

RESEARCH ARTICLE

The law and ethics of a property rights approach to frozen embryo disputes

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Abstract

Disputes over frozen embryos represent a particularly problematic case, legally and ethically, due to the ambiguity of their moral and legal status and the potential rights-claims which can be made with regard to them. Recent work has contextualised frozen embryos as liminal and suggested a contextual approach to their legal classification. By appeal to personal property law, with a lens provided by Roman law doctrines, and reproductive bioethics, we argue that frozen embryos may be subjects of property rights, providing a more stable framework for dispute resolution. To illustrate how a property approach would work, we reconsider the facts of the influential *Evans* case and argue that if a proprietary rather than promissory estoppel claim had been pursued, the reverse outcome may have been reached, to the benefit of women who are disproportionately harmed in these scenarios.

Keywords: health law; personal property; frozen embryos; estoppel

Introduction

In the UK, the creation, freezing and use of embryos is governed by the Human Fertilisation and Embryology Act 1990 (HFEA 1990).¹ Despite the existence of this statutory framework, the popularity of cryopreservation technology has given rise to numerous disputes over the use or disposal of frozen embryos when relationships have broken down between the genetic parents.² This is mirrored in jurisdictions across the world.³ Having jointly created embryos from both of their genetic material, the question of what happens when the parties are no longer of one mind is a contentious one. In a great number of cases worldwide, the courts have typically found in favour of the male partner who applied to withdraw consent for the continued storage or implantation of embryo. Waldman notes a trend in which:

we see courts desperately seeking – using a variety of different analytical tools – to do one thing... the courts are, in reality, striving to accomplish one goal – to make sure that the parent who no longer wants the embryos containing his or her genetic material brought to term wins.⁴

¹As amended, especially by the Human Fertilisation and Embryology Act 2008.

²*Evans v Amicus Healthcare Ltd and Others (Secretary of State for Health and Another intervening)* [2004] EWCA Civ 727, [2005] Fam 1; *ARB v IVF Hammersmith* [2018] EWCA Civ 2803, [2020] QB 93.

³*Davis v Davis* (1992) 842 SW 2d 588 (1992) (Supreme Court of Tennessee, at Knoxville); *Terrell v Torres* (2020) No CV-19-0106-PR (Supreme Court of the State of Arizona).

⁴E Waldman ‘King Solomon in the age of assisted reproduction’ (2001) 24 *Thomas Jefferson Law Review* 217 at 221.

The tide has perhaps begun to shift the other way in some jurisdictions, however, with recent legislation in Arizona seeking to ensure that frozen embryos of divorced spouses go to the spouse who wants to allow them to be born.⁵

This paper is not necessarily interested in the end result, but in the tools that courts use to get there. We argue that the law is neglecting a powerful part of its dispute resolution arsenal – property rights. It can be cogently argued that this is a response to the ‘special status’ bestowed on embryos *in vitro*, which has led to a reluctance to reify them but an equal and opposite reluctance to afford them rights linked to legal personhood.⁶ McMillan notes that ‘embryos/fetuses have not been comfortably fitted within the boundaries law provides persons and objects’ but argues we need to ‘think beyond a bounded approach to the regulation of embryos *in vitro*’.⁷

Here we hope to explore one view of what the legal landscape might look like in the great unbounded beyond – how a personal property rights regime might apply to frozen embryos and the possible effect of that on legal disputes. Legal and ethical questions concerning the mechanics and justifications of considering frozen embryos as property are numerous; we will attempt to work through them in this paper. Further questions remain, as the *Evans* line of cases made clear,⁸ about rights to – and, conversely, to be free of – parenthood. A key notion underpinning many decisions leading to the destruction of disputed embryos was that the male partner’s right not to become a genetic father outweighed the female partner’s purported right to use her own genetic material in becoming a mother.⁹ But how is each kind of rights-claim over the embryos grounded, and how should we understand conflicting claims? We will therefore consider how those claims might interact with a property rights approach to embryo dispute resolution.

We examine various legal and ethical approaches to understanding these rights-claims, and the ways in which these approaches have been defended and applied. On the presupposition that law should (ideally) accord with ethics, we pursue a reflective equilibrium, considering both legal precedent and bioethical accounts of procreative rights. In particular, we appeal to recent strands of bioethics that focus on genetic privacy and reproductive rights alongside traditional Roman doctrines of personal property law. In Section 1 we argue that, ultimately, it is ethically legitimate to use personal property law in relation to human embryos in such circumstances. Section 2 examines the form property rights might take and Section 3 builds on this to show exactly how that approach, if used, may have made a substantial difference to the legal reasoning in *Evans* through proprietary estoppel.

1. Embryos as property?

(a) *What is property?*

When non-lawyers think of property, they think of *things*. Starting from that point of view, it is easy to see how personal property law could have a role in how we treat bodily material, including embryos, since as Jesse Wall points out:

there are important similarities between items of property and items of bodily materials. Both items are objects that exist physically separate from any particular person ... The intuitive attraction of treating items of bodily material as items of property begins with this observation that items of bodily material appear to function in the same way as items of property.¹⁰

⁵ Ariz Rev Stat Ann § 25-318.03 (Supp 2018).

⁶ CAW McMillan *The Human Embryo In Vitro: Breaking the Legal Stalemate* (Cambridge: Cambridge University Press, 2021) p 70.

⁷ *Ibid*, p 89.

⁸ *Evans*, above n 2; *Evans v United Kingdom* (App no 6339/05) [2007] ECHR 264, [2007] 4 WLUK 145.

⁹ *Evans v UK*, above n 8.

¹⁰ J Wall *Being and Owning: The Body, Bodily Material, and the Law* (Oxford: Oxford University Press, 2015) p 13.

But of course, property means something more technical in law and ‘is not things but rights, rights in or to things’.¹¹ Thus when we discuss whether to treat embryos, or any other human material, as property, it is not to deny they are physical objects in the world that we can interact with, use and potentially destroy, but instead whether specific property rights are applicable to them. The current legal frameworks around human tissue and reproductive material are contained in the Human Tissue Act 2004 and the HFEA 1990. They are based around ideas not of property but autonomy and consent, which is also how we consider questions about living human bodies.

‘Property is a complex business,’ remarked Muireann Quigley.¹² It has been debated whether it is possible to even say that property has a ‘definable essence’ at all,¹³ or if it is simply an amorphous and flexible concept – generally referred to as a ‘bundle’. A simple place to start is that property rights are about the ‘relationship between an individual and a thing, and the effect of that relationship on the world at large’.¹⁴ Linked to this is the idea that property rights are universal, unlike contract rights, and thus enforceable against the world at large. In this way they are similar to rights such as bodily integrity: I have a right to not be attacked and this is enforceable against everyone. But Penner explains a key conceptual difference thus:

We do not conceive of a property right not to be murdered because our legal right not to be murdered is not justified by a title, purchased or not. Our legal right not to be murdered is based upon considerations about the universal status of persons. A person is conceived as having the right simply by being a living human.¹⁵

There has therefore always been a tension between personhood and property, and this has radically affected the way the law has considered property rights and the human body.

(b) Property rights to human tissue

Property rights to human tissue in general are not a settled matter by any means, for either law or bioethics. The question of property rights to human tissue has only become more complex in the last century, as legal scholars and philosophers struggle to keep up with medical advances. It had long been a widespread legal position in England and Wales that the human body and any parts thereof cannot be the subject of property rights.¹⁶ However, as medicine and technology have advanced, this general line has become ever more blurred.

The most significant development in common law in this area came from an Australian case called *Doodeward v Spence*,¹⁷ which held that ‘a human body, or a portion of a human body, is capable in law of becoming the subject of property’.¹⁸ This case concerned the foetus of conjoined twins, preserved as a curiosity. It was found it could be subject to property rights on the basis – paralleling the traditional Lockean view of property rights – that there had been a ‘lawful exercise of work or skill’ on the tissue.¹⁹ On the question of a foetus being a human person, the judge also noted ‘It was never alive in the ordinary sense of human life’.²⁰ In this way the judge neatly side-stepped the issue of the person/property dichotomy that we will encounter in subsection (d) below.

¹¹CB MacPherson ‘The meaning of property’ in CB MacPherson (ed) *Property: Mainstream and Critical Positions* (Toronto: University of Toronto Press, 1999) p 2.

¹²M Quigley *Self-Ownership, Property Rights and the Human Body* (Cambridge: Cambridge University Press, 2018) p 129.

¹³JE Penner ‘The bundle of rights picture of property’ (1995) 43 *UCLA Law Review* 711 at 723.

¹⁴M Bridge *Personal Property Law* (Oxford: Oxford University Press, 2015) p 1.

¹⁵Penner, above n 13, at 804.

¹⁶I Goold et al ‘The human body as property? Possession, control and commodification’ (2014) 40 *Journal of Medical Ethics* 1.

¹⁷*Doodeward v Spence* (1908) 6 CLR 406 (High Court of Australia).

¹⁸*Ibid*, at 414.

¹⁹*Ibid*, at 414.

²⁰*Ibid*, at 416.

The possibility of these rights identified in *Doodeward* was first recognised in English law in *Dobson v North Tyneside Health Authority*,²¹ though on the facts of that case it did not apply as the alleged ‘work or skill’ was merely the preserving of a brain in paraffin.²² Body parts preserved as medical specimens by the Royal College of Surgeons were held to be property for the purposes of the Theft Act 1968 in *R v Kelly* when Kelly appropriated them for use in his art work.²³ Rose LJ noted in that case the possibility of future expansion in this area, observing:

the common law does not stand still. It may be that if, on some future occasion, the question arises, the courts will hold that human body parts are capable of being property... if they have a use or significance beyond their mere existence.²⁴

These *obiter dicta* have been called ‘significant’ in paving the way for property rights based on the context of the tissue, not exercise of care.²⁵

(c) *The Yearworth precedent*

*Yearworth v North Bristol NHS Trust*²⁶ has been called a ‘turning point’ in jurisprudence relating to property rights to the human body.²⁷ It marks a move away from the idea that there needs to be an exercise of skill on the human biological material for it to be property, and also applies not to dead and detached body (parts) but living cells that are a product of a living body. *Yearworth* concerned the negligent destruction of sperm samples of a group of men in treatment for cancer. The loss of their samples, and thus potentially their remaining fertility, caused psychiatric injury to the claimants, who then sought compensation from the NHS Trust.

The Court of Appeal found that while damage to their semen sample could not constitute personal injury to the claimants, the sample could amount to property for the purposes of a claim in negligence when said sperm is stored at a clinic licenced under the HFEA 1990. The judges expanded beyond *Doodeward v Spence* with the help of *R v Kelly*, finding that the sperm belonged to the men on the grounds that it might later be used for their benefit; they claimed that the rights granted by the Act, from the right to use the sperm, to the right to require destruction, are by nature ownership rights such as those set out by Honoré in his classic essay on ownership:

Ownership comprises the right to possess, the right to use, the right to manage, the right to the income of the thing, the right to the capital, the right to security, the rights or incidents of transmissibility and absence of term, the prohibition of harmful use, liability to execution, and the incident of residuary: this makes eleven leading incidents.²⁸

Key in the judges’ reasoning on this issue was that ‘the listed incidents are not individually necessary, though they may be together sufficient’,²⁹ therefore lacking some of these rights in relation to the sperm would not leave their claim of ownership groundless. Furthermore, since the main reason for preserving the sperm was so that the men could use it, the Court quoted Honoré, saying, ‘[t]he right (liberty) to use at one’s discretion has rightly been recognised as a cardinal feature of ownership,

²¹*Dobson v North Tyneside Health Authority* [1997] 1 WLR 596 (EWCA Civ).

²²*Ibid*, at 601.

²³*R v Kelly* [1999] 2 WLR 384 (EWCA Crim).

²⁴*Ibid*, at 393.

²⁵R Hardcastle *Law and the Human Body: Property Rights, Ownership and Control* (Oxford: Hart Publishing, 2007) p 32.

²⁶*Yearworth v North Bristol NHS Trust* [2009] EWCA Civ 37, [2010] QB 1.

²⁷Goold et al, above n 16.

²⁸AM Honoré ‘Ownership’ in AG Guest (ed) *Oxford Essays in Jurisprudence* (Oxford: Oxford University Press, 1961).

²⁹*Ibid*, p 116; *Yearworth*, above n 26, para 28.

and the fact that ... certain limitations on use also fall within the standard incidents of ownership does not detract from its importance.³⁰

The Trust argued that since the effect of the HFEA 1990 is to constrict these rights and limit them to licensed facilities, the men's preferences towards the semen did not amount to property rights. However, this was rejected by the Court, on the basis that while these property rights are limited by the HFEA 1990, this is analogous to the limitations numerous statutes apply to a landholder's rights to use his property, for example planning permission or protection of tenants from eviction.³¹ Thus, the men were found to have property rights to the sperm for the purposes of a claim in negligence and also bailment.

(d) Embryos and exceptionalism

Body parts, including sperm and eggs, may therefore be subject to (limited) property rights in English law. Embryos, however, give rise to difficulties for both legal and ethical rights-claims. Whilst the rights to control, use and destruction, amounting to quasi-property rights, as established in *Yearworth*, clearly apply to embryos created under the HFEA 1990, embryos are subject to exceptionalism in this regard.

In 1982, after Louise Brown, the first child born from IVF, was born in 1978, the UK government established the Committee of Inquiry into Human Fertilisation and Embryology, headed by Baroness Mary Warnock (the Warnock Committee). The HFEA 1990 closely followed the Warnock Report's recommendations.³² Most relevant to this paper is the Warnock Report's recommendation that legislation ensure that 'there is no right of ownership in a human embryo'; instead it recommends ascribing a 'special status' to the embryo.³³ Unfortunately, this has simply rendered the status of embryos in law unclear. Fox and Murphy argue that the precise legal status of the embryo 'remains undecided, or perhaps undecidable',³⁴ and others have pointed out that retaining this 'special status' while supporting the legal access to termination of pregnancy and the right of a woman to refuse medical treatment leaves the 'rhetoric ... unsustainable'.³⁵

The Warnock recommendation is also partly grounded in the view that ownership of human embryos might have 'undesirable' consequences: if an embryo is understood as a distinct human organism, rather than merely a transposed cell of the mother or father, then ownership rights over embryos might imply ownership rights over persons.³⁶ Thus, as Dickenson has noted, the law around property and the body traditionally follows a Kantian approach in affirming a strict person/object dichotomy.³⁷ According to Kant, 'it is impossible, of course, to be at once a thing and a person, a proprietor and a property at the same time'.³⁸ But in contrast to this position, embryos are not considered to be living persons, though neither are they subject to property rights, unlike the gametes of which they are made up.

However, arguments from the field of philosophy of parenthood demonstrate that we can straightforwardly avoid these 'undesirable' implications. Whilst the rejection of either category 'children' or 'property' when dealing with frozen embryos may be intuitively more comfortable

³⁰*Yearworth*, above n 26, para 28; Honoré, above n 28, p 116.

³¹*Yearworth*, above n 26, para 45.

³²McMillan, above n 6, p 42.

³³Mary Warnock and Committee of Inquiry into Human Fertilisation and Embryology 'Report of the Committee of Inquiry into Human Fertilisation and Embryology' (1984) Cmnd 9314 para 10.11.

³⁴M Fox and T Murphy 'Can law facilitate embryonic hopes?' (2010) 19 *Social and Legal Studies* 498.

³⁵M Ford 'Nothing and not nothing: law's ambivalent response to transformation and transgression at the beginning of life' in S Smith and R Deazley (eds) *The Legal, Medical and Cultural Regulation of the Body: Transformation and Transgression* (Abingdon: Routledge, 2009) p 31.

³⁶Warnock and Committee of Inquiry into Human Fertilisation and Embryology, above n 33, para 10.11.

³⁷D Dickenson *Property in the Body: Feminist Perspectives* (Cambridge: Cambridge University Press, 2nd edn, 2017) p 5.

³⁸I Kant *Lectures on Ethics* (P Heath and JB Schneewind eds, P Heath tr, Cambridge: Cambridge University Press, 1997) p 157.

for some in light of the undeniable significance of embryos' potential to *become* children, we hold that acceptance of the special nature of embryos is compatible with use of a property rights framework in resolving disputes over their disposal. This is because such a framework allows for variation in the extent and type of rights associated with ownership, depending on the nature of the property. As Page notes, 'the so-called absolute control traditionally associated with property rights was never quite absolute'.³⁹ Instead, we recognise legal and moral restrictions on property rights, including 'restrictions on uses of land, bans on exporting or destroying works of art, and limits on the number of people who may live in a house of a given size, and so on'.⁴⁰ We may note the similarity of this argument to that employed by the judges in *Yearworth*. Just as prohibiting cruelty to animals does nothing to undermine their status as property, so recognising the special legal and moral status of embryos does not undermine the application of a property rights framework.

(e) Context is key

The dichotomy between person and object need not be quite so stringent, and instead could – and it has been argued should – rely on the specific context in which the embryos find themselves, thus recognising 'the multiplicity of legally liminal persons, objects and subject-objects' that embryos can represent.⁴¹ Hallich's 'adoption model' of embryo transfer might present an example of this contextual approach.

When considering what to do with excess embryos left over after successful IVF treatment, Hallich seems to suggest a view of embryos as persons, rather than property.⁴² However, once his defence of this model is situated in the relevant context – that of relinquishment of surplus embryos following IVF – it becomes clear that his concern is not for the rights of embryos *qua* persons, but for the rights of the persons brought into existence when we relinquish embryos for use by others. Moral weight is accorded to the embryos given that the relevant context is one in which they *will* become persons.

Taking geneticism to be 'the most persuasive theory of parental responsibility',⁴³ Hallich argues that, if we accept this theory, logical consistency demands that we likewise accept that we have parental responsibilities to the embryos that we create. This is not to say that we have parental responsibilities to embryos *qua* embryos – after all, an embryo is not the kind of thing that one can 'raise and nurture'.⁴⁴ Rather, his view is that we have parental responsibilities to embryos *qua* future children, and thus have weightier considerations in relinquishing them to the care of others than when we transfer property. Whilst embryo adoption can and should be distinguished from the adoption of born children, he argues that the transfer of embryos nevertheless has more in common with adoption than with the donation of property.

Building on the liminality of the 'special status' of embryos, we believe that Hallich's view is compatible with the view that embryos can nonetheless be treated as property in certain *other* contexts. So, in the context of dispute over the disposal of embryos by the progenitors, the embryos *qua* embryos may still reasonably be considered the property of those progenitors. Since one of the possible outcomes for those embryos is destruction, we cannot speak of the embryos *qua* future children. In the context with which Hallich is concerned, on the other hand, the presupposition is that the embryos *will* be gestated to term (and the moral issue at stake is that of responsibilities to the children they will become) and so it is reasonable to speak of embryos *qua* future children.

³⁹E Page 'Parental rights' (1984) 1 *Journal of Applied Philosophy* 187 at 193.

⁴⁰*Ibid.*

⁴¹McMillan, above n 6, p 207; M Fox and S McGuinness 'The science of muddling through: categorising embryos' in C Stanton and S Devaney (eds) *Pioneering Healthcare Law: Essays in Honour of Margaret Brazier* (Abingdon: Routledge, 2015).

⁴²O Hallich 'Embryo donation or embryo adoption? Conceptual and normative issues' (2019) 33 *Bioethics* 653.

⁴³*Ibid.*, at 654.

⁴⁴*Ibid.*

It thus seems clear that recognition of the special nature of embryos as potential persons, and indeed recognition of the interests and rights of the persons that embryos will become if gestated to term, is no barrier to the application of a property rights framework in the specific context of resolving disputes over the disposal of frozen embryos. However, a further question that must be settled is that of to whom frozen embryos belong. This paper will now consider how that question might be addressed using existing legal structures before examining ethical analyses to see if indeed our proposed legal approach would be ethical.

2. Can we share embryos?

Shared or joint property rights are accommodated by the law in a host of other situations; the questions arising from competing rights-claims concerning frozen embryos are reminiscent of legal arguments surrounding property of other kinds. David Johnston and other commentators have proposed turning to Roman law when dealing with complex property issues emerging from developing biotechnology, claiming that ‘it provides a structure, a taxonomy of rights and the ways in which they arise, a guiding framework to cling to when rights, wrongs and remedies all seem deeply obscure’.⁴⁵ We agree.

In personal property law, three key doctrines relevant to mixtures are *confusio*, *specificatio*, and *accessio*.⁴⁶ The vocabulary and concepts of these are heavily borrowed from Roman law, so it cannot be assumed that it maps perfectly onto English law.⁴⁷ Nonetheless, solutions to such disputes in English law have often borrowed heavily from Roman law as the common law is somewhat undeveloped in this area.⁴⁸

(a) *Confusio*

In Roman law, the doctrine of *confusio* was generally applied to the mixing of liquids or fusing of metals that are then impossible (or simply impracticable) to separate.⁴⁹ It has been considered in modern English law, such as when Lord Hoffmann referred to it in *obiter dicta* in the influential tracing case *Foskett v McKeown*.⁵⁰ In such cases, the basic rule is that this compound becomes joint property, shared between tenants in common proportionately to the original contribution.⁵¹ This doctrine applies to the combination of artefacts where the product is essentially of the same ‘stuff’ as the components, for example oil. The oil might be of different origins or quality. If the embryo is conceptualised as essentially the same ‘stuff’ as the gametes from which it is produced, then the embryo is jointly the property of both progenitors. Is this a reasonable characterisation?

If we consider embryos and gametes all to belong to the category of ‘reproductive material’ then it would seem that fertilisation is simply the mixing of some reproductive material which leaves them inseparable but still substantively the same. However, a narrower characterisation of these artefacts throws the applicability of *confusio* into question. Sperm and eggs are haploid/germ cells, any of which could (in theory) be used to fertilise any other haploid/germ cell of the other kind. Embryos, on the other hand, are made of diploid/somatic cells; fertilisation eliminates the potential combinations that might have resulted from merging with other gametes. Embryos are thus ‘reproductive material’ with a significantly limited potential (insofar as we are concerned with the possible reproductive outcomes they represent) in comparison with unfertilised gametes. To take a crude analogy, we could say that gametes are to embryos what milk is to yoghurt or cheese. Milk, yoghurt, and

⁴⁵D Johnston ‘The renewal of the old’ (1997) 56 Cambridge Law Journal 80 at 90; Hardcastle, above n 25, p 131.

⁴⁶A Borkowski *Textbook on Roman Law* (Oxford: Oxford University Press, 2005).

⁴⁷Bridge, above n 14, p 130.

⁴⁸D Fox *The Reception of Roman Law into the Anglo-American Common Law of Mixed Goods* (University of Cambridge, 2016).

⁴⁹Bridge, above n 14, p 131.

⁵⁰*Foskett v McKeown and Others* [2001] AC 102 (HL) at 115.

⁵¹Bridge, above n 14, p 134.

cheese are all dairy products, just as gametes and embryos are all reproductive materials – but we must acknowledge the significance, particularly for rights-claims, of the difference in function and potential of these reproductive materials. The doctrine of *confusio* thus seems inappropriate as a means of solving conflicts over frozen embryos.

But is the physical *matter* of the embryo, and the materials contributed by each genetic parent, the property at stake here? It could well be argued that the rights-claims relevant to conflicts over frozen embryos are rights-claims concerning genetic *information* held by the embryo, to which both parents contribute more-or-less equally (we say more-or-less because there is a slight disparity, owing to the unilateral transfer of mitochondrial DNA from the egg). Genetic information from each parent can perhaps be more easily called the same ‘stuff’ than can sperm, egg and embryo all be labelled ‘reproductive material’. It might be argued that the rights of individuals over their genetic information, contained within the embryo, give rise to rights against the use of the embryo by others (without permission).⁵² This genetic material represents the individual’s possibilities for exercising reproductive autonomy; importantly for our purposes, fertilisation can constitute a *constraint* upon each individual’s reproductive autonomy. After fertilisation, avoidance of reproduction can be fulfilled only through the destruction of the other person’s reproductive opportunity (*vis-à-vis* *this* genetic material) and, conversely, the pursuit of reproduction is necessarily concomitant with the other individual reproducing.

(b) Specification

The doctrine of *specification* may provide us with insight into this issue. This doctrine (in Roman law) applies to the production of a *novam speciem*, or ‘new thing’, through the combination or modification of artefacts. The classic Roman example was of grapes converted into wine.⁵³ Bridge points to a more modern example of making handbags out of leather.⁵⁴

The application of *specification* in British law is far from uncontroversial, perhaps most notably in the Scottish case of *Kinloch Damph v Nordvik Salmon Farms Ltd*,⁵⁵ which cast doubt on whether the doctrine can be applied to living things. The case concerned a dispute over adult salmon which had developed from a more juvenile stage. However, the facts of the case are different enough to allow for distinction and the reasoning has been criticised as a misstatement of the principle.⁵⁶ Metzger argues that it was more accurate to understand the growing salmon as not being the subject of specification because specification assumes the destruction of the original thing in the manufacturing process. The salmon have changed and grown but have always been in sight. This contrasts with the created embryos where the sperm and egg cease to exist once they are combined, see subsection (a) above. Specification is the only doctrine that deals with the destruction of the goods in the pursuit of something new and therefore, it could be argued, is the only appropriate approach to take.

Specification generally implies the exertion of labour. When a ‘new thing’ is created from one or more objects, the property rights of those who previously owned those objects are extinguished, and the doctrine is then used to decide which original owner gains rights in the new property. When the new thing has been created in good faith the general rule is that the new title vests in the labourer.⁵⁷ However, if an alternate agreement was reached between the owners of the materials and labour that the title will vest in the owner of the materials, this will be honoured.⁵⁸

⁵²We will return to these questions of genetic privacy and parenthood below.

⁵³EG Lorenzen ‘Specification in the civil law’ (1925) 35 *The Yale Law Journal* 29 at 30.

⁵⁴Bridge, above n 14, p 131; *Re Peachdart Ltd* [1983] 3 WLR 878 (Ch).

⁵⁵*Kinloch Damph Ltd v Nordvik Salmon Farms Ltd & Others* [1999] ScotCS 162 (CSOH).

⁵⁶E Metzger ‘Postscript on *Nova Species and Kinloch Damph v. Nordvik Salmon Farms Ltd.*’ (2004) 2 *Roman Legal Tradition* 115.

⁵⁷*Borden (UK) Ltd v Scottish Timber Products Ltd* [1979] 3 WLR 672 (EWCA Civ).

⁵⁸*Clough Mill Ltd v Martin* [1985] 1 WLR 111 (EWCA Civ).

There is, however, no straightforward precedent in Roman law for determining what happens when the new thing was created in bad faith,⁵⁹ and different civil law systems continue to vary in their responses to such questions. English law has little authority on the issue.⁶⁰ In general, the two main approaches to determining title to the new property are: (a) that the original owner of the majority of the materials used gains property rights in the new artefact; and (b) that the individual who performed the majority of the relevant labour in creating the new artefact gains these property rights.⁶¹

Considering this in the context of embryos, the former approach has parallels in proprietary geneticism (mentioned above), whilst the latter has parallels in accounts of parenthood such as Millum's 'investment principle'.⁶² This theory grants parental rights to those who perform the majority of the parental labour involved in caring for and raising a given child (including parental labour performed prior to the child's birth, such as the preparation of a nursery). Either approach to *specification* in bad faith would, it seems, result in the female partner having greater rights-claims in the event of conflict over frozen embryos. The majority of the physical material from which the embryo is produced is constituted by the egg, the egg being about 10,000 times larger than sperm cells. The mother also contributes slightly more genetic information in the form of mitochondrial DNA.⁶³ So it can be fairly uncontentious to say that the majority of material comes from the mother (even if on a slim margin).

Alternatively, the time and physical labour invested in harvesting eggs is significantly greater than that involved in producing sperm (a procedure which requires no clinical intervention and carries minimal risks to life and health). Donna Dickenson calls the labour in egg retrieval 'substantial',⁶⁴ quoting a study by the ethics committee of the American Society for Reproductive Medicine that estimates the time women have to put into egg retrieval as 56 hours.⁶⁵ This includes daily hormone injections, ultrasound monitoring and a procedure under mild sedation, all involving some level of risk to the woman's health.⁶⁶ So again, it is fair to say that women provide the majority of the labour in the process of creating an IVF embryo.

Bridge suggests 'an intermediate solution ... that the owner of the materials obtains a shared interest in the new thing by way of a tenancy in common, along with the operator [labourer] and the owner of other raw materials used in the process'.⁶⁷ Interestingly, a relatively recent English case with a *specification* type of fact pattern explained the subsequent allocation of property rights as a result of implied intention.⁶⁸ If this is the legal mechanism at work in English law, there is no reason that it cannot be said there is an implied intention to create a joint property right in the new thing.

(c) *Accessio*

If the idea that sperm and egg are destroyed in the act of fertilisation is not convincing then the final main doctrine that deals with mixture of goods to turn to is *accessio*. It deals with deciding ownership of objects which have been joined together, where one object is considered the *principal* and the other

⁵⁹Lorenzen, above n 53, at 31; Bridge, above n 14, p 133.

⁶⁰Bridge, above n 14, p 133.

⁶¹Lorenzen, above n 53, at 29.

⁶²J Millum *The Moral Foundations of Parenthood* (Oxford University Press, 2018).

⁶³S Luo et al 'Biparental inheritance of mitochondrial DNA in humans' (2018) 115 *Proceedings of the National Academy of Sciences* 13039.

⁶⁴Dickenson, above n 37, p 48.

⁶⁵The Ethics Committee of the American Society for Reproductive Medicine 'Financial incentives in recruitment of oocyte donors' (2004) 82 *Fertility and Sterility* 240.

⁶⁶Dickenson, above n 37, p 48.

⁶⁷Bridge, above n 14, p 134.

⁶⁸*Glencore International AG v Metro Trading International Inc (No 2)* [2001] 1 Lloyd's Rep 284 (Comm Ct).

an *accession*. The owner of the principal is held to be the owner of both the principal and all that accedes to it. Blackburn J in *Appleby v Myers* gives these examples as illustration:

Bricks built into a wall become part of the house; thread stitched into a coat which is under repair, or planks and nails and pitch worked into a ship which is under repair, become part of the coat or ship...⁶⁹

Importantly, for our purposes, accession can be artificial (for example, building a house on a portion of land) or natural (for example, trees bearing fruit or animals reproducing). The term *accessio* is also applied to the products of the principal (in these cases, the fruit or the offspring), paralleling Lockean theories of ownership – where an individual has a legitimate proprietary claim to the principal, they own the fruit of the principal.⁷⁰ According to *accessio*, then, the owner of a cow, not the bull, will own the calf.⁷¹

How might we apply this to the production of frozen embryos? Whilst some scholars have argued that ‘the rights of both gamete donors should be considered equal’,⁷² there are biological and meta-physical arguments to be made for considering the egg to be the principal object, to which the sperm accedes. As Mills notes, fertilisation is not the fusion of two cells, but rather the dissolution of the male gamete, and the incorporation of its genetic material into the ovum: ‘Throughout the process of fertilization, there’s just a single living cell relevantly in view. After the absorption of the spermatic material, this cell undergoes rearrangement of its internal parts, and in particular of its genetic material.’⁷³

There is a strong case for holding that fertilisation constitutes the modification of the egg *by* the sperm, rather than: (a) the formation of a new object equally constituted by two components; or (b) the formation of a new object following the equal annihilation of the two. On this logic then, the sperm accedes to the egg and the property rights to the embryo thus remain with the mother. A further argument for this approach is that it is common to talk about a ‘fertilised egg’ – using an adjective to modify the noun ‘egg’, indicating it is the dominant, or principal, component.

(d) *Changing, mixing or combining?*

To conclude this section, there are a multitude of different conclusions one could come to about ownership of frozen embryos depending on how we conceptualise what is happening and how that shapes our choice of framework. We suggest there are two main outcomes:

1. The result of applying either *accessio* or *specificatio* appears to grant a full title in embryos to the mother. As explained above, from a legal theory point of view, this could be an acceptable solution and ethically there is a clear and strong argument for this as well. However, socially speaking this is likely to be too extreme an answer when arguments from geneticism are considered. It also goes in the face of the HFEA 1990’s regime which seems to allow for a male veto after fertilisation but before use.⁷⁴
2. Alternatively, the mixture of egg and sperm creates a co-ownership in the embryo according to the doctrine of *confusio*. This is a particularly easy conclusion to come to if we conceptualise eggs, sperm and embryos all as ‘reproductive matter’, or, even more convincingly, focus purely on the mingling of genetic information itself. If this view of gametes and embryos is untenable,

⁶⁹*Appleby v Myers* (1866–67) LR 2 CP 651 (Ex Ch).

⁷⁰TW Merrill ‘Accession and original ownership’ (2009) 1 *Journal of Legal Analysis* 459.

⁷¹Bridge, above n 14, p 132.

⁷²HP Forster ‘Law and ethics meet: when couples fight over their frozen embryos’ (2000) 21 *Journal of Andrology* 512 at 514.

⁷³E Mills ‘The egg and I: conception, identity, and abortion’ (2008) 117 *The Philosophical Review* 323 at 329.

⁷⁴HFEA 1990, ss 3–4.

we submit that, as Bridge suggests, the doctrine of *specification* in English law could also create a joint property right by operation of implied intention.

This paper will move forwards on the assumption that there is some kind of co-ownership of any frozen embryos created in good faith, the exact legal mechanism by which it is created being of only secondary importance. We take this approach as it provides the best fit between property law doctrines that we see applied in the context of all other human bodily material and the statutory regime around fertilisation which makes clear that both men and women have at least some use and control rights.

A shared property right would not allow any one party to assert unilateral control over the embryo but given its basis in the HFEA 1990 (as per *Yearworth*) would allow both sides to retain a veto. This veto itself can be conceptualised as one of the relevant property rights. As we will go on to show though, there are some areas where this property right would provide a much clearer framework for disputes. To illustrate this, we will re-visit the *Evans* case and suggest that identifying property rights in the case unlocks the powerful legal tool of proprietary estoppel.

3. Applying property doctrines to the *Evans* case

The line of *Evans* cases that ran from the English courts⁷⁵ up to the Grand Chamber of the European Court of Human Rights⁷⁶ provides the key current English precedent on disputes over the use or disposal of frozen embryos. Ms Evans claimed a right to use embryos made with her eggs in order to become pregnant, but her ex-partner Mr Johnston claimed the right to withdraw consent for embryos made with his sperm to be used for this purpose. All courts involved found against Ms Evans. A key notion underpinning these decisions was that the male partner's right not to become a genetic father outweighed the female partner's right – if such a right exists – to use her own genetic material in becoming a mother. The ECtHR focused on questions around the right to life and the right to private and family life. The domestic cases also considered the human rights angle but in addition examined the statutory basis of Mr Johnston's veto and, finding it clear on the language of the HFEA 1990, considered whether it could be limited through the operation of promissory estoppel. The Court of Appeal held that Mr Johnston could not be estopped from exercising his statutory right to withdraw consent. It is this question of estoppel on which we will be focusing.

(a) Facts

Ms Evans was seeking fertility treatment with her partner Mr Johnson when it was discovered that she had cancer which necessitated the removal of her ovaries, and thus her permanent infertility. She was offered one more round of IVF prior to the removal of her ovaries, allowing embryos to be created and frozen for later use.

It was accepted that 'events moved very swiftly',⁷⁷ a point that is crucially important when considering an estoppel claim. Within minutes of learning of her life-threatening cancer, Ms Evans and Mr Johnston had begun the discussion of IVF, which was complete, with consent forms signed, within the hour. During this process their fertility nurse talked them briefly through the legal aspects of the consent forms.

The proposed treatment was to have eggs harvested from Ms Evans, fertilised with sperm from Mr Johnston and then frozen. When Evans was told of the treatment, she realised that this would leave her with no eggs that were solely hers, exposing her to clear risks should the relationship dissolve. She therefore inquired about the possibility of egg freezing. The trial judge found that the nurse simply told Evans that it was not a treatment available at that particular clinic, and that (if she wished to pursue the idea further) she should talk to her doctor again.

⁷⁵*Evans*, above n 2; *Evans v Amicus Healthcare Ltd* [2003] EWHC 2161 (Fam), [2004] 2 WLR 713.

⁷⁶*Evans v UK*, above n 8.

⁷⁷*Evans* (HC), above n 75, para 45.

At this point Mr Johnston made several statements to Ms Evans, which this paper treats as crucial. It being clear that she was concerned he would leave her at some point prior to completing treatment, thus leaving her unable to use the embryos she had created to preserve her fertility, he told her to not be a 'negative person',⁷⁸ and that they did not need to have egg freezing, because he was not going to leave her and he wanted to be the father of her children.⁷⁹ If he had not said this, Evans would have indeed looked into alternative treatment, either the possibility of egg freezing or at least the use of donor sperm.⁸⁰ The judge found that Johnston did not give a categorical, unequivocal assurance that no matter what happened she could use the embryos, but Evans maintains that that is nonetheless the irrefutable inference to be drawn from what he said. As it was, both signed consent forms for the creation and use of embryos from their gametes in the treatment of them together. The form began with this disclaimer in bold type:

You may vary the terms of this consent or withdraw this consent at any time except in relation to eggs or embryos which have already been used.

Mr Johnston relied on this disclaimer to prevent Ms Evans from using the embryos.⁸¹

Following this, the IVF treatment was performed, the embryos frozen and Ms Evans was successfully treated for her cancer.⁸² She was advised by doctors to wait two years before attempting to implant the embryos.⁸³ Unfortunately, her relationship with Mr Johnston ended before that time. He wrote to the clinic withdrawing his consent for embryo storage, and Ms Evans brought legal proceedings seeking to guarantee the storage and eventual use of the embryos in her fertility treatment.⁸⁴

(b) A failed promissory estoppel claim

There were several flaws identified by Wall J in Evans' promissory estoppel claim; Alghrani characterised the claim as facing 'a number of insuperable difficulties'.⁸⁵ Wall's reasoning was accepted as correct by the Court of Appeal.⁸⁶ However, if we apply a proprietary rights regime, we argue that some of these can be rectified, as Chrysanthou has recently considered.⁸⁷ Wall J undertook a large survey of what he considered to be relevant estoppel cases and concluded that there are a number of conditions necessary for promissory estoppel to operate:

First, there must be a legal relationship between the parties. Secondly, the estoppel is not, of itself, the cause of action, although it may be an element in it. Thirdly, there must be a clear and unequivocal promise or representation which is designed to affect the legal relationship between the parties. Fourthly, there must be reliance on that promise or representation by the other party and, fifthly, it must be unconscionable for the person making the representation to be allowed to resile from it.⁸⁸

The first two criteria are clearly in issue for Evans. As Wall J explains, the structure of the Act means there is no legal relationship between the two potential parents. Each is, instead, individually in agreement with the clinic.⁸⁹ The second element is often referred to in estoppel cases as the fact that

⁷⁸Ibid, para 47.

⁷⁹Ibid.

⁸⁰Ibid, para 58.

⁸¹Ibid, para 102.

⁸²Ibid, para 87.

⁸³Ibid, para 88.

⁸⁴Ibid, para 91.

⁸⁵A Alghrani 'Deciding the fate of frozen embryos' (2005) 13 *Medical Law Review* 244 at 248.

⁸⁶*Evans*, above n 2, para 120.

⁸⁷A Chrysanthou 'Reliance and representations/promises in frozen embryo disputes: UK and Israeli approaches to estoppel' (2019) 19 *Medical Law International* 32.

⁸⁸*Evans* (HC), above n 75, para 303.

⁸⁹Ibid, para 305.

promissory estoppel acts as a ‘shield not a sword.’⁹⁰ In *Evans*’ case, this would mean she could not sue for control of the embryos. All she could do is prevent Johnston from asserting his rights, for example if he wanted to unilaterally destroy the embryos. This would not allow her to unilaterally implant them herself.

However, it was the final three elements from the list above that Wall J considered to be ‘essential’ to the success of a promissory estoppel claim. The question of reliance is easier than the other criteria in this case, although Wall J acknowledged that he still found it ‘difficult’.⁹¹ Ultimately, it seems clear from the facts that *Evans* did not explore her options regarding egg freezing fully due to Mr Johnston’s ‘assurances’.

Wall J did raise legitimate concerns about the fact that the HFEA 1990,⁹² as it was at the time, would have made it difficult for Ms *Evans* to get treatment if she was single, due to section 13(5) which included reference to a ‘child’s need for a father’ as a consideration in allowing women treatment. However, the discriminatory nature of the HFEA 1990, section 13(5) was recognised when the legislation was changed in 2008 to replace this with ‘the need for supportive parenting’.⁹³ Therefore, whilst on the exact facts of *Evans* it is possible this may have prevented Ms *Evans* from being seen as relying on Mr Johnston’s assurance, this would not be an issue if a similar situation presented itself today.

Additionally, Wall J needed to find a ‘clear and unequivocal promise or representation’ for a promissory estoppel claim to succeed.⁹⁴ Wall J found that Mr Johnston was merely ‘doing his best to reassure Ms *Evans* that he loved her’.

It is clear from the above that Wall J was quite justified in concluding that the elements of promissory estoppel were not made out on the facts in *Evans*.

(c) *What if... proprietary estoppel?*

Contrastingly, proprietary estoppel has slightly different criteria; crucially it *can* create a cause of action.⁹⁵ While proprietary estoppel still needs reliance and an unconscionable element, instead of requiring a legal relationship between parties, proprietary estoppel needs an identifiable property right. The reliance must be to the claimant’s detriment. Furthermore, it seems that the standards for assurance are subtly different, as we will examine below.

Even if it is accepted that one can have personal property rights to frozen embryos, there is a small roadblock to using proprietary estoppel in that there are no cases in English law that focus purely on personal property. But in *Cobbe v Yeoman’s Row*,⁹⁶ Lord Scott suggested that it might be possible for proprietary estoppel to extend outside of real property, saying ‘in principle, [proprietary estoppel is] equally available in relation to chattels’.⁹⁷ Continuing this trend, in *Thorner v Major* proprietary estoppel was used to give ownership rights to chattels on an estate as well as the land itself.⁹⁸ While there is yet to be an actual case where the proprietary estoppel is based solely on a property right to the chattel, it now seems clear that this is within the realm of legal possibility.⁹⁹ Therefore, the co-ownership of an embryo could form the basis of a proprietary estoppel claim, unlike the lack of legal relationship which was a flaw in the promissory estoppel argument.

⁹⁰*Combe v Combe* [1951] 2 KB 215 (EWCA) 218.

⁹¹*Evans* (HC), above n 75, para 308.

⁹²*Alghrani*, above n 85.

⁹³A Krajewska ‘Access of single women to fertility treatment: a case of incidental discrimination?’ (2015) 23 *Medical Law Review* 620 at 621.

⁹⁴*Evans* (HC), above n 75, para 303.

⁹⁵*Thorner v Major* [2009] UKHL 18, [2009] 1 WLR 776 [61] per Lord Walker.

⁹⁶*Cobbe v Yeoman’s Row Management Ltd* [2008] UKHL 55, [2008] WLR 1752.

⁹⁷*Ibid*, para 14.

⁹⁸*Thorner v Major*, above n 95.

⁹⁹S Haren ‘Gifting chattels: the available methods considered’ (2014) 3 *Private Client Business* 119.

There is also a subtle difference between the third limb of promissory and proprietary estoppels. As quoted above, Wall J needed to find a 'clear and unequivocal promise or representation' for a promissory estoppel claim to succeed.¹⁰⁰ Generally, in the proprietary estoppel cases a more nuanced approach is taken. While sometimes there will be an assurance of a specific right, *Thorner v Major* confirmed that this level of specificity is unnecessary.¹⁰¹ In that case, the landowner never promised a specific right or even made an explicit promise. There was merely an implied assurance. In the claimant's words, the landowner 'made various noises that made me think that I might well inherit, but nothing very definite'.¹⁰² Lord Rodger held that the assurance merely had to be 'clear enough', which he made clear was a contextual question.¹⁰³ A lot of emphasis was also put on the family context of this case, and that this might mean the level of clarity and specificity could be lower than in a commercial case, this confirmed suggestions made in *Cobbe v Yeoman's Row* that there is less pressure 'in cases with more of a domestic or family flavour'¹⁰⁴ to prove clear assurances as there is typically less reflection and actual legal advice.¹⁰⁵ In recent years, judges in family proprietary estoppel cases have put even more emphasis on this question of context; for example in *James v James* the judge considered the personalities of the parties while deciding if the assurance was indeed clear enough.¹⁰⁶

This appreciation of context is particularly interesting for our purposes. It reminds us that while some limited and rushed legal advice was offered to the couple by the clinic, ultimately any assurances made by Mr Johnston to Ms Evans came from a place of love and security, and not legal technicalities, and this is not something which should be held against Evans; however, that seems to have been the approach taken by Wall J. This is made clear when he states, 'In the field of personal relationships endearments and reassurances of this kind are commonplace, but they do not-nor can they-have any permanent, legal effect.'¹⁰⁷ The implication of this seems to be that assurances made in a social context are very unlikely to form the basis of a promissory estoppel claim. This is directly contrary to the approach taken in proprietary estoppel cases as exemplified by *Thorner*. The court in that case recognised that to take such a strict approach in familial cases would make successful estoppel claims nearly impossible.

Given this context, we suggest that Mr Johnston's assurances were clear enough to give Ms Evans the reasonable impression that she was going to have access to the embryos for as long as she needed them. This is comparable to proprietary estoppel cases where the landowners' actions rather than words create effective assurance in the claimant about future use of land.¹⁰⁸ Lord Neuberger notes 'the classic example of proprietary estoppel is based on silence and inaction, rather than any statement or action'.¹⁰⁹ Mr Johnston stood by and watched as Ms Evans put all her future hopes and expectations of children on their shared embryos.

Wall J did not examine closely the question of detriment as it is not a specific criterion for promissory estoppel, but it seems to be fairly easily satisfied by the facts of this case. In other estoppel cases, detriment has been found to apply to even a loss of opportunities;¹¹⁰ in Ms Evans' case, this can be applied to her decision to not investigate egg freezing, thus losing her chance of that treatment being successful.

¹⁰⁰*Evans*, above n 2, para 303.

¹⁰¹*Thorner v Major*, above n 95.

¹⁰²*Ibid*, para 41.

¹⁰³*Ibid*, para 26.

¹⁰⁴*Cobbe v Yeoman's Row*, above n 96, para 66.

¹⁰⁵*Ibid*, para 68.

¹⁰⁶*James v James* [2018] EWHC 43 (Ch), [2018] 1 WLUK 252 [33].

¹⁰⁷*Evans* (HC), above n 75, para 306.

¹⁰⁸*Ramsden v Dyson* (1866) LR 1 HL 129 (HL).

¹⁰⁹*Thorner v Major*, above n 95, para 84.

¹¹⁰*Gillett v Holt* [2000] 3 WLR 815 (EWCA Civ).

Therefore, we have shown that on the facts of the *Evans* case, especially if they occurred with the law as it stands in 2023, it is possible to make out the criteria for proprietary estoppel in a way that is not possible with promissory estoppel.

(d) Estoppel against statute

However, as Alghrani highlighted in her 2005 commentary on the *Evans* case:

The High Court held that even if on the facts of the case the three critical elements for an estoppel to succeed were present, the 1990 Act would exclude the operation of an estoppel which would prevent a gamete provider withdrawing his consent to the use of an embryo. Wall J accepted the Secretary of State's arguments that there were substantial reasons of social policy underpinning the provisions of Schedule 3 which militated strongly against the operation of an estoppel.¹¹¹

In the 20 years since *Evans* first brought her claim to court in attempt to become a mother without the consent of the man whose sperm was used in the creation of the embryos she hoped to use, a growing consensus has developed that the HFEA 1990 is in need of reform to better serve the needs of non-traditional families.¹¹² Horsey and Jackson suggest that the perceived need for 'strict additional controls over consent, confidentiality and access to treatment' was rooted in the perception of fertility treatment as controversial in 1990.¹¹³ If *Evans*' claim in estoppel is indeed barred by statute, we suggest that this highlights an area of the statute which requires reform.

Nonetheless, we submit that it is far from clear that estoppel is not possible in the face of an inconsistent statute. One of the most important uses of proprietary estoppel is to enact promises that did not have legal effect due to formal requirements of statutes. While it is true that the Land Registration Act 2002 explicitly allows for the operation of proprietary estoppel via section 116, thus preventing the statute being inconsistent with the use of estoppel, in the words of the statute itself this is merely 'for the avoidance of doubt'.¹¹⁴ Proprietary estoppel has also been used in contradiction to the Wills Act 1837, the Law of Property Act 1925 and the Law of Property (Miscellaneous Provisions) Act 1989, despite those acts containing no equivalent to section 116 of the Land Registration Act 2002.¹¹⁵ As Dixon points out, there has even been an estoppel case that explicitly reversed the rules of land registration as to the priority of registered charges,¹¹⁶ which seems to be a clear example of estoppel overriding clearly legislated policy. One might argue that it is overly simplistic to compare the contextually separate regimes governing land and human bodily materials, but we remind readers of the discussion of *Yearworth* in Section 1 (c) above and that the court there decided that the fact the HFEA 1990 draws strict limits and boundaries around use of embryos does not make use of a property rights framework illegitimate. Furthermore, the judges themselves make the comparison to statutory provisions related to land.¹¹⁷

Chrysanthou provides an interesting analysis on the impossibility of estoppel trumping statute. He notes that in the Court of Appeal Arden LJ held that a person cannot contract out of their own benefit in such a scenario, 'A person may give up a right created by statute for his benefit only, but here the right of withdrawal is granted in recognition of the dignity to which each individual is entitled.'¹¹⁸ However, Chrysanthou points out that '[a]part from Mr Johnston, there is no harm to any other

¹¹¹Alghrani, above n 85, at 249; *Evans* (HC), above n 75, at para 289.

¹¹²K Horsey and E Jackson 'The Human Fertilisation and Embryology Act 1990 and non-traditional families' (2023) *Modern Law Review*.

¹¹³*Ibid*, at 1.

¹¹⁴Land Registration Act 2002, s 116.

¹¹⁵M Dixon 'Confining and defining proprietary estoppel: the role of unconscionability' (2010) 30 *Legal Studies* 408 at 411.

¹¹⁶Dixon, above n 115; *Scottish & Newcastle plc v Lancashire Mortgage Corp'n* [2007] EWCA Civ 684, (2007) NPC 84.

¹¹⁷*Yearworth*, above n 26, para 45.

¹¹⁸Chrysanthou, above n 87, at 39 citing; per Arden LJ in *Evans*, above n 2, para 120.

from Mr Johnston's actions, which would otherwise make his promise ineffective¹¹⁹ and thus not allowing this promise to be binding is 'problematic in terms of Millian autonomy'.¹²⁰

There are also estoppel claims the very point of which is to prevent one party from relying on a particular statutory provision – given that is they have assured or represented that they would not do so; this situation most closely resembles the facts in *Evans*. McFarlane, in his comprehensive work on proprietary estoppel therefore notes that '[a]s a result, broad canards such as "estoppel cannot be used against a statute" are of very little assistance'.¹²¹ Dixon has argued that the 'answer to this conundrum' of why estoppel is allowed to override statute in this way 'is to be found in recognition that the justification for estoppel is the prevention of unconscionable conduct'.¹²²

(e) *But is it 'unconscionable'?*

Finding the elements of property rights, assurance, reliance and detriment is not enough to make a successful proprietary estoppel claim. In *Gillett v Holt*, Lord Walker emphasised that:

the doctrine of proprietary estoppel cannot be treated as subdivided into three or four watertight compartments.... the fundamental principle that equity is concerned to prevent unconscionable conduct permeates all the elements of the doctrine.¹²³

The central nature of unconscionability to estoppel has been recently strongly reaffirmed by the Supreme Court in *Guest v Guest*.¹²⁴ Lord Briggs explained that:

For over a century, starting in the 1860s, the courts of equity developed an equitable estoppel-based remedy, the aim of which was to prevent the unconscionable repudiation of promises or assurances about property (usually land) upon which the promisee had relied to his detriment.¹²⁵

The question of whether allowing Mr Johnston (or any man in such circumstances) to step back from his assurance is unconscionable remains difficult, even with a property rights lens. Most of the reason for finding that it would not be is based on the idea that the Act gives him a clear right to revoke consent at any time and it would be contrary to the Act refuse him that right. However, as explained in Section 3(d) above that is merely the starting point of the enquiry. While *Guest v Guest* was not specifically concerned with unconscionability, nonetheless Lord Briggs offers this guidance as to what he considers the court's normal approach should be:

The first stage (which is not in issue in this case) is to determine whether the promisor's repudiation of his promise is, in the light of the promisee's detrimental reliance upon it, unconscionable at all. It usually will be, but there may be circumstances (such as the promisor falling on hard times and needing to sell the property to pay his creditors, or to pay for expensive medical treatment or social care for himself or his wife) when it may not be.¹²⁶

He suggests that it is *prima facie* unconscionable to go back on a promise that has been detrimentally relied on, but this might be justified by circumstance. However, a break-up or break down in relations between the parties is clearly excluded since that tends to be the background of any estoppel claim and

¹¹⁹Chrysanthou, above n 87, at 40.

¹²⁰Ibid, at 39–40.

¹²¹B McFarlane *The Law of Proprietary Estoppel* (Oxford: Oxford University Press, 2nd edn, 2020) p 336.

¹²²Dixon, above n 115, at 411.

¹²³*Gillett v Holt*, above n 110, para 225.

¹²⁴*Guest v Guest* [2022] UKSC 27, [2002] 3 WLR 911.

¹²⁵Ibid, at 61.

¹²⁶Ibid, at 74.

the ‘inherent flexibility and pragmatism’ of the doctrine allows the court to deal with situations where there needs to be a ‘clean break’ between the parties going forwards.¹²⁷

Additionally, as *Yearworth* made clear, that right to revoke consent is best conceptualised as a property right,¹²⁸ and an essential aspect of property rights is their alienability. Whilst at the beginning Mr Evans had a right to revoke his consent, theoretically there was nothing to stop him transferring that right to Ms Evans. If he has a share in the property rights to the embryo – which, from the analysis above, would seem to be the most likely scenario – then he can assign his half of the rights to Ms Evans. It was this that Ms Evans understood him to be assuring and on which her actions relied. It is not inherently conscionable to allow him to renege from this.

The other main argument proposed in this area is the human rights argument under Article 8: the right to respect for family life. This question went to the Grand Chamber of the European Court of Human Rights, and arguments from that case are therefore relevant to the estoppel question, despite estoppel not being specifically in question at the ECtHR. The basis of the argument came down to balancing ‘the right to respect for the decision to become a parent in the genetic sense’ of Ms Evans and Mr Johnston.¹²⁹ In other words, Ms Evans’ right to be a genetic mother as opposed to Mr Johnston’s right to not be a genetic father.¹³⁰ As Thorpe and Sedley LJ put it in the domestic court ‘unless [the Court] also gave weight to [Mr Johnston’s] firm wish not to be father of a child borne by [Ms Evans], such a rule would diminish the respect owed to his private life in proportion as it enhanced the respect accorded to hers’.¹³¹

The idea of a ‘right to not be a father’ is an interesting one. Not much evidence is given for the existence of such a right. At most, it is seen as the corollary of the established right to *be* a parent. This might be true, but if it does exist then it seems unlikely that it is truly as far-reaching and powerful as the Court of Appeal and ECtHR seem to think. It is submitted that if there is a right for men to not be fathers, then that right is waived the first time they engage in heterosexual intercourse, bearing in mind that all contraceptive methods have a certain rate of failure. After all, at that point they are opening themselves up to the chance of fatherhood and have no control over what then happens. Ms Evans was not asking Mr Johnston to be an active father, or even be legally acknowledged as father. What he objected to specifically was the idea that there could be a genetic child of his somewhere in the world. It is possible that Johnston might have felt some internal sense of obligation to the child, but ‘it’s not clear that we have a right to avoid feelings of obligation and guilt, or that this would give rise to the right to avoid biological parenthood altogether, even if these feelings constitute a significant psychic burden’.¹³² Given that his legal argument referred repeatedly to the desire not to be a genetic father, we hold to our characterisation of the right in question as one concerned ‘merely’ with the use of one’s genetic material in procreation, and not one concerned with the responsibilities attached to social and legal parenthood.

Fatherhood is always a possibility for men once they become heterosexually active. Whether there is a right *not* to be the father of a particular child becomes a question of ‘Why now? Why this sperm?’ Mr Johnston may well have had a right to not be a father, but that right was long since waived, even

¹²⁷Ibid, at 63–65.

¹²⁸*Yearworth*, above n 26.

¹²⁹*Evans v UK*, above n 8, para 72.

¹³⁰It could be argued that this right could be reframed (and we thank an anonymous reviewer for pressing us on this): rather than the right not to be a genetic father, the right to withdraw consent to becoming a father prior to use of the embryos. The right to withdraw consent was held by both parties per their contract with the clinic; however, the court’s decision in favour of Mr Johnston was explicitly based on the right not to be a genetic parent, rather than the right to withdraw his consent to the procedure. Further, the question of conscionability (central to our argument) would apply identically regardless of this reframing; per our argument, it would be unconscionable for Johnston to renege on his earlier assurances to Evans, whether this renegeing is constituted by exercising a purported right not to become a genetic parent against his will or a right to withdraw consent for use of his genetic material.

¹³¹*Evans*, above n 2, para 66.

¹³²T Baron *The Philosopher’s Guide to Parenthood: Storks, Surrogates and Stereotypes* (Cambridge: Cambridge University Press, 2023) p 44.

before he undertook to create embryos using IVF technology, knowing that their sole purpose was to become children for Ms Evans. It is submitted that these factors weigh heavily in suggesting it would be unconscionable for Mr Johnston to deny Ms Evans access to the embryos and so a proprietary estoppel claim could have succeeded.

There is a large body of work in philosophy concerned with this question of unconscionability and breaking promises, which we think it prudent to consider here.¹³³ When we embark upon a joint venture with somebody else, and particularly when we do so in a manner that makes that party dependent upon us for the success of that venture (for example, by persuading them not to invest in back-up options) we incur certain obligations to them. We need greater reason to justify withdrawing from that venture the more the other person invests in that venture, and the smaller their chances of success without our participation. Much of the literature on the use and disposal of frozen embryos focuses on the competing rights of the respective parents to gestate or dispose of those embryos, and the procreative rights of individuals.¹³⁴ However, we take a broader view of the situation and consider the rights of the litigants against one another, given the circumstances under which the miscible property in question came into existence. Mr Johnston not only entered into a joint procreative venture with Ms Evans but made certain assurances that kept her from embarking upon that procreative venture by other means. Specifically, he seemed to assure her that she would have access to the embryos in the case of their relationship's dissolution. At the least we can say his actions and words left her feeling so assured. Scanlon explains succinctly why this sort of behaviour is unconscionable if not followed through on:

The wrong of breaking a promise and the wrong of making a lying promise are instances of a more general family of moral wrongs which are concerned not with social practices but rather that we owe to other people when we have led them to form expectation about our future conduct.¹³⁵

(f) *What's the harm?*

Williams argues that, in determining the balance of rights in such cases, we must provide a more general account of 'the conditions under which an individual is entitled to revoke a prior commitment, and thereby cause others to be harmed'.¹³⁶ Most thinkers argue that we are morally permitted to break promises in some circumstances – the obligations that we undertake are rarely absolute. However, the morally significant (and thus legally through the operation of the equitable doctrine of estoppel) assurance made by Mr Johnston was not that he would co-parent any resulting children, but that Ms Evans would be able to bring those children into existence even if their relationship (and, we may assume, their inclination to raise children together) ended. If no further labours or investment are required of Johnston if the embryos are gestated (there is a proviso here that Wall J points out that parents cannot legally contract out of being liable for child support,¹³⁷ but this could be solved by redefining him as a sperm donor) then what reason might justify his preventing Evans from continuing their venture alone? Williams suggests that:

[A] person who prefers that the embryos he jointly created with his partner not be implanted has a right that they be destroyed only if, were they gestated, the harm to him would be greater in magnitude than that suffered by his partner were they denied to her.¹³⁸

¹³³HM Hurd 'Promises schmomises' (2017) 36 *Law and Philosophy* 279; M Migotti 'All kinds of promises' (2003) 114 *Ethics* 60; M Cholbi 'A plethora of promises – or none at all' (2014) 51 *American Philosophical Quarterly* 261.

¹³⁴J Williams 'Resolving disputes over frozen embryos: a new proposal' (2010) 27 *Journal of Applied Philosophy* 172; JA Robertson 'Resolving disputes over frozen embryos' (1989) 19 *The Hastings Center Report* 7; S Chan and M Quigley 'Frozen embryos, genetic information and reproductive rights' (2007) 21 *Bioethics* 439; Forster, above n 72.

¹³⁵T Scanlon *What We Owe to Each Other* (Belknap Press of Harvard University Press, 1998) p 296.

¹³⁶Williams, above n 134, at 180–181.

¹³⁷*Evans* (HC), above n 75, at 253.

¹³⁸Williams, above n 134, at 181.

Since we accept that promises can sometimes be ethically broken, we suggest that the harm principle is a good measure of unconscionability as it allows us to assess the balance of moral rights and obligations. Within proprietary estoppel, the concept of unconscionability ‘looks to the position in which the parties would be left if no claim were available to B and asks, in Lord Walker’s (possibly over-dramatic) formulation, if it would “shock the conscience of the court” if no redress were available to B’.¹³⁹ Another way to frame this question is how would the parties be harmed or benefited by not allowing the claim. Unconscionability uses this answer then, in Lord Walker’s words, ‘as an objective value judgment on behaviour (regardless of the state of mind of the individual in question)’.¹⁴⁰

It is of course difficult to measure harm and compare different harms suffered by the parties. Here we suggest some ways this has been considered in the philosophical literature. How is Ms Evans harmed by the judgment in favour of Mr Johnston? Williams argues that we must be both forwards- and backwards-looking in our assessment of such cases. We agree that looking backwards, the destruction of the embryos against her will ‘harms a woman by making it the case that her prior investment in the procreative project has been wasted’.¹⁴¹ The sacrifices she made in the process, most notably the pain and discomfort of egg retrieval, are no longer prices paid in order to have a genetically related child, but ‘are retroactively transformed into harms’.¹⁴² Looking forwards, even if a woman could produce new embryos at some future stage, the loss of *these* particular embryos may result in significant distress, as might the physical and financial costs of beginning a new round of egg retrieval and IVF treatment. If the embryos in question represent a woman’s only chance to have a genetically related child, then it is clear that the harm to which she is subjected by their destruction is even greater.

Any harm suffered by Mr Johnston in allowing Ms Evans claim (if we leave aside potential child support liabilities) must be contained in a violation of his genetic privacy. Unlike a woman forced to bear an unwanted child, the birth of a child from the embryos in question cannot be seen as a violation of Mr Johnston’s right to bodily autonomy.¹⁴³

The term ‘genetic privacy’ is used to refer to one of two broad notions. The first of these is used by scholars concerned with research ethics and confidentiality, such as Resnik¹⁴⁴ and Malm,¹⁴⁵ in this context, the right to genetic privacy is subsumed under the right to privacy regarding one’s personal information; my right to genetic privacy has the same grounding as my right to privacy regarding other medical information. In this sense, my genetic privacy may be violated by the sharing without permission, misuse, or mishandling of information about my genetic code. This meaning is not directly relevant to us.

The second way in which ‘genetic privacy’ is used implies a concern with the *replication*, rather than *possession*, of genetic information – specifically, the replication of an individual’s genetic code through reproduction.¹⁴⁶ Räsänen puts forward two scenarios in which he believes the right to genetic privacy is violated. In the first, ‘a mad scientist finds a way to clone humans, steals my DNA, and creates a foetus that is genetically identical to me, which he then gestates in an artificial womb’.¹⁴⁷ In the second (set in a possible future in which ectogenesis is used to carry to term foetuses which would have otherwise been aborted), ‘some women (and men) will have genetic children out there who carry their genetic material without their consent’.¹⁴⁸ Räsänen suggests that the mad scientist thought

¹³⁹McFarlane, above n 121, p 295; *Cobbe v Yeoman’s Row*, above n 96.

¹⁴⁰*Cobbe v Yeoman’s Row*, above n 96, para 92.

¹⁴¹Williams, above n 134, at 179.

¹⁴²Ibid.

¹⁴³Of course, reproductive autonomy (mentioned earlier) is a narrower concept than bodily autonomy, and not a subset of bodily autonomy alone; the exercise of reproductive autonomy may require more than ‘mere’ bodily autonomy.

¹⁴⁴DB Resnik ‘Direct-to-consumer genomics, social networking, and confidentiality’ (2009) 9 *The American Journal of Bioethics* 45.

¹⁴⁵H Malm ‘Genetic privacy: might there be a moral duty to share one’s genetic information?’ (2009) 9 *The American Journal of Bioethics* 52.

¹⁴⁶J Räsänen ‘Ectogenesis, abortion and a right to the death of the fetus’ (2017) 31 *Bioethics* 697; E Mathison and J Davis ‘Is there a right to the death of the foetus?’ (2017) 31 *Bioethics* 313.

¹⁴⁷Räsänen, above n 146, at 699.

¹⁴⁸Ibid.

experiment supports the belief that ‘people in general have a right to genetic privacy’.¹⁴⁹ While he does not explicitly define the concept, we can understand from the examples above that Räsänen means by this a right not to have one’s genetic material biologically replicated (through artificial or natural reproduction) without consent.

A problem with this rights-claim becomes obvious when we consider one way in which many people will have their genetic material biologically replicated without their consent: through siblinghood. Whenever our parents take it upon themselves to procreate, there is a significant possibility that some of our genetic code will be replicated. With the exception of identical twins (or triplets, and so on) our entire genetic code will not be replicated; our siblings will likely have only some of the same genes as us. This is also the case in sexual reproduction: as a result of the genetic mixing that occurs in fertilisation, our offspring will likewise have only some of the same genes as us. Why, then, should we believe that there is a right not to have our genes replicated without our consent? There may be a right not to have our gametes taken and used without our consent, but this is a right grounded in bodily integrity and autonomy; it applies equally to somatic cells and germ cells, and whether our genetic *information* is replicated is irrelevant. The man whose partner secretly stops taking contraceptive pills *contra* their joint agreement, in order to become pregnant against his wishes, may violate both his reproductive autonomy, and his right (a part of bodily autonomy more broadly) to choose how and when he engages in sexual intercourse,¹⁵⁰ but neither violation seems clearly to be grounded in the biological replication of some of his genetic information.

Here, however, we may ask: what is the difference between the man in the last example (who, most would agree, has a right against his partner that she not deceive him into having sex that is much more likely than he thought to lead to pregnancy) and the man who creates frozen embryos with his partner but does not give consent for their implantation? At what point may we legitimately withdraw consent to procreation? We would argue that the above makes clear that a loss of whatever ‘genetic privacy’ one may claim is a harm far smaller than that suffered by Ms Evans. Using harm as a way to make the ‘objective value judgement’ of unconscionability it would thus be unconscionable for Mr Johnston to revoke his consent and so he could and should have been estopped from doing so.

Conclusion

It is entirely possible to apply a property rights regime to embryos and this is not necessarily contrary to the HFEA 1990 or indeed unethical. Since property law concerning mixtures is very flexible, there is still plenty of room for ethical debate within a property rights approach. Using a property rights regime provides a useful frame for disputes over frozen embryos that is still guided by the HFEA 1990. In fact, as *Yearworth* shows, one could argue it is mandated by that Act. A property rights framework retains the important aspects of control over use that the HFEA 1990 is based on but, as shown above, provides clearer tools for dispute resolution, governed and limited by the concept of unconscionability.

We do not go so far as to argue that it is always unconscionable to revoke consent to the use of frozen embryos, but we do advocate for a harm-based model in making this assessment. We have shown that using proprietary rather than promissory estoppel has a subtle but crucial impact on the way the facts of frozen embryo disputes are analysed, including a far greater emphasis paid to the unique problems that arise in a family/personal context. If estoppel is, contrary to our arguments, prohibited by the HFEA 1990 then we suggest it requires reform. While questions of assurance, detriment and whether something is unconscionable remain delicate questions of fact, such an approach would have secured these questions closer scrutiny and perhaps a different conclusion that gave due consideration to the harms Ms Evans suffered.

¹⁴⁹*Ibid.*

¹⁵⁰A Clough ‘Conditional consent and purposeful deception’ (2018) 82 *The Journal of Criminal Law* 178.