‘Abandonment’ and the Acquisition of Property Rights in Separated Human Biomaterials.

Dr. Neil Maddox[1]

This paper offers a critique of the concept of ‘abandonment’ when utilised in relation to separated human biomaterials. In the absence of the recognition of even limited property rights in the human source of such materials, the author contends that utilising abandonment is meaningless and misleading. Absurd consequences need not result from recognition of such limited property rights and indeed most cases of purported abandonment of human tissue are more akin to voluntary transfers. Describing such transfers in terms of abandonment obscures questions as to the agency and the scope of the fiduciary duties of medical professionals and researchers. Income rights in such materials are more appropriately determined in reference to normative questions concerning creator incentives, not by reference to abandonment. A framework that clearly identified when and in whom original property entitlements in the body vest, would help remove any subsequent conceptual confusion about the subsequent loss, transfer or abandonment of these entitlements.

1. Introduction

Modern advances in biotechnology have led to rigorous debate as to how we properly regulate biological materials once they have been separated from the person.[2] There are conflicting views as the usefulness of utilising a property model to deal with these issues.[3] Questions as to the ownership of such separated materials, and in particular whether they vests in its source or a subsequent appropriator, such as a medical research institute, have led to some notable litigation.[4] Broadly, these disputes can be divided into those where the power to control the materials is in issue, and those where it is the entitlement to the income from

[1] Lecturer in Law, Department of Law, Maynooth University, email: neil.maddox@mu.ie

[2] I. Goold, K. Greasley, J. Herring and L. Skene (eds.), *Persons, Parts and Property: How Should We Regulate Human Tissue in the 21st Century* (Oxford: Hart Publishing, 2014); J. Herring and P.L. Chaau, ‘My Body, Your Body, Our Bodies’, *Medical Law Review* 15 (2007), pp. 34-61, 38-40; W. Boulier, ‘Sperm, Spleens, and Other Valuables: The Need to Recognize Property Rights in Human Body Parts’, *Hofstra L. Rev.* 23 (1994), p. 693; L.B. Andrews, ‘My Body, My Property’, 16(5) *Hastings Center Report* (1986) 28-38, R. Rao, ‘Property, Privacy, and the Human Body’, *Buffalo University Law Rev* 80 (2000), p. 359.

[3] I. Goold and M. Quigley, ‘Human Biomaterials: The Case for a Property Approach’, in Goold *et al*, ‘*Persons, Parts and Property*’, pp. 231-241. Cf. L. Skene, ‘Raising Issues With a Property Approach’, in: Goold *et al*, ‘*Persons, Parts and Property*’, p. 263; I. Goold, K. Greasley, J. Herring and L. Skeane, ‘Conclusion’ in Goold *et al*, ‘*Persons, Parts and Property*’, pp. 281-299.

[4] *Moore v. Regents of the University of California* (1990) 51 Cal.3d 120; *Greenberg v. Miami Children’s Hospital* 264 F. Supp. 2d 1064 (S.D. Fla. 2003); *Washington University v. Catalona* 437 F.Supp.2d 985 (E.D. Mo., 2006)

their commercialisation.[5] To admit that the source has property rights in their tissue after it has been separated from their body, it is feared by some, would impose onerous costs upon medical researchers in investigating title, and would impede research.[6] To prevent this, so this argument goes, the source should be granted no property in their own biological materials.[7] Nonetheless, and somewhat incongruously, a concept derived from property law, that of 'abandonment' has been invoked in this debate in aid of this view.[8]

'Abandonment' first appears prominently in a report of the Nuffield Council on Bioethics in 1995 on legal and ethical issues relating to human tissue. Somewhat unclearly, the report recommended that in any consent to treatment, tissue removed in the course of that treatment would be regarded as abandoned by its source.[9]

Such an approach would conveniently preclude the source of any tissue from any subsequent claims to it, protecting the hospital and subsequent researchers making use of the tissue from having to fend off litigation that might impede the smooth running of the hospital and the progress of important medical research.[10] In other words, it is a simple and easy way to resolve any potential title disputes relating to human tissue. The normative merits of such prioritising of third party researchers and hospitals in disputes regarding ownership of human tissue are not the focus of this article.[11] Instead, I seek to critique utilising the concept of abandonment to justify such an approach. There are a number of elements to this.

First, abandonment is one of those phrases that has different meanings depending on the context. When one describes a person 'abandoning' their property, (or their tissue, blood or sperm sample for that matter), it is not always clear what is meant.[12] It can mean, *inter alia*, the abandonment of all claims in respect of a thing, as appeared to be what was meant in the Nuffield Report *or* be employed as a legal term of art to refer to 'Divesting Abandonment' a concept derived from property law whereby an owner loses ownership of his property if divesting abandonment is found to have occurred.[13]

---

[5] M. Quigley, 'Propertisation and Commercialisation: On Controlling the Uses of Human Biomaterials' *The Modern Law Review*, *77*(5) (2014), pp. 677-702. Both *Yearworth v. North Bristol Health Authority* [2009] EWCA Civ 37 and *Holdich v East Lothian Health Authority* [2013] SCSOH 197 involved claims for damages consequent on interference with control rights of frozen sperm samples that had been destroyed.

[6] *Moore* [1990] [4a].

[7] *Moore*, [1990], [4a].

[8] Imogen Goold, 'Abandonment and Human Tissue' in: Goold, K. *et al*, '*Persons, Parts and Property*', pp. 125-155. Nuffield Council on Bioethics, *Human Tissue: Ethical and Legal Issues* (1995), [9.14] available at http://nuffieldbioethics.org/wp-content/uploads/2014/07/Human-tissue.pdf <date accessed 21 April 2016>.

[9] Nuffield Council on Bioethics, *Human Tissue: Ethical and Legal Issues* (1995), [9.14]

[10] The concern to prevent litigation from the source of human tissue that would impede research was of paramount concern in the *Moore* case: *Moore* [1990] [4a].

[11] However, see Boulier, *'Sperm, Spleens, and Other Valuables'* 23, Andrews, *'My Body, My Property'* and Goold *et al* (eds.), *Persons, Parts and Property*.

[12] Goold, '*Abandonment and Human Tissue*', pp. 125-155.

[13] Hudson, 'Is Divesting Abandonment Possible at Common Law? (1984) *LQR* 110.

Secondly, in property law there are specific requirements that must be met before 'divesting abandonment' operates and an owner is deemed to have his ownership extinguished: there must be loss of *de facto* physical control, there must be an intention to abandon *all* rights in the property and there must be indifference as to who any subsequent owner might be.[14] I contend that these requirements are often overlooked when discussing abandonment of human tissue, and, further, that if we are to examine these requirements closely, it becomes apparent that many cases of purported abandonment of human tissue are more akin to voluntary transfers. Incorrectly invoking abandonment obscures this, and also obscures the potential remedies available to a source of human tissue consequent on such a finding.

Thirdly, I contend that is impossible to determine the role that abandonment of ownership or legal rights over human tissue, when it is has not been determined where the original ownership of such material lies, or how it is determined. I argue that this uncertainty may only be resolved by recognising that limited property rights vest in the source of the material. Following on from this argument, I contend that the source of human tissue never has income rights to them, and thus such rights accrue as windfall wealth, not by virtue of their abandonment by their source, the concept here further confusing an already muddled area of law.

This article first sets out the differing meanings of the term 'Abandonment' and then examines the law relating to the property law concept of divesting abandonment, fleshing out is operation and requirements. Then, I examine how 'abandonment' has been applied in relation to human tissue, critiquing such use in the Nuffield report and I outline the inappropriateness of using a line of American Jurisprudence as precedent for a general presumption of abandonment. I then set out the difficulty of defining abandonment given the uncertainty as to who the original owner of such material is, and then argue that most cases of purported abandonment of hospital waste are more akin to voluntary transfers, as there is no break in seisin and no 'roll of the dice' by their source as to who the subsequent owner might be. Furthermore, I discuss how income rights in human materials do not arise by virtue of their abandonment by the source, and that invoking abandonment obscures normative questions as to where such rights should initially vest. Finally, I argue that an alternative framework where limited property rights were granted to the source of human tissue need not lead to absurd consequences, and abandonment could be useful in such a framework, as there would be expressly identified rights to abandon.

1. Abandonment and Human Bodily Materials

In the celebrated case of *Moore v. Regents of the University of California*,[15] abandonment is not discussed by the court.[16] Moore, of course, had consented to have his tissue removed in

[14] L.J. Strahilevitz, 'The Right to Abandon' *University of Pennsylvania Law Review* 158 (2010), pp. 355-420.
[15] (1990) 51. Cal. 3d 120.

the course of treatment, but not to its subsequent commercialisation. He claimed unsuccessfully for conversion of property, indirectly seeking a share in the income rights of this commercialisation of his excised tissue. Notwithstanding the absence of any discussion of abandonment, the Nuffield Council treated it as authority that in consenting to the operation, Moore has abandoned "any claims over the removed tissue".[17] This tenuous proposition is doubtful given that Moore had been misled as to the uses that were to be made of his cells,[18] and it has been contended that any recognition of abandonment would have implied that Moore has property in these cells, i.e. an ownership interest to abandon, something the majority of the court was anxious to rule out.[19]

No English authority was cited in the report justifying the application of abandonment to excised human tissue, and in what Matthews described as an "exaggerated respect" paid to American judicial decisions, the U.S. case of *Venner v. State of Maryland*[20] is cited for the sweeping proposition that there is a general legal presumption in favour of abandonment.[21]

Thus, if the source of tissue does not positively assert what is to be done with it once it is separated from the body, it is presumed that is abandoned in all cases. It is not difficult to conceive scenarios where this would be untrue; for example, in relation to reproductive material such as sperm where the source clearly retains an interest in what is done with the material after it has left his body. Silence as to the fate of such a material would not lead automatically to the conclusion that the source was indifferent to the uses made of it in many cases. Yet, this is the presumption advocated by the Nuffield Council. [22] There are also difficulties with utilising the American Jurisprudence given their constitutional context, discussed below.[23]

2. Defining 'Abandonment' and Distinguishing it from a Voluntary Disposition of Property

The term 'Abandonment' may refer to very different things: abandonment of actual or *de facto* possession of a thing, abandonment of ownership of the thing, or abandonment of any claims in respect of the thing.[24] As we will see, although these criteria sometimes overlap, there is a tendency to treat them as inter-changeable which is not correct. For instance, the abandonment of any claims in respect of a thing would probably encompass claims that arise

---

[16] In the dissent by Broussard J., he talks of a patient abandoning any claim to an organ once has donated it for general research purposes, but abandonment of ownership is no-where discussed, (1990) 51. Cal. 3d 120, p. 153.
[17] Nuffield Council, '*Human Tissue*', [9.12].
[18] *Yearworth v. North Bristol NHS Trust* [2009] 3 W.L.R. 118, [40].
[19] Matthews, *'The Man of Property*', p. 268.
[20] (1976) 354 A 2d 483 (Md CA).
[21] Nuffield Council, '*Human Tissue*', [9.8]; Matthews, '*The Man of Property*' , p. 268.
[22] Matthews, '*The Man of Property*', p. 265.
[23] Goold, '*Abandonment*', p. 136 (fn 62).
[24] Goold, '*Abandonment and Human Tissue*', pp. 126-129.

by virtue of ownership of that thing. As Goold notes, there can be some confusion between a lay-understanding of abandonment and a lawyer's: to abandon something in general parlance is 'to give it up...we mean we are no longer interested in it.'[25] In addition, a non-lawyer without further thought on the matter may assume that abandoning possession of an object is always the same as abandoning ownership of it, but of course this is not always the case.

While possession is an important feature of property, it is not a necessary one, and one may lose possession of an object without losing ownership of it. This is an important distinction to note when examining cases relating to the purported abandonment of human tissue. In the famous case of *Moore v. Regents of the University of California*, for example, question arose as to the rights that the Plaintiff retained if in his excised spleen (i.e. once he has lost possession of it). The Nuffield report suggested that he 'abandoned' any claims in respect of it by consenting to the operation to remove it.

However, if one examines the law relating to the transfer of ownership in chattels, the circumstances in which a loss of physical possession of an object lead to an inference that it has been abandoned are quite limited. Instead, complexity and uncertainty arise once exclusive physical control is lost. While giving up physical possession does not necessarily mean that ownership is lost, there are, according to Pollock and Wright in their leading work on possession, a possible 'infinite combination of facts' between having an intention to retain legal ownership in the thing and wishing to abandon all rights in it.[26] Thus, one cannot assume abandonment once control is lost unless the individual facts of the case are examined and there are many possible solutions, of which abandonment is but one. Voluntary dispossession in favour of another is delivery, while quiting possession without any specific intention of putting another in your place, according to Pollock and Wright, is abandonment.[27]This distinction is important. For delivery to take place, the relinquishing party contemplates the identity of the subsequent taker of the property; whereas, a party purporting to abandon the property is indifferent to the identity of any person who may become the subsequent owner. Thus, in abandonment, as Strahileviz notes, the relinquishing owner "rolls the dice" as to who the subsequent owner might be.[28] With this in mind, it becomes clearer when the term abandonment is used inappropriately. I may 'abandon' my house when the mortgage becomes unsustainable, I do not likely intend putting the house 'up for grabs' in a free for all. Rather, I am abandoning it to my creditors, a situation more akin to a transfer by operation of law.[29] Delivery is possible by handing over a chattel with an intent to transfer ownership. However, such a delivery may be made, as Pollock and Wright observe, with intent to transfer:

> "...a more limited right, including the right to use or have control of that object...There may be cases of handing over for a limited purpose ... It must depend

[25] Goold, '*Abandonment and Human Tissue*', p. 126
[26] Pollock and Wright, '*Possession'*, p. 37 and p. 124.
[27] Pollock and Wright, '*Possession*', pp. 40-41.
[28] Strahilevitz, 'The Right to Abandon', pp. 355-420.
[29] Strahilevitz, '*The Right to Abandon*', p. 377.

> on the true intent of the transaction...whether there is a bailment or a mere authority or licence to deal with the thing in a certain way."[30]

While possession is given up in all cases of delivery, it is the intent of the outgoing possessor that is the crucial element in the extent of the incoming possessors enjoyment and control.[31] As will be discussed below, many circumstances in which hospital waste comes into the possession of a medical or research institution might be more readily characterised as a voluntary transfer, and not as abandonment.

In addition to a loss of *de facto* possession, for legal abandonment to occur the owner must form an intention to unilaterally divest himself of ownership of the goods and any power to exclude others from exercising ownership rights over them.[32] This is called 'divesting abandonment'.[33] The meaning of divesting abandonment is more than that implied when talking of discarding an object, the latter simply referring to a loss of possession. One may look to the taking of an abandoned thing as original acquisition or occupation.[34] This is quite a rigorous requirement, the intention to abandon *all* rights over a thing as well as giving up possession of it. Clearly, one is likely to give the matter more thought if it a part of their body (even a small part contains a person entire genetic code) that they are discarding, as opposed to an old newspaper or used coffee cup.

If one loses property without divesting intention, there is no abandonment, and this is the case even if the search for the item is abandoned.[35]As one judge noted: "One does not abandon property merely because one has forgotten where one put it."[36] It is difficult to imagine how likely a distressed or unconscious patient is to form such a specific intention.

As can be seen from this discussion, determining the intention of the true owner at the time that *de facto* possession of the *res* was parted with is of paramount importance in determining if abandonment has occurred. Obviously, this presents a practical difficulty in that the true owner may not be traceable, and evidence of intention will have to be garnered from the surrounding circumstances. The value and nature of the goods are relevant to the issue. It is unlikely that goods of high monetary or sentimental value were intended to be abandoned by their owner.[37] On both counts, an engagement ring is likely to have been lost; whereas a newspaper left behind at a train station is likely to have been abandoned. Where the costs of retaining ownership of an item begin to greatly outweigh the benefits, this may justify an inference that the goods were abandoned.[38] Furthermore, abandonment of *de facto* possession may be to enable delivery of an item by way of gift, as when items are left outside of a

[30] Pollock and Wright, '*Possession*', p. 58
[31] Pollock and Wright, '*Possession*', p. 41.
[32] Goold, '*Abandonment and Human Tissue*', p. 126.
[33] Hudson, '*Is Divesting Abandonment Possible at Common Law?*', p.110.
[34] Pollock and Wright, '*Possession*', p. 124.
[35] *Moffat v. Kazana* [1969] 2 QB 152.
[36] Wrangham J., *Moffat v. Kazana* [1969], p. 156. See also *Merry v. Green* (1803) 8 Ves 405.
[37] S. Thomas, 'Do Freegans Commit Theft' *Legal Studies* 30(1) (2010) 98, p. 106; *R v. Peters* (1843) 1 Car & K 245, p. 247; 174 ER 795.
[38] In *Bentinck Limited v. Cromwell Engineering Company* [1971] 1 QB 324.

charity store, for example.[39] Of course, the human body has differing kinds of value, monetary, functional and sentimental, and all of these militate against a presumption of abandonment occurring for many types of tissue.

One could of course argue that most tissue left behind by patients in a hospital is waste, or garbage, and can be considered abandoned by its source. Nonetheless, an examination of the case-law in relation to whether there can be theft of garbage in criminal law throws up a more nuanced view. Rubbish is not usually valuable (and clearly not valuable to the person disposing of it) and abandonment can be more easily presumed for garbage than for objects of value. In treating something as rubbish and disposing of it, one shows an intention, *prima facie* at least, to abandon it. This is not always the case, however. *R v. Edwards and Stacey*[40] provides authority to the effect that an intention to permanently deprive oneself of *de facto* possession of an object does not constitute abandonment of ownership. The accused had been prosecuted for digging up diseased pig carcases which had been buried by their owner. The court held that the owner of the pig heads, which were a threat to public health, had retained an intention to control them by leaving them permanently in the ground.[41]

In *Williams v. Phillips*,[42] a larceny conviction for the theft of public bins was upheld with the court holding that putting rubbish out for collection does not constitute abandonment. Refuse had been placed in the dustbins for the specific purpose of being collected and taken away by the local authority and passed into the constructive possession of the local authority as soon as it was placed in their carts.[43] As there was no gap in seisin and legal possession of the goods had not been parted with, this was a case more akin to a voluntary transfer in that one is relinquishing possession to another with the intention to transfer ownership. It can hardly then be said that the owner had abandoned the rubbish to the world generally, as would have been necessary for abandonment.

3. The U.S. Cases: Privacy Decoupled from Property

As noted, the Nuffield Council, relayed heavily on the precdential value of the American case of *Venner* to justify advocating that an extremely broad presumption that tissue is abandoned once it has been separated from its source, unless the source expressly states what is to be done with it.[44] While the failure of the Nufflield council to look for other precedent has been criticised elsewhere,[45] I would note an additional problem with using the line of case-law of which *Venner* forms part as authority, as 'abandonment' in those cases now bears little resemblance to the property law concept of abandonment.

[39] *R.(on the application of Ricketts) v. Basildon Magistrates' Court* [2010] EWHC 2358.
[40] (1877) 13 Cox CC 384.
[41] Cf. *Haynes' Case* (1614) 12 Co Rep 113, 77 ER 1389.
[42] (1957) 41 Cr App R 5.
[43] *Williams v. Phiilips* (1957) 41 Cr App R 5.
[44] Nuffield Council, *Human Tissue* [9.8].
[45] Matthews, *The Man of Property*, p. 268.

The reason for this is related to the fact that these cases concerned questions of American Constitutional law regarding the seizure of evidence, and were not simply disputes as to the title to goods. In the U.S. Constitution, the Fourth Amendment prohibits certain types of searches and seizures; however, the amendment does not protect against the seizure of 'abandoned' property.[46] Thus, abandonment is here invoked in disputes concerning the admission of evidence in a criminal trial, a very different context from a normal dispute over ownership of a chattel that is supposedly abandoned. Pursuant to *Katz v. United States*,[47] police activity only constitutes a search within the meaning of the Fourth Amendment if in the circumstances the defendant exhibits a reasonable expectation of privacy, and if that expectation is one recognised objectively as reasonable. A seizure of a person's property occurs if there is a meaningful interference with a person's possessory interests in it.[48] The court in *Katz* noted that: "[w]hat a person knowingly exposes to the public, even in his own home or office, is not a subject of Fourth Amendment protection...but what he seeks to preserve as private, even in an area accessible to the public, may be constitutionally protected."[49] Thus, property 'abandoned' by its owner does not constitute such a search or seizure and is outside of the protection of the Fourth Amendment.

Nonetheless, the U.S. courts have moved away from a property based approach, i.e. one where a defendant could successfully invoke Fourth Amendment protection by establishing there had been no divesting abandonment of the property in issue. [50] In a criminal context, allowing such an easy objection to the search and seizure of property would be undesirable. A defendant would merely have to assert that they had formed no intention to divest themselves of ownership of their goods, even where they had abandoned *de facto* physical control of them. Instead, the courts began to focus on the privacy implications of the search and seizure in determining if the Fourth Amendment applied.[51]

This has resulted in a somewhat muddled de-coupling of the issue of abandonment from its basis in property law. Somewhat unclearly, the "issue is not abandonment in the strict property-right sense...but whether the person prejudiced by the search had voluntarily discarded, left behind, or otherwise relinquished his interest in the property in question so that he could no longer retain a reasonable expectation of privacy with regard to it at the time of the search."[52] Better, perhaps, if the courts focused exclusively on the question of privacy and ignored the property aspect altogether. Nonetheless, the language of property is still utilised,

[46] E.E. Joh, 'Reclaiming "Abandoned" DNA: The Fourth Amendment and Genetic Privacy' *Northwestern University Law Review* 100 (2006), p. 857.
[47] *Katz v. United* States, 389 U.S. 347, 361 (1967).
[48] *United States v. Jacobson*, 466 U.S. 109, 113 (1984).
[49] *Katz* (1967), p. 351.
[50] *U.S. v. Cowan* 396 F.2d 83 (2nd Cir. 1968), pp. 86-87.
[51] *U.S. v. Colbert* 474 F.2d 174 (5th Cir, 1973).
[52] *U.S. v. Colbert* (1973); *U.S. v. Edwards* 441 F.2d 749 (5th Cir. 1971); *California v. Greenwood*, 486 U.S. 35 (1988), 38; *United States v. Mustone*, 469 F. 2d 970 (1st Cir. 1972).

often incorrectly.[53] It is not at all clear, however, what, if any, are the elements of this new doctrine of 'abandonment'.

The most prominent case involving abandonment of bodily materials and the Fourth Amendment, and the one cited in the Nuffield Report as authority for the proposition that one could abandon such materials, is *Venner v. State of Maryland*.[54] *Venner* concerned whether drugs found in the excrement of an unconscious hospital patient was admissible in evidence in his subsequent trial. Admitting the evidence, the court indicated that the Fourth Amendment does not protect material that was "once owned, possessed, or controlled by an accused, but which comes into the possession of the police after it has been abandoned or otherwise relinquished by him."[55] It was further noted that there could be no reasonable expectation of privacy in the excrement. However, the appellant in *Venner* was admitted to the hospital in a semi-conscious and impaired state. The extent to which the abandonment was volitional is open to question, and the trail of hair, skin cells etc. that every person leaves behind them every day can hardly be described as volitional at all. Such loss of possession of our cells "cannot be avoided unless one is a hermit or is fanatical in using extraordinary containment measures."[56] Had the reasonable expectation of privacy test not been decoupled from it roots in property law, then, it would have been very difficult to infer an intention to abandon in these circumstances. One could argue that the question of abandonment in these cases has been wholly subsumed in the question as to whether there was a reasonable expectation of privacy. In any event, it can be seen that it is wholly inappropriate to utilise this line of cases as authority for the existence of a (property-law) doctrine of divesting abandonment of human bodily materials, given that it is questionable whether property law is an issue in any of these decisions at all.

4. The Nature of 'Property' in the Body

(a) The body is 'mere property' at best

In Honoré's famous conception, possession (i.e. exclusive physical control of a thing) forms just one of the standard incidents of ownership, albeit an important one.[57] Rights of use, management, income, transfer, alienation and destruction are among those listed alongside possession.[58] According to Honoré, none of the individual incidents are necessary or sufficient for ownership.[59] Thus, the absence or loss of a right of possession is not determinative of the absence or loss of all property rights in a thing. It is easier to intuit this

[53] *Abel v. United States*, 362 U.S. 217, (1960) 241. See also: *Hester v. U.S.* 265 U.S. 57 (1924), 58; *U.S. v. Cowan*, 389 U.S. 347, 361 (1967).
[54] *Venner v. State of Maryland* 30 Md. App. 599 (1976); Nuffield Council, *'Human Tissue'*, [9.8].
[55] *Venner* (1976), pp. 617-624. Applying *Robinson v. State*, 13 Md. App. 439, 283 A. 2d 637 (1971).
[56] E.J. Imwinkelried & DH Kaye, 'DNA Typing: Emerging or Neglected Issues' *Washington Law Review* 76 (2001), p. 413, 437-438.
[57] A.M. Honoré, 'Ownership' in: A.G. Guest, *Oxford Essays in Jurisprudence: a Collaborative Work* (London: OUP, 1961), pp. 107-147.
[58] Honoré, '*Ownership*', pp. 107-147.
[59] Honoré '*Ownership*', pp. 112-113.

for real property than for chattels. Few would dispute that a landlord is the 'owner' of his property, even though he has contracted away his right to possession to his tenant for a fixed period. Thus, when one examines it closely 'ownership' is a much more complex phenomenon that would first appear. As identified by Honoré, there are many different rights that may vest in an owner, and as these rights need not vest exclusively in one person, property has many potential owners. Nevertheless, it is typical to think of property as having one owner in whom unlimited powers of control and transmission vest , what has been described as 'full blooded ownership'.[60] It is tempting to think that all owners of property have such full-blooded ownership of it, but this is not correct. Professor Harris conceives of the 'ownership spectrum' whereby ownership is by degrees. At the upper end of the spectrum is full blooded ownership where limits on use, control and transmission are only limited to the extent that they infringe some property independent prohibition.[61] At the lower end is what he defines as 'mere property' which embraces use privileges as well as powers of control over the uses made by others.[62] It does not include transmissibility which is only a necessary feature of ownership in the case of money. The concept of 'mere property' is relevant when we examine how to characterise separated body-parts as property. According to a number of commentators, justifactory arguments for property do not yield full-blooded ownership vesting in the source of separated body parts.[63], but an entitlement further down the ownership spectrum more akin to 'mere property'. Few would doubt I am free to use my body, and the control the use of it made by others (the 'bodily-use freedom principle') and that this use and control is protected by laws prohibiting bodily security. Arguments for the recognition of 'mere property' in separated body parts are an extension of this principle: that which was formerly protected by laws preserving bodily-integrity is now protected by vesting property in the source once the material has been separated from the body. However, because exploitative powers of transmission did not apply to the tissue before it was excised, the fact of its separation cannot have created them.[64]

(b) Uncertainty as to the Original Owner of human tissue

To determine the role that the concept of abandonment plays in relation to human body parts, Goold notes, we must determine who the original owner of the material is.[65] This is not easily resolved. Much, if not all, of the conceptual confusion in this area comes from the old

[60] J.W. Harris, 'Who Owns My Body?' *Oxford Journal of Legal Studies* 16 (1996), p. 55, 58-60.

[61] Harris, 'Who Owns My Body?', p. 59.

[62] Harris, 'Who Owns My Body?', p. 59.

[63] In particular, the 'creation without wrong' argument: Harris, 'Who Owns My Body?', p. 82. See also: J. Wall, 'The Legal Status of Body Parts: A Framework' *Oxford Journal of Legal Studies* 31(4) (2011), p. 783, 789-792; J. Christman, 'Self-ownership, Equality, and the Structure of Property Rights' *Political Theory* 19 (1991), p. 28; J. Christman, 'Distributive Justice and the Complex Structure of Ownership' *Philosophy & Public Affairs* 23 (1994), p. 225.

[64] Harris, 'Who Owns My Body', p. 82.

[65] Goold, *'Abandonment and Human Tissue*', p. 148; R. Hardcastle, *Property Rights, Ownership and Control* (Oxford, Hart Publishing, 2007).

common law rule that there is no property in the body.[66] Notwithstanding the fact that this rule was likely based on a misreading of the early cases, it would seem too well established to do away with.[67] Thus, attempts to justify property in human biological materials are, impliedly at least, framed as exceptions to this general rule. Not being a *res*, anything attached to the complete living body is not property and not owned. There must, in Penner's view, be some separation between the material and the person before human tissue can be 'property'.[68] On separation from the body then, the separated material, although unowned, becomes something capable of being owned, i.e. capable of being a *res*.[69]

This leads to the conceptualisation of separated human materials as *res nullius*, and belonging to no-one until brought under dominion.[70] In essence, the first person to exercise control over the material would be its owner. Unless this was the source of the material, ownership would fall to the first person who took possession of it. Such an approach is a logically consistent extension of the no-property rule. However, the consequences of adopting such an approach render the language of donation and the "gift-relationship" nonsensical. How can a purported donor of property make a gift of an organ or tissue if they do not own it? As Laurie and Matthews have noted, describing such transfers in these terms implies that their source has property in their own body and its products.[71] In a similar vein, we cannot talk of a patient abandoning tissue, in the sense of a legal divesting abandonment, if they had no title to it in the first place. But what rights can the source have in the material if not property rights?[72] It has been suggested the source of the material would be estopped from seeking their return.[73] Lord Denning M.R. famously defined estoppel as being if a person:

> " ... by his words or conduct, so behaves as to lead another to believe that he will not insist on his legal rights knowing or intending that the other will act on that belief—and he does so act, that again will raise an equity in favour of the other..."[74]

---

[66] *Haynes' Case* (1614) 12 Co Rep 113; *R v Lynn* (1788) 2 T R 394, 2 Term Rep 733; *R v Sharpe* (1857) 21 JP 86, 169 ER 959; *R v Price* (1884) 12 QBD 247; *Williams v Williams* (1881–85) All ER 80 (Ch).

[67] M.J. Kenyon, and G. T. Laurie, 'Consent or property? Dealing with the Body and its Parts in the Shadow of Bristol and Alder Hey' *Modern Law Review* 64 (2001), p. 710, 714.

[68] This would seem to mean more than physical separation and Penner indicates that nothing of normative consequence may occur when the material is transferred to another—the transferee must stand in essentially the same relationship to it as its source for it to be property. JE Penner, *The Idea of Property in Law* (Oxford, OUP, 1997), pp 105-127.

[69] M. Quigley, 'Property in Human Biomaterials—Separating Persons and Things?' *Oxford Journal of Legal Studies* (2012), 659,. 660-666.

[70] Nuffield Council, '*Human Tissue*', [9.11]; Matthews, 'The *Man of Property*', pp. 263-264.

[71] G. Laurie, *Genetic Privacy: a Challenge to Medico-Legal Norms* (Cambridge University Press 2002), pp. 312-315; Matthews, '*The Man of Property*', p. 263.

[72] G. Laurie, '*Genetic Privacy: a Challenge to Medico-Legal Norms*', pp. 312-315; Matthews, '*The Man of Property*', p. 263.

[73]Janine Griffiths-Baker, 'Divesting Abandonment: An Unnecessary Concept?' *Common Law World* 16 (2007), p. 36.

[74] *Crabb v. Arun District Council* [1976] 1 Ch. 179, p. 188.

Of course, it is implicit in this statement that the person will have legal rights that they could insist on and that they have lead another to believe they will not insist on. However, it is not at all clear what legal rights the source would be estopped from asserting in the absence of the recognition that they had some sort of property right in their own tissue.

Implicit in the categorisation of excised material as *res nullius* is an assumption that an operating doctor removes any tissue in an independent capacity from its donor.[75] If a medical professional is engaged by me to perform a service involving excising tissue on my behalf and for my benefit, then it is a doubtful that they would immediately have a better claim to the excised tissue than me.[76] This is an important point. In the recent Australian case of *Estate of the Late Mark Edwards*,[77] Mr. Edwards had planned to donate sperm to undergo IVF with his wife but had died unexpectedly before the procedure. His wife sought and was granted an emergency court order to extract sperm from her husband's body. The procedure was held to apply the necessary work/skill to the material to make it property (under the exception espoused in *Dodeward v. Spence*) but it was held to belong to the wife and not the physician who performed the procedure "as the samples were removed on her behalf, and for her purposes, and "no-one else in the world had any interest in them".[78] While legal questions concerning ownership of biomaterials usually focus on the intentions (presumed or actual) of their source, this case is illustrative of the often overlooked question as to the capacity in which the doctor is acting *vis-á-vis* the patient.

Additionally, Dickens imagines a scenario where a limb or digit is severed in an industrial accident. The source's interest in retrieving the severed body-part and having it quickly re-attached surgically "should not be impaired by the chance of the item falling upon another's land or being retrieved and retained by a stranger not implicated in causing the loss."[79] He advocates granting the source a prior superior right in the form of an inchoate right (which he describes as a 'right in prospect' which may become fully constituted if the material in question becomes separated from the body) so that traditional legal tests of intention, possession and control might be preserved when considering ownership.[80]

Others argue that we should simply treat the body as another form of property to cut through the conceptual confusion.[81] Granting property rights, or even inchoate property rights, that are prior to the claims of any subsequent purported owner of the material solves another difficulty. As Hickey notes, a trespassing finder's rights are not affected by virtue of the trespass, and although liable for the trespass their title can only be defeated by a person

[75] Matthews, '*The Man of Property*' [1995], pp. 263-264.
[76] Matthews, '*The Man of Property*' [1995] p. 265.
[77] [2011] NSWSC 478.
[78] *Edwards* [2011], [91].
[79] Dickens , '*The Control of Living Body Materials*', p. 183.
[80] Dickens , '*The Control of Living Body Materials*', p. 183. G. Dworkin and I. Kennedy, 'Rights in the Body and its Parts' *Medical Law Review* 1 (1993), p. 291, 311-312.
[81] M. Quigley, 'Property and the Body: Applying Honoré' *Journal of Medical Ethics* 33 (2007), 631; M. Quigley, 'Human Biomaterials: The Case for a Property Approach' in Goold *et al*, '*Persons, Parts and Property*', p. 231.

showing a better (i.e. a prior, possessory) title.[82] One could interpret the *Moore* case in this way; the initial failure to obtain Moore's consent to the use of his tissue for research did not prevent the researchers from obtaining title to his tissue, although they were still liable for the initial lack of informed consent. If this is the law, then it incentivises an absurd free-for-all whereby a person could wrongfully appropriate a person's tissue (in breach of their bodily integrity, for instance) and yet claim better title to it than its source and defeat any action for its return or disposal.[83]

Acknowledging that the source of the material has a prior right to it, such a mischief is avoided. Of course, such a right need not be full-blooded ownership and may amount to a more circumscribed property right such as Professor Harris's 'mere property', an extension of the bodily-use freedom principle discussed below.[84] Such an approach need not place undue costs upon hospital researchers since such a right could be abandoned, as the traditional tests of ownership— intention, possession and control—would be preserved.[85] Until that is position, it is clear that invoking 'abandonment' is meaningless: it is like placing a fig leaf on a eunuch.

5. Many Cases of Purported Abandonment of Human Tissue More Akin to Delivery

There is a further conceptual difficulty in finding divesting abandonment by the source of tissue in cases involving human materials appropriated during a medical procedure: there is rarely a gap in seisin. In fact, there is a definite chain of possession starting with the source of the material, then moving to the doctor who removes it, then on to the nurses and other assistants before ending with the pathologist.[86] This can hardly be characterised as an abandonment to the world at large as there is no loss of possession at any time as would be present in a true abandonment.[87] It is more akin to a voluntary transfer, i.e. a gift. Furthermore, *all* interest in the tissue must be abandoned simultaneously with the act of abandonment and given the forensic, diagnostic and reproductive uses which even a small sample of human tissue may be put, it is doubtful that the source of such materials, by their silence, intends to abandon all such rights over them, thereby allowing the hospital assume absolute ownership of the material to use as they please.[88]

Indeed, the source of samples will often fail to aver to the type of use that may subsequently be made of them. For instance, in *Moore* the Plaintiff claimed that his consent was to the removal of his spleen for therapeutic purposes, and that consent did not include subsequent

[82] Hickey, '*Freegans*', p. 597 .
[83] As Professor Harris noted: "It could hardly be suggested that separated body parts should be permanently open to a common scramble." Harris, '*Property and Justice*', p. 351.
[84] Pollock and Wright, '*Possession*', p. 125.
[85] Dickens, '*The Control of Living Body Materials*', p. 183. Presumably, any claims would also be subject to limitation periods further reducing the costs of investigating title by subsequent appropriators.
[86] R. Hardiman, 'Toward the Right of Commerciality: Recognising Property Rights in the Commercial Value of Human Tissue' *UCLA L. Review* 34 (1986-1987), p. 207, 243.
[87] Pollock and Wright, '*Possession*'; Strahilevitz, '*The Right to Abandon*', p. 377.
[88] Dickens, '*The Control of Living Body Materials*', pp. 150-163 and p. 181.

commercial exploitation.[89] As McHale notes, one person's waste may be another's raw material.[90] Nonetheless, the implications of treating human tissue as abandoned are much broader than for other more usual forms of waste. For instance, the fact that every cell in the human body can reveal a person's genetic code means that an enormous quantity of information can be obtained about a person (and their family) if a DNA analyses is performed.[91] In *Venner*, things such as "excrement, fluid waste, secretions, hair, fingernails, toenails" were considered abandoned on separation from the body according to the court, by force of "human custom and experience".[92] However, in light of developments in DNA and drug analyses technology, describing such materials as abandoned for all purposes seems inappropriate. Custom may dictate that we abandon human waste on separation from our body, but this hardly includes an authorisation to perform DNA or drug analyses on it.

When parting with a tissue, a person is often unaware of its potential value. Skene draws an analogy with abandoning a piece of furniture without knowing if it had commercial potential or not.[93] This appears analogous to the principle of mistake in contract law where a mistake as to the value of an object that is not shared by another party is not legally relevant.[94] If I purchase a ring believing it to be made of gold, I cannot rescind the contract on the grounds of mistake since my mistake does not relate to the terms of the contract which are to purchase a specific ring. *Caveat Emptor* applies and this is not affected by the fact that the vendor knew of my mistake, or that it is clear I would not have entered into the contract had I realised it.[95] Furthermore, mistake implies a positive belief that is incorrect and failure to aver to an issue (such as the value of an object) is not sufficient for the relief to be granted.[96] Furthermore, there is a general rule in contract law that mere non-disclosure cannot constitute misrepresentation.[97]

Nevertheless, abandoning furniture to a skip or giving it to a rag and bone man is very different to having tissue excised by one's attending physician during the course of medical treatment. In addition to the legal presumption of undue influence, there is also a fiduciary relationship between a doctor and patient.[98] As such, there is an exception to the general rule that non-disclosure cannot constitute misrepresentation. Even if any engagement with a patient is on behalf of a hospital or a research institute, these bodies act through the physician as their agent.[99] A physician, being a medical specialist, is clearly in a better position to assess the potential monetary value of any tissue taken than the patient themselves.[100] Let us

[89] *Moore* [1990].
[90] Jean McHale, 'Waste, Ownership and Bodily Products' *Health Care Analyses* 8 (2000) pp. 123-135, 128.
[91] Joh, 'Reclaiming "*Abandoned DNA*", pp. 868-874.
[92] *Venner* [1976], 498-499.
[93] L. Skene, 'Ownership of Human Tissue and the Law' *Nature* 3 (2002), pp. 145-148.
[94] H.G. Beale (ed.), *Chitty on Contracts* (31st ed., Thomson Reuters, London), p. 488.
[95] H.G. Beale (ed.), '*Chitty on Contracts*', p. 488.
[96] H.G. Beale (ed.), '*Chitty on Contracts*', pp. 487-488.
[97] H.G. Beale (ed.), '*Chitty on Contracts*', p. 582.
[98] `Dickens, '*Control of Living Body Materials*', pp. 186-187.
[99] B.M. Dickens, 'Contractual Aspects of Human Medical Experimentation (1975) 25 *UTLJ* , p. 406, 424.
[100] Dickens, '*Contractual Aspects*', p. 427.

not forget that Skene argues a mistake as to value should not affect an abandonment, i.e. a divesting of goods with an intention to abandon them to the world at large. Mistake, misrepresentation and non-disclosure imply a *voluntary transfer* between parties who know each other, i.e. not in the nature of abandonment. Incorrectly applying 'abandonment' to transactions involving voluntary exchange serves to obscure the potential remedies that may be available to the source of material for breach of contract or breach of fiduciary duty.

Furthermore, as is evident from the case-law relating to abandonment and larceny, disposing of an object as trash is not conclusive of the formation of intention to abandon: one may intend to make a voluntary transfer to the bin-man of the rubbish for collection,[101] or retain an intention to control it (in a negative sense) as being permanently disposed of.[102]

6. Abandonment, Income Rights and Windfall Wealth

Of course, discussions as to how we allocate property rights so as to protect the interests of their source can often omit the right to derive income from the exploitation of these materials.[103] The source of such tissue may care little what is done with it until they discover it has been commercialised. This sheds light on a problem with regard to hospital waste. It is difficult to determine if something is waste or not as its value may be contingent on the actions of others. I may be happy to allow my excised spleen be used as a teaching aid in a medical school or simply incinerated without any further thought. However, if it is to be used in research with commercial potential this may motivate me to consider it as my property.[104] As McHale notes, what constitutes waste is relative and needs to be considered in context: "one person's waste can be another person's raw material."[105] An old newspaper, for instance, may have value for a recycling company or to shelter a vagrant. For ordinary chattels, there would seem to present little difficulty. If the newspaper was discarded in circumstances where one could infer an intention to abandon, the next person appropriating it would become its owner irrespective of the use they decide to make of it. If the object is valuable, however, such as a bracelet, there would be no presumption of abandonment as it would most likely have been lost.

A mistake as to the value of an abandoned object by the person abandoning it does not affect abandonment (or a voluntary transfer) once the necessary intention is formed. A similar outcome would also apply to property which has contingent value. If a company makes money selling products produced with my recycled trash, I can hardly call for a share of the profits.[106] Nonetheless, different considerations apply when it is abandonment of human biological materials in issue.

---

[101] *Williams v. Phillips* (1957).

[102] *R. v Edwards and Stacey* (1877).

[103] M. Quigley, 'Propertisation and Commercialisation: On Controlling the Uses of Human Biomaterials' *Modern Law Review* 77 (2014), p. 677.

[104] Goold, '*Abandonment and Human* Tissue' p. 152; McHale, '*Waste, Ownership and Bodily Products*', p. 128.

[105] McHale, '*Waste, Ownership and Bodily Products*', p. 128.

[106] http://mentalfloss.com/article/50227/13-products-made-using-recycled-materials <accessed 1 May 2016>.

So, for example, in *Moore* the plaintiff's failure to aver to the actual or contingent value of his cells would not affect his loss of ownership, nor would the subsequent use made of them by the researchers. Herein lies the rub. Such an approach implies ownership by the source that is lost or abandoned; and in the *Moore* case this would have included income rights. Similar thinking is involved in the incongruous recommendation of the Nuffield Council that donated tissue be regarded as a 'gift', clearly implying the source has property rights to give, while at the same time denying the source has such rights by invoking the 'no property in the body' rule.[107] Yet that rule is then disregarded and property in these parts will emerge "further down the line" for valuable biotechnological products, or for preserved samples that are used in teaching and research.[108] Thus the notion of 'abandonment' is applied in a partial and haphazard manner to vest ownership in subsequent appropriators, while denying it to the source.

Of course, it is not strictly correct to say that a person has 'no property' in their body. Intuitively, we have some rights over our bodies reflected in body-ownership rhetoric such as referring to "My Body".[109] Yet, it is not "my" body, in the same way that my car is "my" car. If we conceive of ownership in terms of Honoré's standard incidents, these can be broadly divided into control rights and income rights.[110] A person's interest in the living body comprises the former, but not the latter, what Professor Harris conceived of as "mere property": "the notion that something pertaining to a person is, maybe within drastic limits, his to use as he pleases and therefore his to permit others to use gratuitously or for exchanged favours."[111]

These rights do not include the right to derive income from the thing (e.g. I may donate an organ, but not sell it). Indeed, there is academic support for the view that there can be no expressive justification for income rights given that they are conditional on external market conditions.[112] The power to donate one's body to medical research, for instance, would be regarded as an extension of the "bodily-use freedom principle", rather than related to any powers of transmissibility.[113] Such freedoms over the complete body are protected by a right to bodily integrity (prohibition of assault, for example), and an argument could be made that severed parts, the recently severed finger, belong to the source, not as a chattel over which one has full-blooded ownership, but as an extension of this principle.

This reflects the reality that income rights in separated human biomaterials are not transferred by "gift" or "abandoned" by the source, but are "windfall wealth" that Harris argues should

[107] Nuffield Council, '*Human Tissue*' [9.14], Mason and Laurie, '*Consent or Property*', p. 725.
[108] Mason and Laurie, '*Consent or Property*, p. 726.
[109] J.W. Harris, 'Who Owns My Body?' *Oxford Journal of Legal Studies* 16 (1996), p. 55, 62-65.
[110] Honoré, '*Ownership*', pp. 107-147.
[111] Harris, '*Property and Justice*', p. 28 and pp. 360-361.
[112] J. Wall, 'The Legal Status of Body Parts: A Framework', p. 783, 789-792; J. Christman, 'Self-ownership, Equality, and the Structure of Property Rights', p. 28; J. Christman, 'Distributive Justice and the Complex Structure of Ownership', p. 225.
[113] Harris, '*Property and Justice*', p. 352.

accrue to the community.[114] Windfall wealth is a new item of social wealth to which no-one in the community has a better claim than anyone else.[115] Arguably, income rights in separated human biomaterials are such wealth as they did not exist prior to such separation (their source having 'mere property' at best in their body). Once separated, any right to their commercial exploitation is thus a windfall, as such rights did not exist prior to their separation. Thus, the source of such materials has no better claim than anybody else to the income rights in them, since these rights never vested in them, and they did not lose them. The question as to where such a windfall should land is normative and for property-specific justice reasons, according to Harris, preference is given to share such wealth with the community (or a public agency acting on its behalf). Nonetheless, one can justify conferring windfall wealth on private individuals if you do so pursuant to a simple rule that can save costs. For example, of one regards the title obtained by an adverse possessor of property as windfall wealth, ideally it should accrue to the community. This is impractical and costly, however, and conferring title on an adverse possessor in the form of the adverse possessor is a low cost way of providing incentives for investment in the property.[116] In *Moore*, the court indicated that to find for the plaintiff in conversion would confer would allow him to recover a "highly theoretical windfall", the implication being that to confer such a windfall on a private individual would be undesirable.[117] Yet, the California court went on to confer the windfall on a private enterprise in the form of the research institute. The possibility that the windfall ought to accrue to the community was not even considered by the court in *Moore*.

Viewing income rights in such materials as windfall wealth can illuminate what is really at issue in recent notable cases. The source may contend, as happened in *Moore*, that the windfall should more appropriately accrue to them. Alternatively, in line with Harris's view, the source may argue that the windfall should accrue to the community. In the U.S. case of *Greenberg v. Miami Children's Hospital* the plaintiff donors of tissue brought an action against the defendant hospital who had been the recipient of the tissue, when the latter commenced charging licensing fees and imposed restrictions for the use of a genetic test developed in the course of the research. The plaintiffs contended that the donation had been made on the understanding that the results would be for the benefit of the general population, and that testing would be affordable and within the public domain

If one accepts this argument that income rights in these materials are windfall wealth, they do not vest in the hospital or research institute by virtue of their abandonment or gift by their source. They are a new right and were not the source's to give. Use of such language suggests in disputes as to who owns separated human tissue misleadingly imply that these are disputes where is there is privity between the parties with regard to these income rights, when in fact they are seeking to assert ownership over a new right. Simply conferring ownership on a private hospital or research institution without a consideration of the merits vesting them in

[114] Harris, '*Property and Justice*', pp. 359-360.
[115] Harris, '*Property and Justice*', pp. 314-316.
[116] Harris, '*Property and Justice*', pp. 314-316.
[117] *Moore* [1990], 163.

some agency acting on behalf of the community, "designed to swell the public coffers" as Harris says,[118] is regrettable.

7. Possession, Policy and Absurd Consequences

There are conflicting policy goals that involve the issue of 'abandonment' and human biomaterials. This conflict has been examined by contrasting the respective merits of allowing an easy or automatic presumption of abandonment versus disallowing the presumption, or severely limiting the circumstances in which it can apply.[119] Allowing abandonment be easily presumed, it is contended, provides security of ownership to a researcher once they take possession of the biomaterial.[120] It is argued that without such an easy presumption of abandonment researchers would be exposed to potential conversion claims unless they incurred the significant cost of determining ownership of each biological sample they used.[121] An elaboration of this view is the objection to property in the body because of the 'absurd consequences' that would seemingly result. For example, dropping hair in a public place could lead to a finding that you were littering, a hospital would have to ensure consent to bodily waste being disposed of,[122] and a bequest of 'all my property to my son' would not only entitle the beneficiary to the deceased's body and possessions but also the body and other tissue.[123]

This approach assumes in all cases of statutory and testamentary construction, that the type of property recognised in the body would meet the definition of 'property' in a criminal statute, or that a court would interpret a testator's devise of property to incorporate such matters as her body or excised tissue, unlikely, one would think unless expressly stated. Textbook writers consider in detail the presumption in statutory interpretation that a legislature did not intend absurd consequences to result from legislation, unless this stated in very plain language.[124] In particular, interpretations which are unworkable or impractical or "productive of a disproportionate counter-mischief" are to be avoided.[125] A prosecution for littering in shedding hair would surely fall into this category. In *Hecht v. Superior Court*,[126] a case involving a purported bequest of sperm, it is easy to misstate the key issue for determination by that court as whether sperm was property or not. In fact, it was whether sperm was

[118] Harris, '*Property and Justice*', p. 360.
[119] Goold, '*Abandonment and Human Tissue*', pp. 149-154.
[120] Goold, '*Abandonment and Human Tissue*', pp. 150-151.
[121] *Moore* [1990], [4a].
[122] J. Herring, 'Why we Need a Statute Regime to Regulate Bodily Material' in Goold *et al*, '*Persons, Parts and Property*', pp. 215-231.
[123] L. Skene, 'Arguments against People Legally Owning Their Own Bodies, Body Parts and Tissue' *Macquarie LJ* 2 (2002), p. 165.
[124] O. Jones (ed.), *Bennion on Statutory Interpretation: A Code* (6th ed., Lexisnexis, London, 2013), pp. 869-904; J. Bell and G. Engle (eds.), *Cross: Statutory Interpretation* (3rd ed., Butterworths, London, 1995), pp. 88-92.
[125] Jones, '*Bennion on Statutory Interpretation*', p. 869.
[126] (1993) 16 CA 4th 836; also D.A. Rameden, 'Frozen Semen as Property in *Hecht v. Superior Court*: One Step Forward: Two Steps Backward' *Umkc Law Review* 62 (1993), p. 377.

property for the purposes of the California Succession Statute applicable in that case, a much more limited *dicta*.[127]

Furthermore, one has control rights in the body and control rights do not necessarily lead to property.[128] The body has been described as property *sui generis*,[129] 'mere property',[130] or an 'interim' category,[131] none of which may meet the definition of 'property' in every context, as they are more limited forms of ownership.[132] As such, the 'absurd consequences' argument tends give in to the tendency to conflate more limited property interests with full-blooded ownership.[133] Even if a conversion claim were successful, damages in many cases contemplated by this argument (a lost hair or flake of skin) would be negligible.[134] There may be exceptions nonetheless, such as where interference with use and control rights causes significant damage to the source, such as for the unauthorised use, or loss of destruction of gametes.[135]

Additionally, the 'absurd consequences' argument assumes incorrectly that all cases of theft and conversion are treated the same by the courts. When determining the issue of possession for the resolution of a dispute, judges have some flexibility to further policy goals. This is clear from the fact that, while the issue of abandonment is found in discreet areas of law (law of wreck, criminal law, law of personal property), it's application differs depending on the context. For instance, to state that "Abandonment will not lightly be inferred" as a blanket proposition and not one restricted to cases of larceny is incorrect. Possession is not a fixed concept and possession will be found in some cases and not in others, notwithstanding factual similarities.[136] For example, the lack of a specific knowledge of the location or existence of a chattel or the absence of a particular intention with regard to it is not necessarily fatal to a finding that one has possession of it.[137]

Possession, in D.R. Harris's view, is flexible and functional with a limited discretion vested in judges in marginal cases to effect policy goals with their decision. There is a list of factors that judge's have regard to (namely, the physical control and knowledge and intention of the

[127] (1993) 16 Cal. App. 4th 836, 846.
[128] D.C. Hubin, 'Human Reproductive Interests: Puzzles at the Periphery of the Property Paradigm', *Social Philosophy and Policy* 29 (2012), p. 106, 113.
[129] L.B. Moses, 'The Problem with Alternatives: The Importance of Property Law in Regulating Excised Human Tissue and *In Vitro* Human Embryos', in Goold *et al*, '*Persons, Parts and Property*, p. 197.
[130] Harris, '*Property and Justice*', pp. 28 and pp. 360-361.
[131] *Davis v. Davis* (Tenn. 1992) 842 S.W.2d 588, 597.
[132] There is reluctance to describe embryos as property: *Evans v. Amicus Healthcare* [2003] EWCA Civ 727, but cf. *Yearworth v. North Bristol NHS Trust* [2009] 3 WLR 118.
[133] Hubin, '*Puzzles at the Periphery*', p.107.
[134] Hardiman, 'Towards a Right of Commerciality', pp. 248-252.
[135] *Yearworth* [2009]; *Holdich v. Lothian Health Board* [2013] CSOH. 197; G.I. Cohen, 'The Right Not to Be a Genetic Parent' *Southern California Law Review* 81 (2007), p. 1115.
[136] D.R. Harris, 'The Concept of Possession in English Law' in A.G. Guest, *Oxford Essays in Jurisprudence* (1961), pp. 68-106.
[137] D.R. Harris, '*The Concept of Possession in English Law'*, pp. 68-106.

supposed owner and any rival claimant) and no single factor is determinative.[138] Thus, judges "subconsciously" compare the facts before them with the perfect pattern of possession to see if they are sufficiently analogous to give the plaintiff the remedy sought.[139] Thus, judges have discretion to recognise possession (analogous to a finding of reasonableness) and will permit further departures from the ideal concept of possession to further justice and social policy goals.[140] The very great leeway afforded to "owners' in cases of larceny lies then in the policy of the law to convict dishonest person's when possible."[141] One must be cautious then in generalising that the law of 'abandonment' in, for instance, the criminal law (where the punishment of dishonest conduct is a policy goal) will operate identically in another discreet area of law such as for conversion of human tissue, were one would assume courts would tend towards avoidance of absurd consequences.

Alternatively, it has been contended that allowing abandonment be presumed too easily would insufficiently protect the interests that the source retains in their excised tissue.[142] As noted, when an object of value, such as a wallet or gold bracelet, is found a court is likely to presume it is lost and not abandoned.[143] However, where the found item has no value or is found in circumstances that suggest it was intentionally discarded, an intention to abandon is more likely to be inferred. A *res* may have value in the market, i.e. an objective economic value, or subjective value, i.e. objects that may not have a market value but hold personal significance for the individual and is associated with their personhood.[144] Separated human biomaterials can hold both types of value. In the former category, there are a number of cases involving disputes over the source's entitlement to income rights in the products of medical research made from their biomaterials.[145] In the second category, there are products that have personal significance for the source, usually associated with reproduction such as sperm, ova and embryos.[146] This value can be functional as well. In Dickens' example, a recently severed finger would clearly still have value to its source, since it could be reattached. As long as that is the case, it would seem unwise to infer abandonment.[147]

---

[138] D.R. Harris, '*The Concept of Possession*', p. 72.

[139] D.R. Harris, '*The Concept of Possession*', p. 80.

[140] D.R. Harris, '*The Concept of Possession*', p. 103. The author acknowledges he is conflating possession and ownership here, but it is useful to do so for the purposes of this discussion.`

[141] D.R. Harris, '*The Concept of Possession*', p. 103. The decision in *South Staffordshire Water Co. v. Sharman* [1896] 2 QB 44 is explained by Harris as being motivated by the social policy discouraging prospecting for valuable objects on private land, D.R. Harris, '*The Concept of Possession*', p. 92.

[142] Goold, '*Abandonment and Human Tissue*', pp. 149-154.

[143] S. Thomas, '*Do Freegans Commit Theft*?', p. 98

[144] Dickens, '*The Control of Living Body Materials*', p. 183, M.J. Radin, 'Property and Personhood' *Stanford Law Review* (1982), p. 957; S. McGuiness and M. Brazier, 'Respecting the Living Means Respecting the Dead Too' *Oxford Journal of Legal Studies* 28 (2008), p. 297, 299-301.

[145] *Moore* [1990], *Greenberg* [2003], *Washington* [2006].

[146] *Yearworth* [2009]; *Holdich* [2013]; *Evans* [2003]; *Davis v. Davis* [1992]; 589-92; *Kass v. Kass* 696 N.E.2d (N.Y. 1998); *AZ v. BZ* 725 N.E.2d 1051, 1051-54 (Mass. 2000); *JB v. MB*, 783 A.2d 707, 709-10 (N.J. 2001); *In re Marriage of Witten*, 672 N.W.2d 768, 772 (Iowa, 2003)*; York v. Jones* 717 F.Supp, 421,422 (E.D. Va.1989).

[147] Goold, '*Abandonment and Human* Tissue', p. 152.

Herein lies the major difficulty in determining such disputes through a discussion of the concept of abandonment: it is a blunt instrument that distracts from normative questions that are often a more appropriate grounds for determining ownership. At law, legal abandonment entails the abandonment of *all* rights in a *res*. But, given the personal nature of the body, this seems like overkill. If I have lost *de facto* physical control over a blood sample which contains information pertaining to my health and my entire genetic code, or of a sperm sample which contains such genetic information in readily utilisable form, it seems inappropriate to conclude that I have abandoned *all* of my interests in the sample in question in the absence of explicit evidence that this was my intention. In terms of protecting patient interests, the value of a property model is that it allows continuing control over the separated materials.[148] Nonetheless, the casualness with which abandonment has been invoked by some commentators would tend to lend support to adopting a consent, as opposed to a property, model when dealing with such materials, although there are nuanced arguments for both.[149] Consent, of course, requires explicit authorisation of the type of use that is to be made of the material. Perhaps, a hybrid approach would be preferable

For instance, Laurie appears to suggest that some sort of inalienable property right could be recognised to protect the dignity and integrity of the human person and draws an analogy with the protection afforded in intellectual property law to artist's moral rights.[150] This leads into another question obscured when such disputes are framed in the language of 'abandonment'. Arguably, the question is often not whether I have 'abandoned' the material, but whether certain human biological products ought to be the objects of property at all.[151] Treating such material as a *res* that may be abandoned like any other *res* ignores the question as to whether, in the circumstances, there is sufficient conceptual separation from the person who is the source of the material so that the material can appropriately be considered an object of property.[152] Rights that pertain to the so-called 'indivisible person' might be better protected under the law of privacy or by property independent prohibitions.[153] Furthermore, the finality implied by 'abandonment' would seem to offer lower protection to the source than adopting a consent model where specific uses of the material need to be expressly assented to, even sometime after separation from the person has taken place.

---

[148] Mason and Laurie, 'Consent or Property', p. 724-727.

[149] Mason and Laurie, 'Consent or Poperty'.

[150] G. Laurie, *Genetic Privacy: A Challenge to Medico-Legal Norms* (Cambridge University Press, Cambridge, 2002), pp. 325-326.

[151] J. Wall, 'The Trespasses of Property Law' *Journal of Medical Ethics* 40 (2014), p. 19; J. Herring and P.L. Chau, 'Interconnected, Inhabited and Insecure: Why Bodies Should Not Be Property' 40 *Journal of Medical Ethics* (2014), p. 39.

[152] Penner, '*The Idea of Property in Law*', pp. 105-127.

[153] R. Rao, 'Genes and Spleens: Property, Contract, or Privacy Rights in the Human Body?*' Journal of Law, Medicine & Ethics* 3 (2007), p. 37. R. Rao, 'Property, Privacy, and the Human Body' *BUL Rev.* 80 (2000), p.359.

Conclusion

There a myriad of objections to invoking the concept of abandonment to separated human biological materials. Much of the difficulty comes from utilising a property law concept, despite the failure (for the most part) of the law to recognise that the source of these materials has any property rights in them. Such materials are the source's property in so far as their actions can be taken to have extinguished any ownership rights they had in them before being acquired by a hospital or research institute. However, when one inquires as to the ownership rights that the source abandoned, one is met with the objection that there is no property in the body. You can't have your cake and eat it. While there is a failure to recognise the property rights of the source in the body, then it is the language of property that should be abandoned.

There is also merit in recognising a limited form of property in separated body parts— 'mere property'—that is an extension of the bodily-use freedom principle. Absurd consequences need not result as such items would not be the same as chattels, and would not be treated the same. Such an approach need not impose onerous costs on medical institutions in investigating ownership. Furthermore, most cases of purported abandonment in a medical context are more akin to a voluntary transfer as there is no 'roll of the dice' as to the identity of the next owner. The misdescription of such transfers as abandonment obscures questions about the agency and undue influence that are appropriately raised where a fiduciary personally benefits through the relationship from a gratuitous transfer of a valuable or useful *res*. Finally, it is more appropriate to determine entitlement to income rights in such materials by reference to nuanced normative questions concerning creator incentives, not by reference to the blunt instrument of abandonment.