that is left for them'.²⁶ In another case, a woman submitted an application to retrieve her husband's sperm after he committed suicide. She explained that it was his intent 'to conceive a child prior to his untimely death ... [He] expressed his desire to have children so that his legacy may continue'.²⁷ The judge granted permission for the requested procedure.²⁸

B. The deceased's prior consent

The second common element among the designated countries is a requirement for prior consent to posthumous gamete retrieval and use on the part of the deceased. The issue of consent lies at the center of the debate on posthumous reproduction. The predominant approach is that retrieving and using the deceased's gametes when there is no consent is morally wrong and represents a breach of the paramount ethical principle of respect for autonomy.²⁹ Without prior consent, it is impossible to know with certainty what the deceased would have wished.³⁰

Victoria and South Australia, for example, do not have any laws related to posthumous gamete retrieval. Similar to the other Australian states, most of the cases are decided on the basis of the law governing organ donation. Namely, a hospital representative is able to authorize the removal of tissue for medical purposes.³¹ However, contrary to the other states, in Victoria and South Australia, the hospital

²⁴ Bethany Spielman, *Pushing the Dead into the Next Reproductive Frontier: Post Mortem Gamete Retrieval Under the Uniform Anatomical Gift Act*, 37 J.L. MED. & ETHICS 331, 332 (2009).

²⁵ *Id.*

²⁶ Dorian Block, *Judge Allows Wife to Harvest Dead Husband's Sperm*, DAILY NEWS (Apr. 18, 2009), <http://www.nydailynews.com/new-york/bronx/judge-wife-harvest-dead-husband-sperm-article-1.361746#ixzz0g0jq4wqR> (accessed May 24, 2018).

²⁷ Jose Martinez, *After Husband Kills Himself, Wife Goes to Court Saying She Wants His Sperm*, DAILY NEWS (Oct. 15, 2010), <http://www.nydailynews.com/new-york/husband-kills-wife-court-sperm-article-1.189691> (accessed May 24, 2018).

²⁸ *Id.*

²⁹ Robert D. Orr & Mark Siegler, *Is Posthumous Semen Retrieval Ethically Permissible?*, 28 J. MED. ETHICS 299 (2002); Frances R. Batzer, Joshua M. Hurwitz & Arthur Caplan, *Postmortem Parenthood and the Need for a Protocol with Posthumous Sperm Procurement*, 79 FERTIL. STERIL. 1263, 1265 (2003); Frederick Kroon, *Presuming Consent in the Ethics of Posthumous Sperm Procurement and Conception*, 1 REPROD. BIOMED. SOC. ONLINE 123 (2015); BROWNE LEWIS, *THE ETHICAL AND LEGAL CONSEQUENCES OF POSTHUMOUS REPRODUCTION: ARROGANCE, AVARICE AND ANGUISH* 18 (2016).

³⁰ Anne Reichman Schiff, *Arising from the Dead: Challenges of Posthumous Procreation*, 75 N.C. L. REV. 901, 943 (1997); Carson Strong, Jeffrey R. Gingrich & William H. Kutteh, *Ethics of Postmortem Sperm Retrieval After Death or Persistent Vegetative State*, 15 HUM. REPROD. 739 (2000).

³¹ *Human Tissue Act 1982 (Vic) s 26; Human Tissue Act 1983 (NSW) s 23.*

representative can permit retrieval only when the deceased consented in writing.³² Similar policy applies to posthumous gamete use. In South Australia, posthumous gamete use is only permitted if the deceased consented in writing.³³ In Victoria, the law permits posthumous gamete use, as long as (i) the deceased provided written consent; (ii) the procedure is carried out by the deceased's partner or, if the deceased is a woman, her male partner uses a surrogacy arrangement; and (iii) the Patient Review Panel has approved it.³⁴

Interestingly, in several cases, the Australian courts have granted permission to retrieve and use the deceased's gametes, despite a lack of prior consent as the laws in both states require. The case of *YZ v Infertility Treatment Authority* is only one example.³⁵ In this case, YZ's husband, XZ, died in a motor vehicle accident in 1998. Immediately after his death, YZ submitted an application to the Supreme Court of Victoria, asking for a court order authorizing the retrieval and storage of XZ's sperm. The Court granted this order. In 1999, YZ wished to use XZ's sperm. She applied for approval to export XZ's sperm to the Australian Capital Territory, which has no regulation related to posthumous reproduction. According to the law in Victoria,³⁶ gamete exports are not allowed, although the Infertility Treatment Authority may approve an exemption. However, the Infertility Treatment Authority refused YZ's application.³⁷

As a result, YZ commenced proceedings that would come to be known as *AB v Attorney-General of Victoria*.³⁸ Specifically, YZ sought a declaration that the law did not prohibit an intracytoplasmic injection using XZ's sperm.³⁹ In May 2005, the court ruled that this procedure was indeed not prohibited. However, it also declared that the intracytoplasmic injection could not take place in Victoria, due to a lack of consent on the part of XZ. In June 2005, YZ once again sought permission to export the sperm to the Australian Capital Territory, but her application was denied.⁴⁰ Therefore, YZ asked the Victorian Civil and Administrative Tribunal to review the Infertility Treatment Authority's decision, and she also requested permission to move her husband's sperm to another state to enable its use.⁴¹

Seven years after XZ's death, the Tribunal accepted YZ's request to use XZ's sperm and permitted its export. In his ruling, the judge relied on Section 5 of the Infertility Treatment Act, which outlines some guiding principles.⁴² Section 5 reads as follows:

It is Parliament's intention that the following principles be given effect ... (a) the welfare and interests of any person born or to be born as a result of a treatment procedure

³² *Id.*

³³ *Assisted Reproductive Technology Act 2007* (NSW) ss 17 and 23.

³⁴ *Assisted Reproductive Treatment Act 2008* (Vic) ss 46 and 85.

³⁵ *YZ v Infertility Treatment Authority* (Vic) [2005] VCAT 2655. For other cases, see *Douglas and Debra Fields v Attorney General of Victoria* (Vic) [2004] VSC 547; *Jocelyn Edwards v Attorney General of New South Wales* (NSW) [2011] NSWSC 478.

³⁶ *Infertility Treatment Act 1995* (Vic) s 56.

³⁷ *YZ v Infertility Treatment Authority*, *supra* note 35, at 3–4.

³⁸ *Id.* at 4.

³⁹ This is a procedure whereby a sperm is directly injected in order to produce an embryo which can be subsequently implanted in a woman's body.

⁴⁰ *YZ v Infertility Treatment Authority*, *supra* note 35, at 4–5.

⁴¹ *Id.* at 5.

⁴² *Id.* at 11–6.

are paramount; (b) human life should be preserved and protected; (c) the interests of the family should be considered; (d) infertile couples should be assisted in fulfilling their desire to have children.⁴³

As regards the welfare and interests of the child, the judge explained that if he permitted the export of XZ's sperm, and that if YZ bore a child as a result, that child 'would be loved and cared for'.⁴⁴ The fact that the child would be conceived after the death of a genetic parent and thus would not have a 'living father' would be insufficient grounds to prohibit the export of XZ's sperm. He concluded that 'if there is such a thing as a perfect family, it is a loving, caring family; a family is not a perfect family simply because it consists of a father, a mother and children. As a society, we must get away from stereotypes'.⁴⁵ In term of the interests of the family, the judge asserted that the decision would bring the family closer together and give it joy and happiness.⁴⁶ As to the deceased's consent, the judge found evidence that XZ had desired to conceive a child using his own gametes and those of YZ. He emphasized that 'consent is usually given by words or by conduct—not by legal instrument ... [the] assessment of whether or not consent has been given ... will usually require consideration of the circumstances and will require inferences from the circumstances'.⁴⁷ Therefore, he found no reason to prohibit the transfer of XZ's sperm to another state and concluded:

There is every reason to think that XZ would now want his sperm to be used to produce children mothered by YZ, if this is the course desired by YZ. Most people who die accept that they cannot, and should not, seek to rule from the grave. Rather they leave on-going decisions to the living; especially to the living who they love or respect.⁴⁸

A similar requirement for prior consent exists in the United Kingdom. The Human Fertilisation and Embryology Act 1990 states that 'a person's gametes must not be used for the purposes of treatment services unless there is an effective consent by that person'.⁴⁹ Although the law prohibits gamete use without consent, courts have succeeded in overcoming this requirement by permitting gametes to be exported outside of the country.⁵⁰

⁴³ *Infertility Treatment Act*, *supra* note 36, at s 5.

⁴⁴ *YZ v Infertility Treatment Authority*, *supra* note 35, at 15.

⁴⁵ *Id.* at 16.

⁴⁶ *Id.*

⁴⁷ *Id.* at 19.

⁴⁸ *Id.* at 20.

⁴⁹ The Human Fertilisation and Embryology Act 1990, sch. 3.

⁵⁰ *R v. HFEA ex parte Blood* [1997] 2 All ER 687; [1997] 2 WLR 806; [1999] Fam 151. In 2013, another case was reported through the media. In this case, M obtained an emergency ruling to have her husband's sperm retrieved while he was in a coma and close to death with a heart condition. There was no consent on the part of M's husband. According to the media report, 'the Human Fertilisation and Embryology Authority did not oppose her bid,' and thus she was 'permitted to take the sperm to another country to begin IVF treatment'. See Barney Calman, *Wife Breaks the Law to Use Dead Husband's Sperm for Baby... and Health Chiefs Back Her: British Widow Makes Legal History by Travelling to Europe for IVF*, DAILY MAIL (Aug. 10, 2013), <http://www.dailymail.co.uk/news/article-2388938/Wife-breaks-law-use-dead-husbands-sperm-baby-health-chiefs-British-widow-makes-legal-history-travelling-Europe-IVF.html> (accessed May 24, 2018).

The issue is best illustrated via a recent case—*R v. The Human Fertilisation and Embryology Authority (HFEA)*.⁵¹ While A was in hospital, she underwent treatment for the retrieval and storage of her eggs. She signed a form that indicated consent to the retrieval and storage of her eggs, including storage after her death. The form stated that, ‘there is a separate form on which you can say how you want your eggs to be used. Your eggs can only be used if you have also completed the other form’.⁵² However, A did not ask to view or sign this second form.

Six years after she was diagnosed with cancer, A died. Her parents asked the HFEA for permission to export A’s eggs to the United States. Her parents wished ‘to use A’s eggs to create an embryo with anonymous donor sperm and to implant the embryo in ... A’s mother, with a view to any child who may be born being brought up as ... [their] grandchild’.⁵³ The parents’ request was rejected, and at that point, they applied an appeal. The High Court held that the decision of the HFEA was lawful and rational, and it thus dismissed the application. Both the HFEA and the High Court stated that A never consented in writing to the egg use proposed by her parents.⁵⁴ Once again, A’s parents appealed this ruling.

In June 2016, the Court of Appeal ordered the HFEA to reconsider A’s parents’ application to export A’s eggs so that they could be implanted in her mother. It held that the HFEA’s decision was flawed in light of evidence indicating that A wanted her mother to carry her child after her death.⁵⁵ The Court asserted that the HFEA did not consider which information A had to have before she could consent to the proposed actions, and it would be unrealistic to assume that A had been unaware that there would have to be a sperm donor.⁵⁶ Interestingly, important issues, such as the family connection between A’s mother and the resulting child, were not considered.

C. Permission for the partner to engage in posthumous reproduction

The third element shared by the designated countries is permission for the partner, but not the parents, to retrieve and use the deceased’s gametes. The common belief is that parents have no protected interests toward their children’s reproduction decisions and that such choices should rather be made by the potential parents themselves.⁵⁷ This requirement is enshrined, for instance, in the committee opinion published by the American Society for Reproductive Medicine. According to the committee opinion, the desires of the parents do not give them ‘any ethical claim to their child’s gametes’.⁵⁸ Israel has embraced a similar approach. According to the guidelines issued by the Attorney

⁵¹ *R (on the application of M) v. Fertilisation and Embryology Authority* [2016] EWCA Civ 611.

⁵² *Id.* at 3.

⁵³ *Id.* at 1.

⁵⁴ *Id.* at 8.

⁵⁵ According to A’s parents, when it became clear to A that she was terminally ill, she told her mother the following: ‘They are never going to let me leave this hospital, Mum; the only way I will get out of here will be in a body bag. I want you to carry my babies. I didn’t go through the IVF to save my eggs for nothing. I want you and Dad to bring them up. They will be safe with you. I couldn’t have wanted for better parents, I couldn’t have done without you.’ *Id.* at 4 (emphasis added).

⁵⁶ *Id.* at 12–6.

⁵⁷ Kathryn D. Katz, *Parenthood from the Grave: Protocols for Retrieving and Utilizing Gametes from the Dead or Dying*, 2006 U. CHI. LEGAL F. 289, 296 (2006); Guido Pennings et al., *ESHRE Task Force on Ethics and Law 11: Posthumous Assisted Reproduction*, 21 HUM. REPROD. 3050 (2006).

⁵⁸ American Society for Reproductive Medicine, *supra* note 19, at 1844.

General, which are not legally binding, the deceased's female partner is the sole individual authorized to use the sperm (the guidelines do not refer to eggs) and the deceased's parents are precluded from the posthumous use of their son's gametes.⁵⁹

Despite limitations restricting posthumous reproduction to the deceased's partner, in some cases, courts were willing to grant parents a permission to retrieve and use the deceased's gametes. It should be noted that most cases concern sperm retrieval and use. It is beyond the scope of this article to address the reasons for the lack of requests for egg retrieval and use, but suffice is to say that according to one explanation, it is medically complex to retrieve and use eggs of a deceased woman.⁶⁰ Another intriguing explanation relates to cultural perceptions of differences between men and women when it comes to procreation and parenting.⁶¹

One case in the United States is of Nikolas Evans, who was killed unexpectedly. His mother, Marissa, applied for an emergency court order to authorize the retrieval of Nikolas's sperm and its subsequent use for reproduction. She argued that she had engaged in many conversations with her son about his desire to have children. The judge approved her request.⁶²

Another case is of Omri Shahar in Israel.⁶³ In June 2012, Omri, a young soldier, was killed in a car accident. At his death, Omri's parents, Asher and Irit, petitioned Israel's Family Court for posthumous sperm retrieval. The request was approved yet, 1 year later, they submitted an additional request, this time—to use the sperm to fertilize a donated egg, implant the embryo in a gestational carrier, and raise the child. In an unprecedented decision, the Court approved the request,⁶⁴ holding that Omri wished to have children, and that in case of his death, he wanted his parents to raise those

⁵⁹ Ministry of Justice Guidelines of the Attorney General of the Government, No. 1.2202, Oct. 27, 2003. Israel has a lenient approach toward posthumous reproduction. The core assumptions, enshrined in the Jewish tradition underlying the Israeli approach, are that most individuals desire to leave offspring to ensure their legacy. The guidelines refer to the biblical commandment to 'be fruitful and multiply', as well as to the biblical practice of levirate marriage (ie the deceased's brother is obliged to marry the deceased's wife and the first child born from such a union should carry the deceased's name and be his heir). See Ruth Landau, *Posthumous Sperm Retrieval for the Purpose of Later Insemination or IVF in Israel: An Ethical and Psychosocial Critique*, 19 HUM. REPROD. 1952, 1954 (2004); Hashiloni-Dolev, *supra* note 6, at 636.

⁶⁰ Katz, *supra* note 57, at 307.

⁶¹ Yael Hashiloni-Dolev & Silke Schicktanz, *A Cross-Cultural Analysis of Posthumous Reproduction: The Significance of the Gender and Margins-of-Life Perspectives*, 4 REPROD. BIOMED. SOC. ONLINE 21 (2017) ('there is the common belief that mothers make better parents, which leads to more positive public attitudes towards PHR when the surviving partner is a woman ... This is related to the widely shared stereotype presenting men's parental interests as minimal, only instrumental or financial in contrast to those of women.' *Id.* at 27). See also Yael Hashiloni-Dolev & Zvi Triger, *Between the Deceased's Wish and the Wishes of His Surviving Relatives: Posthumous Children, Patriarchy, Pronatalism, and the Myth of Continuity of the Seed*, 39 TEL. AVIV. UNIV. L. REV. 661, 671–76 (2016) [in Hebrew]; Zvi Triger, *One's Death is Another's Life: Posthumous Reproduction and the Jewish-Israeli Ideology of Parenting*, 49 THEORY & CRITICISM 67, 78–80 (2017) [in Hebrew].

⁶² Browne C. Lewis, *Graveside Birthday Parties: The Legal Consequences of Forming Families Posthumously*, 60 CASE W. RES. L. REV. 1159, 1177 (2010).

⁶³ For other cases, see Rosenblum, *supra* note 7, at 633; Harriet Sherwood, *Israeli Family Can Freeze Eggs of Daughter Killed in Road Accident*, GUARDIAN (Aug. 8, 2011), <https://www.theguardian.com/world/2011/aug/08/israeli-family-can-freeze-eggs-daughter> (accessed May 24, 2018); File No. 12977–01–14 Family Court (Kiryat Shmona), Anonymous v. State of Israel (Jan. 6, 2015), Nevo Legal Database (by subscription, in Hebrew).

⁶⁴ File No. 16699–06–13 Family Court (Petah Tikva) 16699–06–13, Shahar v. Attorney General of Israel (Sept. 27, 2016), Nevo Legal Database (by subscription, in Hebrew).

children.⁶⁵ The Court was convinced that Omri and his parents had enjoyed a close relationship. Moreover, it viewed Omri's parents as the dominant figures in his life; they had taken an active role in shaping Omri's plans and knew his ambitions. The Court concluded:

If Omri was standing in front of us, there is no doubt that he would have expressed a definitive will that, under these circumstances, his parents should fertilize a donated egg with his sperm and raise the child on their own.⁶⁶

The Court then turned to two associated issues—the interests of the resulting child and the ability of Omri's parents to raise the child. It rejected the claim that the child would be subject to 'planned orphanhood', or would be 'a living monument'.⁶⁷ Instead, it affirmed that Omri's parents would have an excellent parental capacity to raise the child.⁶⁸ The Court was persuaded that the child would grow up to be 'a loved and wanted child, and thus the child's best interests are guaranteed, even before she is born'.⁶⁹ It maintained that the child would benefit more from being raised by Omri's parents than from being raised by a designated woman who had not been known to Omri. In the modern world, the Court argued, individuals desire continuity after death, and they fulfill that aspiration either by leaving offspring with their life partner or through diverse alternatives to the traditional family.⁷⁰ The Court acknowledged that in today's world young parents are under substantial pressures, and so grandparents have increasingly become involved in raising their grandchildren. Thus, grandparents often act as *de facto* 'parents'.⁷¹ In such circumstances, the government should not unequivocally preclude the deceased's parents from posthumously using their son's sperm.⁷² The Court went even further, concluding that the parents' interest in witnessing their son's continuity should be recognized.⁷³ Their interests, according to the Court, are not inferior to those of a partner. The Court claimed that the deceased's parents should be recognized as the legal parents of the child by virtue of the genetic connection between them, noting that 'the child would carry the same genes' and that 'they are the biological parents of the child's biological father'.⁷⁴

The reactions to this groundbreaking decision were not long in coming. First, the state appealed, and in January 2017, the District Court overruled the Family Court's decision.⁷⁵ The Court specifically focused on the fact that the request was unprecedented and unusual because Omri's parents desired to *raise* the child. The Court asserted that according to the Attorney General's guidelines, 'the presumption is that a deceased person would have agreed to posthumous reproduction only if the request is made by his

⁶⁵ *Id.* at 13.

⁶⁶ *Id.* at 15 (my translation).

⁶⁷ *Id.* at 22.

⁶⁸ *Id.* at 18.

⁶⁹ *Id.* (my translation).

⁷⁰ *Id.* at 12.

⁷¹ *Id.* at 21.

⁷² *Id.* at 24.

⁷³ *Id.*

⁷⁴ *Id.* at 31 (my translation).

⁷⁵ File No. 45930–11–16 District Court (Central District), State of Israel v. Shahar (Jan. 29, 2017), Nevo Legal Database (by subscription, in Hebrew).

partner'.⁷⁶ Since Omri's girlfriend did not wish to be impregnated with his sperm, the use of that sperm should be prohibited.⁷⁷ The Court also explained that, 'there is not enough evidence showing that Omri wished the child will be born to a world in which no genetic parent is present in the child's life'.⁷⁸ Moreover, it specified that permitting agreements that are flexible in terms of genetic relatedness (namely, permitting parents to use the gametes based on the genetic affinity they share with their deceased child and grandchild) would be against the public interest.⁷⁹ Last, the Court maintained that approving the parents' request would be against the child's best interests as the child has a right to be born to a 'full family', which consists of two genetic parents.⁸⁰

Second, in December 2016, in another case, the Supreme Court overruled a decision of the District Court, which authorized the deceased's parents to use their son's sperm, despite opposition from that son's widow.⁸¹ It was the widow who brought this appeal. The Supreme Court rejected the parents' application to use the deceased's sperm, and particularly the claim that they had a protected interest in grandparenthood.⁸² The Court explained that the right to grandparenthood is not recognized under Israeli law when the grandchild's parents are alive and legally competent.⁸³ In addition, even when grandparents' rights are recognized, they only extend to grandchildren who have already been born. Parents, the Court ruled, do not have the right to demand the birth of their grandchildren.⁸⁴ It determined that with the exception of unique cases, the deceased's parents should not have standing in terms of clarifying their son's wishes if that son had a life partner.⁸⁵ The Court, however, left unresolved the question of whether parents should also be prohibited from using their child's gametes in instances in which the deceased had been single.⁸⁶ That having been said, a minority opinion by Justice Hanan Melcer maintained that the parents should be allowed to use their son's sperm based on the deceased's right to continuity.⁸⁷ Justice Melcer asserted that the evidence makes clear that the deceased wanted to have continuity through reproduction and leave a mark in this world.⁸⁸ The Court thus, so he argued, must protect the deceased's interest.⁸⁹

A grim picture emerges from the comparative analysis regarding the practice of posthumous reproduction. Perhaps the most worrying aspect is that posthumous reproduction is 'governed' by a complete ambiguity; there are no direct laws on posthumous gamete retrieval and use, and these procedures are performed according to laws

⁷⁶ *Id.* at 30 (my translation).

⁷⁷ *Id.* at 37–8. Although Omri's girlfriend did not wish to be impregnated with Omri's sperm, she supported his parents' request.

⁷⁸ *Id.* at 36 (my translation).

⁷⁹ *Id.* at 50.

⁸⁰ *Id.* at 52–4.

⁸¹ File No. 7141/15 Supreme Court (Jerusalem), Anonymous v. Anonymous (Dec. 22, 2016), Nevo Legal Database (by subscription, in Hebrew).

⁸² *Id.* at 17–20.

⁸³ *Id.* at 18.

⁸⁴ *Id.*

⁸⁵ *Id.* at 25.

⁸⁶ *Id.* at 30–2.

⁸⁷ *Id.* at 36–62.

⁸⁸ *Id.* at 47.

⁸⁹ *Id.* at 41–3.

concerning other issues or guidelines that are not legally binding. Posthumous reproduction should not be enveloped in a legal ambiguity, and countries should make efforts to regulate the practice and create certainty. In addition, the countries require prior consent on the part of the deceased. Adopting a requirement mandating prior consent ultimately means that the deceased's desires might be denied as in most cases clear indications regarding the deceased's desires after his or her death are lacking. Thus, countries should adopt a legal regime that is based on presumed consent (rather than refusal) as it produces outcomes that are more likely to resemble the deceased's interests. Moreover, the practice of posthumous reproduction is governed by traditional means of thinking about the family as the only one who is permitted to request posthumous reproduction is the deceased's partner. The presumption that a person with a partner would want only that person to retrieve and use his or her gametes after death is not consistent with contemporary changes to the structure of the family unit. Also, preserving the institution of parenthood 'the way that we know it' is not the only way to meet the needs and the interests of the resulting child.

II. WHY SHOULD POSTHUMOUS REPRODUCTION BE LEGALLY PERMITTED?

After identifying common elements among some existing legal frameworks and discussing their flaws, this part advocates for a more permissive approach toward posthumous reproduction and provides three justifications for permitting it in the absence of the deceased's prior consent.

A. The Interest in genetic continuity

The first justification concerns the interest in 'genetic continuity', which is about individuals' desire (men and women alike) to leave a 'piece' of themselves in the world and maintain a chain of continuity.⁹⁰ It should be clarified that one's interest in genetic continuity differs from one's interest in procreation. The latter is related to the subject matter of procreation—the *child*—and grounded in individuals' strong desire to create and give birth to a child, while the former is about perpetuating one's *genes* to future generations.

Once a person ceases to exist, his or her 'life story' does not continue independently.⁹¹ Rather, it endures via the 'life stories' of others—primarily the deceased's loved ones. One way that a person's 'life story' continues is through the fulfillment of one's will, which indicates the individual's wishes regarding financial assets or values.⁹²

⁹⁰ There are three main approaches to attributing interests to deceased individuals: (i) one that recognizes that the deceased can hold interests; (ii) one that objects to the possibility that the deceased might have interests; and (iii) one that distinguishes between ante-mortem (before-death) and post-mortem (after-death) persons and holds that only an ante-mortem person can hold interests. Recognizing the interests of the ante-mortem person means protecting his or her interests regarding events that might occur after that person's death. For the different approaches, see Joel Feinberg, *The Rights of Animals and Unborn Generations*, in *RIGHTS, JUSTICE AND THE BOUNDS OF LIBERTY: ESSAYS IN SOCIAL PHILOSOPHY* 159 (1980); Joan C. Callahan, *On Harming the Dead*, 97 *ETHICS* 341 (1987); Matthew H. Kramer, *Do Animals and Dead People Have Legal Rights?*, 14 *CAN. J. L. & JURIS.* 29 (2001).

⁹¹ Asa Kasher, *Life in the Hearts*, 8 *J. LOSS TRAUMA* 247, 248 (2003).

⁹² *Id.* at 253.

Another way that a person's 'life story' continues is through his or her name.⁹³ After death, a person's first name is written on his or her tombstone. Also, in many cultures, other individuals are named after the deceased. With respect to surname in particular, it endures through offspring. Connectedness demonstrated through a shared surname is a symbol to which social meanings are attributed,⁹⁴ and 'the common usage of surnames to indicate lineage is a modern cultural practice'.⁹⁵ Posthumous reproduction is, therefore, another, more contemporary method for realizing one's interest in continuity. It enables individuals to create a genetic connection with future generations by making it possible for a genetically related offspring to carry the deceased's genetic material.

Yet, some clarifications are required. First, not *all* people have an interest in genetic continuity. Some, for example, may object on religious grounds. Posthumous reproduction should therefore be prohibited if the deceased overtly objected to this possibility or when strong indications exist that the person would not have consented to performing such a procedure. Second, the interest in genetic continuity must be balanced against those of the partner and other family members. To prevent a situation in which the deceased 'controls' the lives of living individuals contrary to their wishes, the law must stipulate that the duty to protect the deceased's interest should be fulfilled only when the act is also in the interest of living individuals.

Three core reasons can be found for the propositions that people are interested in genetic continuity and that such an interest is particularly valuable. One reason relates to *autonomy*, often understood as one's capacity to live his or her life according to objectives that he or she endorses.⁹⁶ This principle holds that an individual has the liberty to make choices and develop a life plan based on his or her own values and conceptions of good life. And if certain activities grant access to 'goods', such as genetic continuity, those activities should be respected. Of course, one does not have a liberty to realize *any* good; however, liberties that protect one's capacity to pursue his or her plans using the goods he or she is justly entitled to should be protected.⁹⁷ Indeed, having access to opportunities for choice in matters of reproduction holds an instrumental value for securing necessary conditions of human well-being.⁹⁸

A second reason pertains to *self-extension*. People know that their lives are finite and that sooner or later they will confront the reality of their own mortality. However, through genetic continuity people can 'extend' themselves into the future and 'overcome' mortality. Self-extension is valuable since 'if we had to confine our plans to the span of our own life, this would greatly impoverish our opportunities to pursue plans that are meaningful'.⁹⁹ The fear of dying could be one reason for this, and 'knowing that

⁹³ *Id.* at 251.

⁹⁴ Kathryn Almack, *What's in a Name? The Significance of the Choice of Surnames Given to Children Born Within Lesbian-Parent Families*, 8 *SEXUALITIES* 239 (2005).

⁹⁵ Hayley Davies, *Sharing Surnames: Children, Family and Kinship*, 45 *SOCIOLOGY* 554, 555 (2011).

⁹⁶ Tim Meijers, *Justice in Procreation: Five Essays on Population Size, Parenthood and New Arrivals* 130 (Dec. 2016) (unpublished Ph.D. thesis, Université Catholique de Louvain) (on file with author).

⁹⁷ *Id.* at 135.

⁹⁸ Marshall Missner, *Why Have Children?*, 3 *INT'L J. APPL. PHILOS.* 1 (1987); Saul Smilansky, *Is There a Moral Obligation to Have Children?*, 12 *J. APPL. PHILOS.* 41 (1995).

⁹⁹ Meijers, *supra* note 96, at 153.

we do not disappear completely after we die ... allows for some reconciliation with the prospect of death'.¹⁰⁰ Using the deceased's gametes is a tangible way for people to leave 'pieces' of themselves 'alive' in the world.

A third reason concerns *personal identity*. Existing philosophical literature distinguishes between two main identities—physiological and psychological.¹⁰¹ Physiological identity focuses on biological organisms and views continuity as bodily or somatic characteristics (height, features, or skin color). Psychological identity concerns immaterial minds (beliefs, desires, or memories) and views continuity as evolving out of our psychological traits. Genetic identity may offer a third approach to understand personal identity and human continuity. It contains elements of both approaches as genes affect both physical and psychological traits.¹⁰² While genetic continuity is not a necessary component of parenthood, it is about passing on one's genes as a liberal expression of personal identity and a communitarian expression of family heritage. Individuals interested in perpetuating their genes view genes as a significant element of who they are; this idea leads them to wanting to project their genes into the future. It is a basic desire to want other individuals to take on certain of our features, such as values and genetic material. This assumption is warranted by the fact that society is becoming increasingly aware of what genes can reveal about people's identities. With the beginning of the Human Genome Project, the public has known that through their genes, parents may be able to pass on features of their identity, such as temperament and personality traits. Moreover, through transmission of their DNA, individuals can maintain biological continuity with immediate family members and even generations.¹⁰³ In addition, by passing on their genes, people transmit their genetic heritage as members of nations and communities.¹⁰⁴ By using the deceased's gametes, others are able to inherit the deceased's DNA, thus fulfilling his or her interest in genetic continuity.¹⁰⁵

The assumption that individuals are interested in genetic continuity is also based upon various testimonies of people who, prior to their deaths, revealed their interest in continuity via posthumous reproduction. Although those testimonies are only anecdotal evidence, they may still provide some indication of people's interest in genetic

¹⁰⁰ *Id.*

¹⁰¹ See eg DAVID HUME, *TREATISE OF HUMAN NATURE* 251–63 (1896); DEREK PARFIT, *REASONS AND PERSONS* 204–09 (1984); THOMAS NAGEL, *THE VIEW FROM NOWHERE* 40 (1986); ERIC T. OLSON, *THE HUMAN ANIMAL: PERSONAL IDENTITY WITHOUT PSYCHOLOGY* 22–3 (1997); DAVID DEGRAZIA, *HUMAN IDENTITY AND BIOETHICS* 13–9, 82–6 (2005).

¹⁰² Florina Uzefovsky, Anna Doering & Ariel Knafo-Noam, *Values in Middle Childhood: Social and Genetic Contributions*, 25 *SOC. DEV.* 482 (2016); HENRY T. GREELY, *THE END OF SEX AND THE FUTURE OF HUMAN REPRODUCTION* 114–19 (2016).

¹⁰³ A recent research reveals that contemporary East Asians are genetically related to the ancient hunter gatherers who lived in the same region 8000 years ago. See Veronika Siska et al., *Genome-Wide Data from Two Early Neolithic East Asian Individuals Dating to 7700 Years Ago*, 3 *SCI. ADV.* e1601877 (2017).

¹⁰⁴ Ewen Callaway, *UK Mapped Out by Genetic Ancestry: Finest-Scale DNA Survey of Any Country Reveals Historical Migrations*, *NATURE* (Mar. 18, 2015), <http://www.nature.com/news/uk-mapped-out-by-genetic-ancestry-1.17136> (accessed May 24, 2018). See also Pilar N. Ossorio, *Myth and Mystification: The Science of Race and IQ*, in *RACE AND THE GENETIC REVOLUTION: SCIENCE, MYTH, AND CULTURE* 174–90 (Sheldon Krimsky & Kathleen Sloan eds., 2011).

¹⁰⁵ Collins, *supra* note 5, at 434–36.

continuity. Irit Rosenblum, the director of the New Family Organization in Israel,¹⁰⁶ has described such testimonies in detail.¹⁰⁷ One case concerned a young man who wanted his sperm to be used to create children. He said to Irit:

Now I can die peacefully, knowing that life is not embodied only in the body. Life has energy and that energy has a mission. The energy is concealed in every person who delivers the energy of life. Please help me to pass it on.¹⁰⁸

In another case, a young girl who froze her eggs before starting chemotherapy treatment said: 'Do not say that it is going to be ok, because it is not. I have made a great effort and suffered in order to leave eggs. Please use them. The most important thing for me is that my life will be continued.'¹⁰⁹ These are only two examples. Since the technology is relatively new and the majority of the population is not fully aware of the availability of posthumous gamete retrieval and use, the question as to whether there is a human interest in genetic continuity through such procedures is new. This question certainly deserves further empirical investigation in order to gain a better understanding of what individuals want to happen after their death.

A possible counterargument to the assumption that people are interested in genetic continuity could be that if the person truly cared about genetic continuity, he or she would have so stated. Yet, this claim raises some difficulties. First, such assertion ignores the fact that the majority of the population is not aware of the possibility of posthumous gamete retrieval and use. If the general public was properly informed regarding the availability of these procedures, it is likely that the interested individuals would start taking measures to realize their wishes. Second, some individuals may ideologically object to writing down their beliefs and desires. Therefore, even if aware that posthumous reproduction is available to them, those individuals may choose not to explicitly express their wishes. Care should be taken when assuming that a person had no interest in posthumous reproduction just because he or she remained silent on the issue. One's interests are deeply personal, and conversations about post-death events are often considered to be upsetting. It follows that many reasons exist to explain why such matters may not be explicitly expressed or discussed before death.

It should be emphasized that the desire for genetic continuity is expressed in other forms except posthumous reproduction. For example, in 2016, for the first time, a couple in Mexico used a technique that mixes DNA from three people to produce a child. The 'three-parent technique', used to prevent the transfer of mitochondrial disorders,

¹⁰⁶ The New Family Organization is an association that provides legal advice and assistance services in various issues, including civil marriage, biological will, and surrogacy. In 2001, Irit Rosenblum proposed the establishment of a sperm bank for soldiers. Such a bank would offer soldiers a chance to store sperm for the use in an event of their death or loss of reproductive ability. She also initiated the idea of Biological Will. This initiative enables any person to draft a Biological Will specifying the intended use of their gametes. See Irit Rosenblum, *Respect the Dead by Creating New Life*, HAARETZ (Apr. 23, 2012), <https://www.haaretz.com/opinion/respect-the-dead-by-creating-new-life-1.426003> (accessed May 24, 2018). It should be noted that feminists and human rights activists in Israel consider the New Family Organization's agenda as controversial. Its activity, so it is argued, is driven by commercial interests. See Hashiloni-Dolev & Triger, *supra* note 61, at 668–69.

¹⁰⁷ IRIT ROSENBLUM, *GARDEN OF GOD* (2016) [in Hebrew].

¹⁰⁸ *Id.* at 66 (my translation).

¹⁰⁹ *Id.* at 70 (my translation).

The ‘respect-for-wishes’ model should apply to posthumous reproduction. If a person dies without leaving any indication of his or her wishes, and there is no reason to believe he or she objected to posthumous reproduction, it should be presumed that the deceased would have preferred for his or her gametes to be retrieved and used by a partner or parents.¹¹⁹ Through the ‘respect-for-wishes’ model, a ‘majoritarian default rule’ is being adopted; the decision whether to retrieve and use the deceased’s gametes is determined based on what the majority of the parties would have done had they explicitly addressed the issue.¹²⁰ Such a position acknowledges that most people would most probably consent to posthumous reproduction following their partner’s interest in procreating and becoming a parent and their parents’ interest in grandparenthood and the continuity of the family’s genetic heritage (see Section C).

Those against implementing the ‘respect-for-wishes’ model of autonomy may claim that ‘mistaken’ retrieval violates the right to bodily integrity.¹²¹ From their perspective, when gametes are retrieved from the body of a person who was opposed to such a procedure, the body is invaded against that individual’s wishes, thus violating his or her autonomy.¹²² ‘Mistaken’ non-retrieval, in contrast, merely fails to help bring about a state of affairs that the deceased perhaps desired. And, ‘while it is unfortunate if we fail to help a person’ to achieve his or her life goals, it ‘pales in comparison with a violation of a person’s right to decide whether an invasive procedure’ should be performed on his or her body.¹²³

While retrieving gametes from individuals who did not wish for them to be retrieved and used is unfortunate, one may argue that such a situation is morally no worse than not retrieving gametes from people who did wish for them to be retrieved and used—both ‘mistakes’ may fail to fulfill a person’s wishes about what should happen after his or her death.¹²⁴ This approach attempts to develop a ‘fewer mistakes’ argument based on a moral concern with minimizing harm.¹²⁵ Indeed, applying the ‘respect-for-wishes’ model to posthumous reproduction is likely to result in the minimum number of ‘mistakes’ as several empirical studies have indicated that individuals would support the retrieval and use of their gametes if that was the desire of their loved ones. Acting on the presumption that individuals would desire for their partner or parents to retrieve and use their gametes would be more likely to respect their actual wishes.

The first empirical study on attitudes toward posthumous reproduction in the United States was published in 2008 by Jason Hans.¹²⁶ For three scenarios, participants were asked to indicate ‘whether the surviving partner should or should not be allowed

¹¹⁹ Kelton Tremellena & Julian Savulescu, *Posthumous Conception by Presumed Consent: A Pragmatic Position for a Rare but Ethically Challenging Dilemma*, 3 REPROD. BIOMED. ONLINE 26 (2016).

¹²⁰ Russell B. Korobkin, ‘No Compensation’ or ‘Pro Compensation’: *Moore v. Regents* and Default Rules for Human Tissue Donations, 40 J. HEALTH L. 1, 9 (2007). See also David Charny, *Hypothetical Bargains: The Normative Structure of Contract Interpretation*, 89 MICH. L. REV. 1815, 1820–823 (1991); Ian Ayres, *Preliminary Thoughts on Optimal Tailoring of Contractual Rules*, 3 S. CAL. INTERDISC. L.J. 1, 5 (1993).

¹²¹ Gill, *supra* note 115, at 43.

¹²² *Id.*

¹²³ *Id.*

¹²⁴ *Id.* at 38.

¹²⁵ *Id.* at 41–2.

¹²⁶ Jason D. Hans, *Attitudes Toward Posthumous Harvesting and Reproduction*, 32 DEATH STUD. 837 (2008). Respondents were contacted using a modified, list-assisted random-digit dialing method. The procedure resulted in 407 completed interviews.

to have the reproductive material preserved'.¹²⁷ In the first segment, the cases that were presented revolved around a couple who had been either married or cohabiting for 1 or 7 years.¹²⁸ In the second segment, new information was added. This material touched upon whether the couple had a child and whether they had planned to have one.¹²⁹ In the third segment, further information revealed whether the couple had ever discussed having children and whether the deceased's parents were supportive.¹³⁰

For the first segment, 45% of the participants responded that the partner should be able to have the deceased's reproductive material preserved. A participant's likelihood of indicating that retrieval should be allowed declined by 56% when the surviving partner was a male. Participants presented with a married couple were more than twice as likely to say that the procedure should be allowed.¹³¹ Moreover, 41.6% of the participants agreed that the procedure should be allowed in the scenarios presented in the second segment. Concerning the final portion of the survey, 60.1% of the participants stated that posthumous retrieval should be allowed. The study revealed, as Hans has put it, 'generally positive attitudes toward posthumous harvesting',¹³² with the results suggesting that supportiveness was a significant predictor of responses.

In later studies, Hans continued to further investigate the issue. One such analysis revealed even greater support for posthumous reproduction than what the 2008 study demonstrated.¹³³ Remarkably, 64% of males and 55% of females responded that 'they would want a surviving spouse to be able to reproduce using their gametes if the spouse wished to do so following an untimely death ... an additional 5% of males and 8% of females were undecided'.¹³⁴ More specifically, among respondents of reproduce age (18–44 years) the support was higher; 70% of males and 58% of females responded that they would want a partner to be able to reproduce using their gametes in case of an unexpected death.¹³⁵ Hans concluded that:

Abandoning the prevailing presumption of non-consent in favor of a presumption of consent ... will result in the deceased's wishes being honored three times more often for males and two times more often for females ... the evidence is clear: In the event of an early death, the majority of reproductive-aged Americans would want their gametes to be retrieved posthumously to produce a child if that is the wish of their surviving spouse.¹³⁶

Another study performed by Hans and Brigitte Dooley asked whether a partner should or should not be able to use the deceased's frozen gametes.¹³⁷ About half of

¹²⁷ *Id.* at 850.

¹²⁸ *Id.* at 849.

¹²⁹ *Id.* at 850.

¹³⁰ *Id.*

¹³¹ *Id.* at 852.

¹³² *Id.* at 867.

¹³³ Jason D. Hans, *Posthumous Gamete Retrieval and Reproduction: Would the Deceased Spouse Consent?*, 119 *SOC. SCI. & MED.* 10 (2014). Respondents were contacted in using a random-digit dialing method. The sample consisted of 2064 respondents.

¹³⁴ *Id.* at 12.

¹³⁵ *Id.*

¹³⁶ *Id.* at 15.

¹³⁷ Jason D. Hans & Brigitte Dooley, *Attitudes Toward Making Babies...With a Deceased Partner's Cryopreserved Gametes*, 38 *DEATH STUD.* 571 (2014). Respondents were contacted using a modified, list-assisted random-digit dialing method. The procedure resulted in a sample of 857 respondents.

the participants responded that the partner should be able to reproduce using frozen gametes in cases in which the deceased's explicit wishes were unknown.¹³⁸ Moreover, when the couple was married, 76% of the participants responded that the partner should be able to use the frozen gametes, as compared to 66% of the participants that stated the same for unmarried couples. The study concluded that, 'Americans are generally accepting of the procedure'.¹³⁹

A few empirical studies were conducted in Israel as well. The first study was published in 2015 by Yael Hashiloni-Dolev.¹⁴⁰ The study showed that while a few interviewees had a person wish in continuity and in having a post-mortem offspring, 'many interviewees were willing to defer to their surviving spouse's wishes to have their post-mortem child, sometimes even against their own wish, thus indicating a stronger support for presumed consent to surviving partners requests'.¹⁴¹ In another study, published in 2016, Hashiloni-Dolev and Zvi Triger revealed similar results.¹⁴² A recent study, conducted by Vardit Ravitsky and Ya'arit Bokek-Cohen, indicated Israeli soldiers' willingness to pursue posthumous reproduction if that was their parents' request. Interestingly, the wishes of the parents had much more influence on the willingness to pursue posthumous reproduction than the wishes of the partner.¹⁴³

Although further research is needed to gain a better understanding on people's interests after their death, the empirical studies described above may imply that overall the public tend to have a positive attitude toward posthumous reproduction when it is requested by the deceased's partner or parents.¹⁴⁴ Ultimately, the empirical studies indicate that adopting the 'respect-for-wishes' model may produce outcomes that are more likely to resemble the deceased's interests.

C. Other interests at stake

The third justification concerns the interests of the deceased's partner, the deceased's parents, and the resulting child—which have not received much attention in the literature. One of the arguments against posthumous reproduction would be that it should only concern the deceased, and not living individuals. Proponents of this view may claim that if the deceased's wishes are unknown, it should be presumed that that person would have refused. Presuming refusal, this line of reasoning runs, does not harm the deceased. However, such an argument ignores the fact that others have interests that are affected by presuming refusal.

¹³⁸ *Id.* at 575.

¹³⁹ *Id.* at 579.

¹⁴⁰ Hashiloni-Dolev, *supra* note 6. This study was based on 26 semistructured in-depth interviews of 13 Jewish-Israeli couples (ages 21–33).

¹⁴¹ *Id.* at 640–41, 647.

¹⁴² Hashiloni-Dolev & Triger, *supra* note 61, at 701. This study was based on 28 semistructured in-depth interviews of 14 Jewish-Israeli couples (ages 21–33).

¹⁴³ Ya'arit Bokek-Cohen & Vardit Ravitsky, *Soldiers' Preferences Regarding Sperm Preservation, Posthumous Reproduction, and Attributes of a Potential 'Posthumous Mother'*, O.M.E.G.A. 1, 13–5 (2017); Vardit Ravitsky & Ya'arit Bokek-Cohen, 'Life After Death': The Israeli Approach to Posthumous Reproduction, in *BIOETHICS AND BIOPOLITICS IN ISRAEL: SOCIO LEGAL, POLITICAL, AND EMPIRICAL ANALYSIS* 207–08 (Hagai Boas et al. eds., 2018).

¹⁴⁴ Collins, *supra* note 5, at 435.

i. *The deceased's partner*

In many cases, the deceased's partner has interests in procreating and becoming a parent after the death of his or her loved one. The core rationale underlying individuals' interests in procreating and parenting is connected to concepts of human dignity and identity.¹⁴⁵ These interests concern people's desire 'to create a secure nest and achieve a deep and meaningful connection and relationship with their flesh and blood extension of self'.¹⁴⁶ Although reproductive issues are generally contested, there is wide agreement that choices in procreative matters should be respected.¹⁴⁷ The legal system also reflects this consensus by giving a wide protection to procreative freedom.¹⁴⁸

Numerous legal systems have long recognized the rights to procreate and become a parent as fundamental rights. In the United States, the Fourteenth Amendment has been interpreted as protecting a person's right to procreate.¹⁴⁹ The United States Supreme Court has often interpreted a person's rights to liberty and privacy as implying a right to procreate. In Israel, the rights to procreate and become a parent are constitutively protected, and these rights are derived from human dignity, the right to privacy, and the principle of autonomy.¹⁵⁰ A person's rights to procreation and parenthood have been recognized in various rulings of the Supreme Court of Israel, and particularly in the case of *Nahmani v Nahmani*. In that case, the Supreme Court held that in special circumstances, a woman's rights to procreate and become a parent take precedence over her husband's right not to be a parent.¹⁵¹ The Supreme Court maintained that, 'if you take parenthood away from someone, it is as if you have taken away his life',¹⁵² and emphasized that procreation and parenthood constitute 'basic and existential value[s] both for the individual and for the whole of society'.¹⁵³

One can hardly doubt that the deceased's partner has rights to procreate and become a parent. The more controversial question is whether such rights extend to the partner's rights to procreate and become a parent by using a particular genetic material—the deceased's gametes. Such an extension may be justified by the partner's expectation that the relationship with the deceased would lead to parenthood, and this defense is all the more compelling if the surviving partner does not have any other possible alternatives for fulfilling that interest.¹⁵⁴ In the case of widows, for example, the fact that the 'biological clock' is ticking may influence the decision of whether to permit posthumous

¹⁴⁵ JOHN A. ROBERTSON, *CHILDREN OF CHOICE: FREEDOM AND THE NEW REPRODUCTIVE TECHNOLOGIES* 16, 22–42 (1994); Judith F. Daar, *Accessing Reproductive Technologies: Invisible Barriers, Indelible Harms*, 23 *BERKELEY J. GENDER L. & JUST.* 18, 49 (2008); Nicolette Priaux, *Rethinking Progenitive Conflict: Why Reproductive Autonomy Matters*, 16 *MED. L. REV.* 169, 175 (2008).

¹⁴⁶ Doron Dorfman, *The Inaccessible Road To Motherhood: The Tragic Consequence of Not Having Reproductive Policies for Israelis with Disabilities*, 30 *COLUM. J. GENDER & L.* 49, 52 (2015).

¹⁴⁷ ROBERTSON, *supra* note 145, at 24.

¹⁴⁸ *Id.*

¹⁴⁹ See eg *Skinner v. State of Oklahoma, ex. rel. Williamson*, 316 U.S. 535 (1942); *Eisenstadt v. Baird*, 405 U.S. 438 (1972); *Moore v. City of E. Cleveland*, 431 U.S. 494 (1977); *Quilloin v. Walcott*, 434 U.S. 246 (1978); *Santosky v. Kramer*, 455 U.S. 745 (1982); *Planned Parenthood v. Casey*, 505 U.S. 833 (1992); *Bragdon v. Abbott*, 524 U.S. 624 (1998).

¹⁵⁰ Rhona Schuz, *The Developing Right to Parenthood in Israeli Law*, 2013 *INT'L SURV. FAM. L.* 197, 197–201 (2013).

¹⁵¹ CFH 2401/95 *Nahmani v. Nahmani* [1995–6] *ISR. L. REV.* 1.

¹⁵² *Id.* at 40.

¹⁵³ *Id.* at 38–9.

¹⁵⁴ Hilary Young, *Presuming Consent to Posthumous Reproduction*, 27 *J. L. & HEALTH* 68, 78 (2014).

reproduction, because it could represent the woman's last chance to procreate. Widows may not want to wait and find another man in order to have a child.

Entering into a serious relationship usually generates strong expectations of procreation, particularly if the couple talks about children and makes plans to that effect. Individuals may even rely on such expectations, often forgoing other opportunities for reproduction.¹⁵⁵ The American Society for Reproductive Medicine has framed the partner's interest in terms of the interest promoted by the couple's 'joint reproductive project'.¹⁵⁶ It is argued that as long as no evidence demonstrates that the deceased was opposed, if the couple planned to have a family together, the lack of prior consent should not necessarily preclude posthumous reproduction.

ii. *The deceased's parents*

In recent years, an increasing number of parents have become interested in retrieving and using their child's gametes after his or her death, and this figure is likely to increase when the public becomes aware of the availability of posthumous reproduction.

Scholars have widely agreed that the deceased's parents have no legally protected interests as regards posthumous reproduction.¹⁵⁷ However, under some circumstances, the parents' interest in grandparenthood should be legally recognized and they should be entitled to use the deceased's gametes to bring a grandchild into the world. The parents' interest in grandparenthood reflects, first and foremost, their interest in realizing their child's interest in genetic continuity. Moreover, it also concerns the parents' own interests in the continuation of the family genetic heritage and the grand-parenting experience.

There should be two main possibilities for parents to realize their interest in grandparenthood in the context of posthumous reproduction (assuming that the deceased had not explicitly objected or that there are no indications that the deceased would not have permitted the parents to use the gametes, such as poor parent-child relationship or abusive behavior on the part of the parents). One option is by donating the deceased's gametes, permitting another person to become a parent. In this case, the designated parent has the primary responsibility for the child and the deceased's parents only have a relationship with the child. Another option is to make use of gamete donation and surrogacy services. In such instances, there is no biological or genetic parent who is involved in raising the child. The resulting child is raised by the deceased's parents, who are the ones to hold the primary responsibility.

The legal recognition of the parents' interest in grandparenthood may be grounded in the following justifications. The first justification concerns the *relationship that parents have with their deceased child*. A person's parents frequently desire to have grandchildren, perhaps even more so when their child dies. They may strongly feel that posthumous reproduction offers them 'a living link to their dead child'.¹⁵⁸ Parents are not meant to bury their children; it is not in the natural order of things. However, for several reasons (illness or other circumstances), that can and does happen. Parents are expected to watch their children grow into adulthood and to sit back and enjoy their

¹⁵⁵ *Id.* at 81.

¹⁵⁶ American Society for Reproductive Medicine, *supra* note 19, at 1844.

¹⁵⁷ Katz, *supra* note 57, at 307.

¹⁵⁸ Young, *supra* note 154, at 81.

children's lives, as well as those of their grandchildren. The death of a child prevents parents from experiencing this 'reward'. Allowing the parents to retrieve and use their child's gametes might keep this reward intact.

The second justification focuses on the *role of grandparents*. The relationship between grandparents and their grandchildren has become less traditional; for different reasons, a great number of grandparents have full responsibility for rearing their grandchildren.¹⁵⁹ Grandparents provide a significant amount of care for their grandchildren, and in recent years, the legal standing of grandparents on other matters has been increasing. For example, Israeli law authorizes courts to make decisions on requests submitted by grandparents regarding contact with their grandchildren when a parent dies.¹⁶⁰ A recent amendment added that courts can make decisions on requests submitted by grandparents regarding contact with their grandchildren in circumstances that do not necessarily involve a deceased parent. Alongside the recognition of grandparents' legal status concerning their grandchildren, grandparents also have duties—it is possible to impose child support on them.¹⁶¹ In the United States, several states have granted grandparents a statutory right to petition the courts for visitation. The law in Washington provides that 'visitation with a grandparent shall be presumed to be in the child's best interests when a significant relationship has been shown to exist'.¹⁶² In Florida, the court should, upon a petition filed by a grandparent of a minor child, grant reasonable rights of visitation to that grandparent when it is in the best interests of the child.¹⁶³ The above-mentioned legal trend leads to a desirable outcome. Indeed, the legal recognition of the interest in grandparenthood differs between reproduction and issues of visiting rights and child support. Yet, the recognition of the latter implies that grandparents play a crucial role in their grandchildren's lives, and that they should have legal standing in matters concerning their grandchildren.

The third justification concerns *genetic continuity*. The deceased's parents have a deep desire to pass on their genes and ensure that some part of them will survive in the future. The deceased's parents are interested in the continuity of family ties across generations. Therefore, genetic relatedness should be granted a special weight in constructing families and in assigning rights. It seems that while genetic relatedness is not necessary to

¹⁵⁹ TRACI TRULY, GRANDPARENTS' RIGHTS 5 (1999).

¹⁶⁰ Capacity and Guardianship Law (Amendment No. 17), 5772–2012, § 28 (2012). This provision was added after the 1973 Yom Kippur war following cases in which widows did not allow their children to meet the deceased's parents. Several cases were ruled in favor of the grandparents' rights. See eg File No. 4238/03 Supreme Court (Jerusalem), Levy v. Highest Rabbinical Court (Sept. 9, 2003), Nevo Legal Database (by subscription, in Hebrew); File No. 1900/06 Family Court (Krayot), Orphan v. Widow (Oct. 29, 2006), Nevo Legal Database (by subscription, in Hebrew).

¹⁶¹ The Family Amendment (Maintenance) Law, 5719–1959, §§ 4–5 (1959).

¹⁶² WASH. REV. CODE ANN. § 26.09.240(6) (2017). All that notwithstanding, the visitation rights are limited when the grandparents' wishes are not consistent with the parents' wills. The Supreme Court of the United States decided that the application of § 26.10.160(3) of the Revised Code of Washington was an unconstitutional infringement on the custodial parent's rights. § 26.10.160(3) provided that 'any person may petition the court for visitation rights at any time including, but not limited to custody proceedings. The Court may order visitation rights for any person when visitation may serve the best interest of the child whether or not there has been any change of circumstances'. However, the Court did not declare that nonparent or grandparent visitation statutes are per se unconstitutional. Rather, it indicated that state courts would have to examine the statutes on a case-by-case basis. See *Troxel v. Granville*, 530 U.S. 57 (2000).

¹⁶³ FLA. STAT. ANN. § 752.01 (2017).

establish family ties, it may be sufficient, especially in regard to the child's wider family.¹⁶⁴

The recognition of the deceased's parents' interest in grandparenthood may raise several objections. The first critique would be that allowing the parents to use their child's gametes and raise the resulting child may blur the boundaries between parents and grandparents. Since the resulting child will grow up in a family in which one of his or her genetic parents is dead, there is a risk that the deceased's parents will raise that child as if he or she were their own child, rather than their grandchild. However, this objection is not persuasive since the deceased's parents do not have a reason to act as the child's parents. After all, their main motive is to fulfill the deceased's wish for genetic continuity. A second objection could be that the parents can adopt a child instead of using their own child's gametes. However, such an objection ignores the fact that the parents do not want to have just any grandchild, but rather a *genetic* grandchild, who has the family's genes and would leave a 'piece' of their child and of themselves in the world.

iii. *The resulting child*

A central claim against posthumous reproduction is that it may not be in the best interests of the child.¹⁶⁵ This line of reasoning claims that bringing a fatherless or motherless child into the world would harm him or her.¹⁶⁶ According to proponents of this view, 'an adult's desire to give birth to an orphan should not have priority over the child's basic right to two living parents'.¹⁶⁷ The critics posit that the child may suffer both economically and emotionally—the child may not be entitled to inherit the deceased's estate and may feel that he or she is a 'replacement' for the deceased, serving as a 'memorial' for a late parent.¹⁶⁸ Moreover, if the deceased's parents intend to raise the child, he or she might grow up with older individuals suffering from declining physical and mental health.

The main critique of the aforementioned arguments is that the act claimed to be harmful for the child is, in fact, the very process that brings that child into being. According to Derek Parfit's famous 'non-identity problem', actions cannot harm future individuals because they do not make them worse off than they would otherwise have been. Individuals can be harmed only if they are worse off than they otherwise would have been if a particular action had not occurred.¹⁶⁹ Until evidence is able to demonstrate that the absence of a living parent is significant, there is no reason to believe that posthumous birth harms the resulting child.¹⁷⁰

¹⁶⁴ Heather Draper, *Grandparents' Entitlements and Obligations*, 27 *BIOETHICS* 309, 311 (2013); Andrew Bainham, *Contact as a Right and Obligation*, in *CHILDREN AND THEIR FAMILIES: CONTACT, RIGHTS AND WELFARE* 37 (Andrew Bainham, Bridget Lindley & Martin Richards eds., 2003).

¹⁶⁵ Orr & Siegler, *supra* note 29, at 301; Lewis, *supra* note 62, at 1175; Evelyn Shuster, *The Posthumous Gift of Life: The World According to Kane*, 15 *J. CONTEMP. HEALTH L. POL.* 401, 409–10 (1999).

¹⁶⁶ Landau, *supra* note 59, at 1952–953.

¹⁶⁷ *Id.* at 1953.

¹⁶⁸ LEWIS, *supra* note 29, at 24–5.

¹⁶⁹ PARFIT, *supra* note 101, at 351–77; I. Glenn Cohen, *Regulating Reproduction: The Problem with Best Interests*, 96 *MINN. L. REV.* 423 (2011); I. Glenn Cohen, *Beyond Best Interests*, 96 *MINN. L. REV.* 1187 (2012).

¹⁷⁰ Sheila A. M. McLean, *Post-Mortem Human Reproduction: Legal and Other Regulatory Issues*, 9 *J. L. & MED.* 429, 437 (2002).

In responding to the ‘non-identity problem’, several theories provide justifications for protecting the interests of future people. One theory, the ‘threshold conception of harm’, explains that an action can be harmful if it causes an individual to have a life that falls below a certain threshold.¹⁷¹ Another theory is the ‘impersonal principle of beneficence’. It claims that if either of two possible outcomes occur in which the same number of people live, the situation is inferior if those who live are worse off, or have a lower quality of life, than those who would have lived.¹⁷² A third theory, the ‘externalities approach’, focuses on the costs of other parties.¹⁷³

None of these theories is sufficiently persuasive when it comes to posthumous reproduction. First, regarding the ‘threshold conception of harm’, even if some problems arise in the child’s life, their development could be thwarted via appropriate mental health care. Such issues would not cause the child to live below a minimum level of well-being or to have a lower quality of life. In addition, the claim that posthumous reproduction harms the child runs against the modern structure of the family unit.¹⁷⁴ In contemporary society, there are more single parent families and more cases in which the social parent and the genetic parent are not the same. Studies have not produced any evidence of harm to children who are raised by a single parent.¹⁷⁵ Moreover, individuals live longer today than ever before,¹⁷⁶ and as such, concerns regarding the fitness of the deceased’s parents as a primary caregiver are significantly lower.

Second, regarding the ‘impersonal principle of beneficence’, its use is restricted to ‘same-number’ cases—that is, those in which the world would contain the same number of people, regardless of which option is chosen.¹⁷⁷ Under this theory, ‘it is only in same-number cases that the non-person affecting principle approach can declare that the world is better off from an impersonal standpoint if the substitution takes place’.¹⁷⁸ However, it seems that posthumous reproduction is, in fact, a ‘different-number’ case, as divergent numbers of children would come into existence with each alternative. By prohibiting posthumous reproduction, fewer children would be produced. Therefore, the impersonal principle of beneficence does not support the regulation of reproduction when it produces fewer children.¹⁷⁹

Third, regarding the ‘externalities approach’, it cannot justify a total ban on posthumous reproduction. It can possibly support the claim that posthumous reproduction does not help to reduce the number of orphans—that is, instead of bringing a new child into the world, the deceased’s partner or parents should adopt an existing child.

¹⁷¹ Jeff McMahan, *Wrongful Life: Paradoxes in the Morality of Causing People to Exist*, in RATIONAL COMMITMENT AND SOCIAL JUSTICE 208 (Jules L. Coleman & Christopher W. Morris eds., 1998); Lukas H. Meyer, *Historical Injustice and the Right of Return*, 5 THEO. INQ. L. 305, 306–11 (2004).

¹⁷² PARFIT, *supra* note 101, at 378.

¹⁷³ Cohen, *Beyond Best Interests*, *supra* note 169, at 1217.

¹⁷⁴ Collins, *supra* note 5, at 434.

¹⁷⁵ Alison Douglass & Ken Daniels, *Posthumous Reproduction: A Consideration of the Medical, Ethical, Cultural, Psychosocial and Legal Perspectives in the New Zealand Context*, 5 MED. L. INT’L. 259, 268 (2002).

¹⁷⁶ In Europe, life expectancy was 81 years of age in 2016, and in the United States it was 79. In countries such as Israel and the United Kingdom, people reach 81 to 83 years of age on average. See World Bank, *World Development Indicators* (2016), <https://data.worldbank.org/indicator/SP.DYN.LE00.IN> (accessed May 24, 2018).

¹⁷⁷ Cohen, *Regulating Reproduction*, *supra* note 169, 485–86.

¹⁷⁸ *Id.* at 486.

¹⁷⁹ *Id.* at 487.

Another possible argument is that posthumous reproduction may harm the couple's existing children, if any, due to the wider distribution of existing resources across children. However, there are several problems associated with this theory. The first relates to the fact that in many cases, there are no existing children.¹⁸⁰ The second problem is that it only considers the negative externalities.¹⁸¹ As previously discussed, posthumous reproduction would benefit the deceased's partner and parents. The third drawback is that it does not consider the overall benefit that posthumous reproduction brings. The benefit arising from the child's birth may outweigh any negative externalities affecting others. The fourth problem concerns under inclusivity.¹⁸² As Glenn Cohen has argued, 'there are many forms of reproduction producing comparable or worse reproductive externalities and no intervention has been imposed.'¹⁸³ Thus, there would seem to be a lack of valid arguments for prohibiting posthumous reproduction while at the same time permitting other practices.

CONCLUSION

The topic of posthumous reproduction raises a wide range of ethical and legal dilemmas. The article addressed some of those dilemmas, such as whether it is possible to presume the deceased's intentions; what status the deceased's partner and parents have in determining the deceased's interests; and whether posthumous reproduction is against the resulting child's best interests. The core argument of the article was that posthumous reproduction should be legally permitted, even in the absence of the deceased's prior consent, and that the default position should be to presume that the deceased consented to posthumous reproduction, unless he or she previously objected to it or there are strong indications (eg religious beliefs or values) that the person would not have agreed. Decisions to prohibit posthumous reproduction should not be based solely on the principles of autonomy and bodily integrity and more considerations should be taken into account, including the deceased's interest in genetic continuity, the partner's interest in procreating and becoming a parent, the parents' interest in grandparenthood, and the child's opportunity to come into existence.

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¹⁸⁰ Cohen, *Beyond Best Interests*, *supra* note 169, at 1218.

¹⁸¹ *Id.* at 1230.

¹⁸² *Id.* at 1123.

¹⁸³ *Id.*