

Is my body my property? An examination of Property Rights Issues in human tissue and Biobanking Research

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Abstract

The application of property law to subject matter such as excised tissue has been the subject of debate. Opinions of scholars are divided on this. Some are in favour of property rights over and above the narrower scope of rights such as that which in personam rights through the law of torts and contract have to offer. Much of the concerns and arguments of those against property rights in tissue are because of the harms of commodification that may arise from giving full rights of ownership to tissue. This paper examines and analyses the arguments for and against recognising property rights in tissue and argues for the recognition of property rights over excised tissue, that the recognition of such rights is the more appropriate category for ensuring that rights of control of the tissue source in biobanking research are protected, and that the recognition of property in tissue does not necessarily entail the right to alienate a human being. The paper examines the meaning of property and finds that tissue has akin characteristics to property as judicially defined and can thus be legally recognised as property in law. The paper situates this analysis within the interstices of Biobanking research in Nigeria. The paper concludes by advocating for recognition of quasi property rights in tissue to protect the autonomy, privacy and right to make decisions of the tissue source.

Introduction

A Canadian court in 2014, decided, as a preliminary matter, that human tissue removed from the body for diagnostic medical tests

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is “personal property” that belongs to the hospital where the procedure was performed. The case was a medical negligence action brought against two doctors by the estate of Snezana Piljak, a woman who was diagnosed in 2009 with colorectal cancer and died in 2011. One of the issues in the case is whether the doctors were negligent in failing to diagnose the cancer in 2008 when a colonoscopy was performed on Ms. Piljak. The doctors had petitioned the Canadian court for access to liver tissue biopsied from Ms. Piljak in 2009 at Toronto’s Stonybrook Hospital. The court had to address the matter of tissue ownership before it could consider whether the defendant-doctors had a right to access the liver tissue in order to investigate whether Ms. Piljak had hereditary non-polyposis colorectal cancer (HNPCC or Lynch Syndrome). If the HNPCC were indicated by an examination of the tissue, the defendant-doctors would use that fact to mount a defense against the accusations of negligence. The court ruled that the tissue was personal property of the hospital (though it ultimately denied the defendant-doctors’ request to examine it for technical reasons). The decision that human tissue is “personal property” has important legal ramifications for genetic research community outside of Canada some of which will be examined in this paper.

When we assign a property label to something (such as human tissue or a DNA sample), we assign corresponding rights and obligations, and this legal classification ultimately shapes societal conduct and responses. Property law principles promote and facilitate transfers or, contrastingly, deter and restrict transfers. For instance, Statutes² require that agreements to sell real property be in writing whereas personal property can be transferred by verbal agreement. However in relation to human tissue, the law is not precise in its categorisation of tissue as property or not. The way Law treats and historically treated the human body (in whole

² Section 7 of the Statute of Fraud, 1677 which states that any declaration of trust in respect of land must be evidenced by a memorandum in writing signed by parties creating the trust. See also section 78(1)b of Property and Conveyancing Law

and in part) in various contexts (e.g., medicine, research, education, employment, immigration, etc.) has been a subject of debate. Commentators are divided, along the lines of those in favour of property rights over and above the narrower scope that which in personam rights through the law of torts and contract have to offer and those against property rights because of the harms of commodification or full rights of ownership. This paper, argues for the recognition of property rights over excised tissue, that the recognition of such rights is the more appropriate category for ensuring that rights of control of the tissue source in biobanking research are protected, and that the recognition of property in tissue does not necessarily entail the right to alienate or promote commodification of the human body.

Commodification of the human body poses challenging legal questions. For example, organ donation is encouraged, but policies discourage the use of financial incentives to increase the number of organ donors and to make organ donation less disruptive to the life of the donor. Commerce and economic transactions in the area of health in general, and the buying and selling of human biological material in particular, are among the most controversial issues in health policy. Issues regarding commodification and commercialisation of tissues stored in biobanks, and information extracted from sequencing human DNA is part of the ongoing debate.³ An underlying issue in this also, is self-ownership and the concept of ownership in tissue and whether its acceptance might open the door for morally objectionable practices such as sale of organs and body parts and even the right to engage in prostitution or self-slavery.⁴ Self-ownership it is said could also encourage the idea that we own our bodies, sperm, fetuses and, by extension, our children and hence we can do as we

³ Moore v Regents of the University of California Supreme Court of California 51 cal 3d 120, 793 P 2d 479, 271 Cal Rptr 146 (1990), Ashcroft, R. (2000). The ethics of reusing archived tissue for research. *Neuropathology and Applied Neurobiology*, 26(5), 408-411.

⁴ Quigley, M. (2007). Property and the body: Applying Honoré. *Journal of Medical Ethics*, 33(11), 631-634.

please in relation to them.⁵ In the light of this, courts are reluctant to attach proprietary interests to biological materials.⁶ This reluctance, has in some cases, been based on a policy of not wanting to hinder the growth of research.⁷ It is perhaps because of these reasons that some might want to dismiss the recognition of property in tissue and body parts. Even though the idea of commodifying the human body is repugnant, considering the body within a property framework is an effective method of dealing with the effects of the changing conceptions of the tissue and its value under a property law approach does not necessarily entail buying and selling of body parts. This is because recognising property rights in tissue is not tantamount to embracing a full spectrum of alienable property rights.⁸ In other words, it can be argued that recognising property rights in tissue need not encourage commercialisation of the body and its parts as feared in some quarters. Non alienable rights or non-tradable rights if recognised in tissue will enable the tissue source to have a say in future unspecified research, but still not be allowed to sell body parts. From a practical point of view, realising the recognition of property rights in tissue without the baggage of commodifying the human body can be achieved through other legal mechanisms such as a charitable trust model.

Indeed a property rights approach to tissue has the advantage of giving tissue source a continuing control over excised tissue as well as a possible cause of action in tort. A bundle of rights approach to property also makes it possible to exercise

⁵ Brazier, M. (2003). Organ retention and return: problems of consent. *Journal of Medical Ethics*, 29(1), 30-33.

⁶ In *Moore v. Regents of University of California*, 793 P.2d 479, 51 Cal. 3d 120, 271 Cal. Rptr. 146 (1990). the court found that granting ownership rights to tissue source would hinder research but the court had no objection to the researchers obtaining a patent on the tissue samples.

⁷ *Washington University v. Catalona*, 400 F.3d 667, 2007 W.L. 1758268 (Court of Appeals 2007) per Limburg J at 1002

⁸ Winickoff, D. E., & Neumann, L. B. (2005). Towards a social contract for genomics: property and the public in the 'Biotrust' Model. *Life Sciences Society and Policy*, 1(3), 8.at p.13

property right on body. The inappropriateness of traditional (full) property rights to bodily parts was also emphasised by Honoré, who wrote:

In other cases again, we speak not of having a thing but a right in or to something. Thus, a person does not either own or have his body or liberty, though perhaps he owns dead parts of his body such as his hair and nails. In general he has, instead, a right to bodily security or liberty, and a right to determine how parts of his body, such as his kidneys, are to be used during his lifetime if he chooses to forego their use or, being dead, no longer has use for them. Here the analogy with the ownership of a thing is tenuous. These rights are either inalienable or can be dealt with only by something in the nature of a gift'.⁹

Significance of property rights to the claim of the tissue source in biobanked samples and data

The law on property is a mechanism whereby access to and control of resources are regulated. It is a tool that organises finite resources. The law of property has been used as a system for resolving disputes between parties who have different interests in a thing. Where, for instance, a party wishes to use or possess a thing, property law operates to determine who has a better claim. These rights are protected by rules based on designation of control and the protection of that designation.¹⁰ The ability of a property framework to grant access and control over the thing in question is one of the reasons why the idea of locating the claim of the tissue source within the property framework is being suggested. When relating to a thing, property law may relate to it as the property or

⁹ Honoré T. Ownership. In: Guest AG, ed. Oxford essays on jurisprudence. Oxford: Oxford University Press, 1961 at p.52

¹⁰ Goold, I. (2005) Sounds Suspiciously like Property Treatment: Does Human Tissue Fit within the Common Law Concept of Property? *University of Technology Sydney Law Review*, 7, 62.

more importantly as a system that identifies and recognises which thing can have property rights exercised over it.¹¹ The ability of property to accommodate the various rights regardless of whether the thing is tangible or not makes it a framework with flexibility that can accommodate excised tissue.¹² According to Gray and Gray¹³ the definition of property is constantly on the move. Grubb also believes that the categories of property are never closed or static and that they shift with societal norms.¹⁴

A legal conception of property as rights gives it flexibility and, in turn, makes it useful in analysing legal issues arising from technological advancement.¹⁵ Flexibility is an important feature of the property law concept which makes its framework suitable for analysis of claims such as that of the tissue source to control of excised tissue in biobank research. Is this flexibility achievable only through the property rights approach?

This paper, examines this and the concept of property to determine whether human tissue, can be the object of a property claim by the tissue source. It seeks to advance a legal basis for an entitlement claim of the tissue source. By analysing and defining the concept of property, the paper aims to determine whether tissue, as well as the claim of the tissue source, has hallmarks of what the law can protect. The paper also recognises the general debate about whether the tissue source should be a partaker of the fruits of research but does not enter into it.

¹¹ Munzer, Stephen R. (1990) *A Theory Of Property*. Cambridge University Press.

¹² Ibid at 105.

¹³ Gray, K. J., & Gray, S. F. (1987). *Elements of Land Law at p.14*. London: Butterworths.

¹⁴ Grubb, A. (1998). 'I, me, mine': bodies, parts and property. *Medical Law International*, 3(4), 299-317.

¹⁵ Nwabueze, R. N. (2007). Biotechnology and the challenge of property: property rights in dead bodies, body parts, and genetic information. Ashgate Publishing, Ltd, 31-32

What is property?

The term property can be used to describe aspects of the relationship between people and things and also to describe the thing itself. Property can be used to describe the nature of things such as a car. This is the popular sense of the term property, often referred to as the layman's understanding of property. This view of property perceives it as something physical and essentially tangible (The reified perspective of property). However, it can also be used to describe the nature of a relationship, such as a bailment. This is the conception of property that lawyers have: the bundle of rights perspective. In other words, rather than view property as the thing itself, property is seen as consisting of the legal relations with the thing or bundle of rights exercised with respect to the thing. Lord Wilberforce in *National Provincial Bank v Ainsworth*, described the common law characteristics of property saying:

'Before a right or an interest can be admitted into the category of property, or of a right affecting property, it must be definable, identifiable by third parties, capable in its nature of assumption by third parties, and have some degree of permanence or stability.' Following this judicial pronouncement of the common law position on property rights,

Nwabueze noted, that:

the dephysicalization of property resulting from the perspective of the bundle of rights theory imbues it with some flexibility that is amenable to judicial and analytical creativity, and also creates an opportunity for the propertization of rights and interests on the fringes of property law, such as dead bodies and body parts'.¹⁶

¹⁶ Ibid at 8.

The reified perspective of property

The reified theory of property conceptualises it as things or physical entities. In other words it objectifies property. This perception of property dates back to the nineteenth century, when William Blackstone described property rights as comprising:

‘that sole or despotic dominion which one man claims and exercises over the external things of the world, in total exclusion of the right of any other individual in the universe’.¹⁷

This view has changed and few, if any, would argue that property confers absolute despotic dominion. Property rights are not absolute; the law through statute does place limitations on the exercise of property rights by property owners.¹⁸ Blackstone’s reference to ‘despotic dominion’ can thus be interpreted to mean the right of the property owner to exclude others from using his property. Strahan,¹⁹ a century later, also affirmed that property must be a physical object and further stated that debts and copyright were not property. This position echoes the concerns that property rights objectify the human body. In spite of this, reified theory of property does have the advantage of simplicity and certainty, even though it does not cater for the intangible property rights such as intellectual property rights. In the context of biobank research, using the reified perspective, tissue samples may be recognised as property because of their physical nature. However, it may not recognise information as property nor the right of the tissue source to control of the data. This limitation of the reified theory appears to be out of touch with the times. The growth of information technology has endowed certain pieces of information

¹⁷Blackstone, W. (1879). *Commentaries on the laws of England: In four books* (Vol. 2). Callaghan.

¹⁸Rose, C. M. (1998). Canons of Property Talk, or, Blackstone’s Anxiety. *Yale Law Journal*, 601-632.

¹⁹Strahan, J.A., and Baxter. J.S., (1908) *A General View of the Law of Property*. Stevens.

and data with greater value than was previously attributed to them; as a result some classes of information have attained the status of property.²⁰ The increased significance of information and its effect on the concept of property plays out in the field of biobank research.²¹ A gene contains genetic information about the tissue source and this could be shared and used in a number of ways, including future unspecified research, which are totally different from the one the tissue source enrolled for. This has generated a debate on the legal status of human genetic information and whether genetic information can be owned.²² In his regard, writers have argued for the ownership of information, and have also warned that failure to recognise information as property capable of being stolen is unrealistic.²³ In the context of biobank research, the emergence of population biobanks has heightened the debate on the legal status of samples and data. The advancement in technology has dictated a change in property and its forms. These new forms of property that have emerged in the wake of biotechnology and biobank research, challenge traditional forms of property law regimes, although the issue of whether a tissue sample is recognised as property remains a question to be clearly answered even though the reified perspective of property appears to suggest that it is.

In *Roche v Douglas*,²⁴ the claimant applied for a DNA analysis of the deceased's tissue sample. For the application to

²⁰ Weinrib, A. S. (1988). Information and property. *University of Toronto Law Journal*, 117-150.

²¹ Human Genetics Commission, & Human Genetics Commission. (2002). Inside information: balancing interests in the use of personal genetic data. *HGC*, 167.

²² Ontario report genetic testing and gene patenting charting new territory in health care available at http://www.health.gov.on.ca/en/common/ministry/publications/reports/genetic_srep02/report_e.pdf last accessed 6/11/2014

²³ Weinrib, A. S. (1988). Information and property. *University of Toronto Law Journal*, 117-150; Barrad, C. M. V. (1992). Genetic information and property theory. *Nw. UL Rev.*, 87, 1037.

²⁴ *Roche v. Douglas*, (2000) WASC 146.

succeed, it must be established that the body tissue qualified as property in the eyes of the Court. It was held that, in addition to the procedural benefits of identifying a property right in the deceased's tissue sample, it defies reason not to regard tissue samples as property, and that such samples have real physical existence. The Court in *U.S. v Arora*²⁵ also found the reified perspective useful. In that case, personal animosity between two scientists employed by the National Institute of Health reached its peak when one of them maliciously destroyed the cultured human cells produced by the other. The United States brought an action in conversion against the offending researcher. The Court, using a pure property analysis, held that the cell, although a product of a living body, was property. In spite of these decisions and other decisions applying the reified perspective to ascertain property in tissue, there is little consensus on the application of the reified perspective to human tissue.²⁶

Bundle of rights theory of property

Another approach to the theory of property is to consider property as a right over a thing and not the thing itself. These are rights exercisable over the thing, which are often intangible and may include intellectual property rights, rights of way, and rights of access. Property in this sense encompasses a great variety of intangible rights, the greatest exercise of which is ownership.²⁷ These rights are legal in so far as the legal system in which they exist provides rules to safeguard the holder's interest in them from undue interference.²⁸ Also each of these rights is capable of

²⁵ *U.S. v. Arora*, 860 F. Su1091 (D. Md. 1994).

²⁶ *Janicki v. Hospital of St. Raphael* [1997] 744 A.2d 963, 46 Conn. Su204 (1999), *Cornelio v. Stamford Hospital*, 1997 W.L. 430619.

²⁷ Nwabueze, R. N. (2013). Body parts in property theory: an integrated framework. *Journal of Medical Ethics*, 2012.

²⁸ Calabresi, Guido, and A. Douglas Melamed. 'Property rules, liability rules, and inalienability: one view of the cathedral.' *Harvard Law Review* (1972): 1089-1128.

qualifying as property. It is not necessary for a person to exercise all the rights in the bundle over a thing.

In relation to biobank research, the right of the tissue source to have a say in the use of his sample or data in future unspecified research is arguably one of the rights in the bundle because it supports the claim of the source to have a say in future unspecified use of their data based on a claim of entitlement to privacy as an autonomous person. It also supports claims for the intangible and more importantly for data and sample to be recognised as having the qualities of property. The bundle of rights approach as rights over the tangible has sufficient rights in its bundle to qualify a thing as property. In line with the argument advocated in this discussion for a say in future research, the discussion proceeds in the following section on the basis that property rights are a collection or an accumulation²⁹ of ownership entitlements and that each individual right in the bundle is capable of qualifying as property. This position played out in *Catalona*³⁰ where patients sought to assert their right to determine downstream use of their tissue. The *Catalona* case, in the opinion of Dickenson,³¹ was framed in terms of the right to possess one of the sticks in the bundle. This shows that one does not need to have all the sticks in the bundle to exercise property right. The bundle of sticks approach also helps to unpack and identify the rights, as the case may be the sticks of the relevant parties. Using *Catalona* as an illustration, the institutional proprietor of the biobank, in this case Washington University, could claim a right of management, a right to possess, and a right to use. While the tissue sources claimed, albeit unsuccessfully, a right of transmissibility and withdrawal. What this suggests is that with a bundle of rights approach to tissue, all stakeholders may have sticks in the bundle, but none has

²⁹ Nwabueze, R. N. (2013). Body parts in property theory: an integrated framework. *Journal of Medical Ethics*.

³⁰ *Wash. Univ. v. Catalona*, 128 S. Ct. 1122, 552 U.S. 1166, 169 L. Ed. 2d 949 (Supreme Court 2008).

³¹ Dickenson, D. (2007). *Property in the body: Feminist perspectives*. Cambridge University Press.p.136

all the sticks to themselves in other words none of them own the tissue outrightly.

Ownership in this sense is used to indicate the content of property rights over the thing. It can be described as a bundle of entitlements that an individual has to a thing.³² There is a range of different entitlements that a person may have with regard to a resource that others are obligated to respect as ownership.³³ One of the ways to view these various entitlements is to conceive each entitlement as an ‘incident of ownership’.³⁴ In trying to determine what ownership actually is, Honoré, in his seminal essay *Ownership*, identifies eleven ‘standard incidents’ of ‘the liberal concept of full ownership’.³⁵

These incidents are constitutive of, but not necessary to, the concept of ownership.³⁶ If, as Honoré contends, having full ownership consists in holding some of the incidents of ownership, then it is possible to argue for property rights in body parts if it can be shown that the body satisfies some of the incidents of ownership as outlined by Honoré in his list of incidents. This list contains the variety of entitlements that the property can be broken into. The incidents of ownership are:

1. The right to possess; to have exclusive physical control over the object;
2. The right to use or to exercise personal use of the object;

³² Wall, J. (2011). The legal status of body parts: a framework. *Oxford Journal of Legal Studies*, 31(4), 783-804 at 786.

³³ ‘[P]roperty is not things but rights, rights in or to things’ – Macpherson, C.B. (1978) ‘The Meaning of Property’ in *Property: Mainstream and Critical Positions*, Basil Blackwell, 2.

³⁴ Honoré A.M. (1961) *Ownership’ in Making Law Bind: Essays Legal and Philosophical*, Oxford: Clarendon Press.

³⁵ Honoré, T. (1987). *Making Law Bind: Essays Legal and Philosophical*. Oxford: Clarendon Press. 161-192.

Honoré, A.M. Ownership in Guest A.G.(ed), *Oxford Essays in Jurisprudence* (OUP) 112-128; Honoré A.M., (2006) Property and Ownership; Marginal Comments, in Endicott, T. Getzler J. and Peel E. (eds) *Properties of Law: Essays in honour of Jim Harris* (OUP) 131-135.

³⁶ Quigley, M. (2007). Property and the body: Applying Honoré. *Journal of Medical Ethics*, 33(11), 631-634.

3. The right to manage; to determine how and by whom the object is used;
4. The right to income or to derive a benefit from foregoing personal use of the object;
5. The right to security and insurance that the person will remain owner of the object;
6. The rights of transmissibility – the ability to transfer ownership interests to another;
7. The right to absence of term – the presumption of indeterminate length of ownership;
8. The duty to prevent harm – the inability to use the object in harmful ways;
9. The liability to execution – the liability that the object may be seized in payment of debt; and
10. The incident of residuary – rights may expire or be abandoned so as to vest in someone else.

These incidents of ownership are incidents of legal interest in so far as the legal system backs them up with rules that protect the interest holder from interference from others. The viability of tissue being recognised as property will be examined in relation to biobanking research by evaluating some incidents of ownership. Although Honoré's incidents of ownership have been considered a useful starting point for the consideration of property rights in biological material, as well as a lens through which to view the current position of the law on ownership, by itself it is an insufficient account of ownership entitlements.³⁷ This is because ownership is not a unitary concept that is constituted by a sufficient number of incidents being present, but rather is best understood as a collection of smaller ownership bundles within Honoré's bundle of ownership. Honoré's incidents not only give a detailed picture of the kind of rights an individual has in the

³⁷ Wall, J. (2011). The legal status of body parts: a framework. *Oxford Journal of Legal Studies*, 1-23.

ownership of a thing, his framework also gives a comprehensive picture of the sticks within the bundle of rights theory.

Having analysed what property is, the following paragraphs will examine whether human tissue can fit into the concept of property under the bundle of rights approach. It will also assess where applicable who can claim these rights.

The right to possess

Honoré's first incident is the right to possess. This right grants exclusive physical right of control over an object. According to Honoré, there are two aspects of this right: the right to be put in exclusive control, and the right to remain in control.³⁸ Both of these aspects of control within property flow from the right to exclusive possession.³⁹ Where the object cannot be physically possessed, or where it is intangible or immovable, this right can be exercised to exclude others from using it. It can therefore be used to assign rights of possession over an intangible object. Property systems protect the right to possession to enable the protection of other property rights. For instance, in many cases it would be nearly impossible for a legal system to protect the rights to use and manage property, if anyone was free to take possession of the objects of those rights.⁴⁰ In relation to biobanking, tissue can be possessed by the biobank. Tissue samples are also tangible visible objects, whether liquid or solid, and thus can be possessed or held under the physical control of an individual or organisation. It is also possible to exclude others from them either by placing them in a secure container which is protected from removal. Similarly, researchers can possess tissue samples in research and exercise control over who may have access to them.

³⁸ Quigley, M. (2007). Property and the body: Applying Honoré. *Journal of Medical Ethics*, 33(11), 631-634 at 632.

³⁹ Penner, J. E. (1995). Bundle of Rights Picture of Property, The. *UCLA L. Rev.*, 43, 711 at 755.

⁴⁰ Goold, I. (2005). Sounds suspiciously like property treatment: does human tissue fit within the common law concept of property. *UTS L. Rev.*, 7, 62 at 71.

The right to use

According to Honoré, the right to use, the right to manage and the right to income overlap, because the latter falls within the definition of use.⁴¹ The right to use does not necessarily include the right to manage and to reap income. It is a claim right to the personal enjoyment of the thing as well as a privilege to use it. There are various uses to which human tissue can be put. It can be used in pathological examinations, treatment, and forensic or biobank research. The many uses to which it can be put lend credence to the suggestion that a right to use can be exercised over tissue samples, some of which have been recognised by the courts and, by implication, the legislature.⁴²

Today the value and utility of body parts has changed. Tissue can be stored and used over and over again almost for ever. DNA can be extracted from the smallest sample for forensic analysis, and tissue taken for an initial study can be stored and used in several other studies by various other researchers; thus, the progressive breakthroughs in science dictates protection for the tissue source. While others can use the samples of the tissue source for a number of reasons, it should be done with the permission of the tissue source.

The right to manage

The right to manage includes the power to determine who may use the thing and how it may be used, as well as a claim right that the object is dealt with as directed. The right to manage allows a person to enable others to deal with the thing.⁴³ It includes activities such as lending and contracting out. With regard to tissue samples or data, it is possible to exercise a right to manage in the sense that the owner of the body parts who is the holder of the

⁴¹ Honoré, A.M., Ownership' in Guest A.G. (ed), *Oxford Essays in Jurisprudence* (OUP) at 116.

⁴² Wall, J. (2011). The legal status of body parts: a framework. *Oxford Journal of Legal Studies*, 783-804 at 786.

⁴³ Honoré, A.M., Ownership' in AG Guest (ed), *Oxford Essays in Jurisprudence*, OUP, at 117.

enabling power – i.e. the tissue source – has the power to determine the conditions of use of their tissue as contained in the informed consent form.⁴⁴ The tissue source can allow or prohibit the use of his sample or data by others to perform other types of research. In fact, the right to manage works well in the context of tissue banking and secondary research because it allows several people who have an interest in the sample to pursue the interest, while giving overarching control to the person who will be most detrimentally affected if it is dealt with in a way that conflicts with their interest.⁴⁵ Where tissue is stored, as in the case of a biobank, the biobank exercises management powers by being the one who may grant access to use of the tissue.

The right to the income

According to Honoré, income in the more ordinary sense includes the fruits, rent, profits and benefit derived from relinquishing personal use of a thing and allowing others to use it for reward.⁴⁶ This right overlaps with the right to use in that one can derive income from the use of a property. It allows owners to benefit from the income generated by the object. In the context of biobank research, researchers and biobanks as well as the tissue sources are not precluded from profiting and making income from the developments generated from research especially pharmaceutical companies. Tissue samples can be used to test pharmaceuticals which are sold for profit. In the case of *Moore*, a highly lucrative cell line was developed which is used to generate income.

⁴⁴ Quigley, M. (2007). Property and the body: Applying Honoré. *Journal of Medical Ethics*, 33(11), 631-634 at 632.

⁴⁵ Goold, I. (2005). Sounds suspiciously like property treatment: does human tissue fit within the common law concept of property. *UTS L. Rev.*, 7, 62 at 73.

⁴⁶ Honoré, A.M., Ownership' in AG Guest (ed), *Oxford Essays in Jurisprudence*, OUP, at 117.

The right to the capital

This is, 'the power to alienate the thing, and the liberty to consume, waste, or destroy the whole or part of it'.⁴⁷ It is a right to access the value held in the object itself. This includes the power to transfer the holder's title to the object during his lifetime or after death.⁴⁸ This power may be exercised via sale gift or other means. It should be highlighted that the power to alienate under this incident of ownership does not equate to a power to alienate within a market. It can simply mean gifting or transferring by organ donation, blood donation or giving tissue samples for biobank research. This power can be exercised by the tissue source if he voluntarily participates in research by giving tissue to a biobank. Biobanks can in turn exercise this power once the tissue is in their custody and they have control over the tissue samples

The right to security

This right to security is right against unauthorised taking, which gives the assurance that a person 'should be able to look forward to remaining owner indefinitely if he so chooses and if he remains solvent'.⁴⁹ This right has been exercised over the body especially in cases of compensation for wrongful death which is seen as compensation to the next of kin.⁵⁰

In the context of biobank research, the right to security can be exercised through the option of withdrawal from biobank research. When a tissue source wishes to withdraw from a study, de-identification of samples and data (making it impossible to link it to specific individuals) has been considered a satisfactory

⁴⁷ Björkman, B., & Hansson, S. O. (2006). Bodily rights and property rights. *Journal of Medical Ethics*, 32(4), 209-214.

⁴⁸ Goold, I. Sounds Suspiciously like Property Treatment: Does Human Tissue Fit within the Common Law Concept of Property?'(2005). *University of Technology Sydney Law Review*, 7, 62.

⁴⁹ Björkman, B., & Hansson, S. O. (2006). Bodily rights and property rights. *Journal of medical ethics*, 32(4), 209-214.

⁵⁰ Quigley, M. (2007). Property and the body: Applying Honoré. *Journal of Medical Ethics*, 33(11), 631-634 at 632. Fata Accidents law, Laws of Lagos state chapter F1

security for the tissue source.⁵¹ Recognising this right will protect the tissue source from exploitation.

The right to transmissibility

The right to transmissibility of property gives the owner the power to pass the property or transfer the object to another. The transfer can be on the death of the owner or it could be during his lifetime. Applied to the body, the power to transfer our rights to the body to another can be done by delegating proxies to take certain decisions on our behalf. In relation to stored tissue research the law does not currently allow for bodies or their parts to be transferred by the tissue source.

In *Washington University v Catalonia*⁵² the parties were in dispute over the ownership of biological materials donated for medical research. Catalonia, a respected urologist, was employed by the University, where he was instrumental in establishing a bio repository of biological materials. In 2003 he left the University for North-Western, where he continued his research. Before leaving Washington University, Catalonia sought to take along with him the biological samples of some of his research participants. Washington University refused to release the samples and requested a declaratory judgement that they owned them. The University argued that once the tissue source had made a voluntary donation of the sample, the recipient (in this case, the University), became the owner of the biological samples with the right to control their use and storage. The defendant's position was that the University was not the recipient, and that the tissue sources donated the samples with the intent that the materials should stay with him for the purposes of research.

The Court, relying on cases of *Moore* and *Greenberg*, found that donation of the biological samples to the University constituted an *inter vivos* gift. In adopting this approach, the Court seemed to have adopted the position of Moreno J. in *Greenberg*

⁵¹ UNESCO. International declaration on human genetic data. *Eur J Health Law* 2004; 11: 93–107.

⁵² *Washington University v. Catalonia*, 490 F.3d 667 (8th Cir. 2007).

that, although an individual may have property rights in biological materials, those rights evaporate once they are voluntarily given to a third party.⁵³ This position presupposes that a tissue source has property rights in tissue until such rights are divested by donation or otherwise to a third party. This position appears to rest upon the proposition that property rights were created on severance or excision of the biological materials by way of gift. The case further highlights the importance of express conditions when making a gift and the need for the tissue source to be able to control access to the tissue especially in relation to future unspecified research. This inevitably puts an onus on the source to be aware of the limitations they wish to place on the gift. It also raises concerns about the ability of the tissue source especially in low resource settings like Nigeria to do so. However, it is authority for the proposition that tissue is capable of being transmitted legally and physically, as the Court ruled that both custody and ownership passed from the tissue sources to the University.

Rationale for property right in tissue and biobanking research

‘A proprietary approach confers on the claimant the advantage of continuing control that is tellingly lacking in non-property frameworks underpinned, for instance by consent, negligence, privacy and unjust enrichment rules’.⁵⁴

In spite of this advantage, the position being advocated is not to further the purpose of commercialising or creating a tissue market, but rather to find a legal basis for tissue sources to determine whether they want their biobanked tissue used in future research. The choice of a property framework is adopted based on utility and also because in comparison to non-property frameworks, as Nwabueze⁵⁵ observes, it gives the required control to the tissue source. Moreover, most of the non-property frameworks, such as

⁵³ *Greenberg v. Miami Children's Hospital Res. Inst., Inc.*, 264 F. Su2d 1064 (S.D. Fla. 2003) at 1059.

⁵⁴ Nwabueze, R. N. (2013). Body parts in property theory: an integrated framework. *Journal of Medical Ethics*.

⁵⁵ *Ibid.*

tort remedies, still depend on the proof of a property right.⁵⁶ In the same vein, Mason and Laurie⁵⁷ suggest that property is a powerful device for the bundle rights it confers, and to recognise a quasi-property claim to material is to support a normatively strong connection to that material as well as establishing a justiciable legal interest in it.

‘To recognise a ‘quasi-property’ claim to material is to support a normatively strong connection to that material and, accordingly, to establish strong, justiciable legal interest; by the same token.....’full’ property rights will only be recognised where there is little or no prospect of exploitation or other harm, which can include the ‘harm’ of disrespect for the dignity of the human organism’.⁵⁸

It has been suggested that a modified form of property right – quasi property – be recognised to give limited continuing control over tissue samples to the tissue source.⁵⁹ Recognised quasi property rights include the right of the next of kin to possession of the corpse for burial,⁶⁰ and the right to donate organs. Limited property rights would help to resolve some of the issues of commodification related to possession of excised tissue. In the case of a biobank, for instance, quasi property rights in tissue will make remedies available to a researcher or a biobank in the event that tissue

⁵⁶ *Moore v Regents of the Uni of California* [1990] 793 2d 479, 51 Cal. 3d 120, 271 Cal. Rptr. 146.

⁵⁷ Mason, K., Laurie, G., & Smith, A. M. (2005). *Mason and McCall Smith’s Law and Medical Ethics*. Oxford University Press.

⁵⁸ *Ibid* at 514-515.

⁵⁹ Mason, J. K., & Laurie, G. T. (2001). Consent or property? Dealing with the body and its parts in the shadow of Bristol and Alder Hey. *The Modern Law Review*, 64(5), 710-729.

⁶⁰ Boulier, W. (1994). Sperm, Spleens, and Other Valuables: The Need to Recognise Property Rights in Human Body Parts. *Hofstra L. Rev.*, 23, 693 at 709.

samples are stolen or wilfully destroyed.⁶¹ It would also allow for a legally recognised voice on how tissue samples are used in the future. A limited recognition of property rights in the human body can be developed by drawing analogies from non-proprietary areas of the law that affirm property rights, such as law of torts that protects bodily integrity and the inviolability of the person.

Individuals may not wish separated biological materials to be used in commercial settings.⁶² This desire or stance may be dictated by religious, moral or philosophical beliefs against commercial dealings in body parts. The direct involvement of commercial enterprises in the procurement distribution, handling and research on human tissue may be cause for concern.⁶³ This is because a commercial orientation may sometimes conflict with the values of the custodial nature of biobank research. It may also lead to a lack of public trust on the part of the tissue source in the research enterprise.

In *Moore* where the question of property arose in the context of human tissue used in biotechnological engineering, a U.S. court held that a donor of tissue is not entitled to share in the profits of a commercially successful biotechnological product engineered from the donor's tissue. The rationale was that such material is the subject of gift regardless of what use is subsequently made of it. Moore's reaction shows that a donor may be willing to part with tissue for a number of therapeutic and research purposes, but he may not want to do so where the recipient is to make a significant profit from it.

Property rights may be the legal tool that enables a tissue source to determine how separated biological samples and associated data are used in future unspecified research. Property as rights sees property not as a thing but as rights exercisable against others in or over things and it can be used as a legal tool to define the

⁶¹ *U.S. v. Arora*, 860 F. Su1091 (D. Md. 1994).

⁶² Green D. et al (2006) Obtaining informed consent for genetic studies: The multi-ethnic study of atherosclerosis *Am. J. Epidemiology* 164 (9) 845 at 849.

⁶³ Anderlik, M. R. (2003). Commercial biobanks and genetic research. *American journal of Pharmacogenomics*, 3(3), 203-215.

obligations of persons with respect to a tangible or intangible thing. Intangibles to which property rights have been exerted include whiteness,⁶⁴ personhood,⁶⁵ racial identity,⁶⁶ and a university degree.⁶⁷ A property interest does not necessarily imply that the holder owns something, but that someone owes him an obligation. Property rights, unlike contractual rights, are enforceable against the whole world as rights *in rem*. In the words of Mathews:

The common law sees property as essentially negative, the right to exclude others from something, or from some aspect of something. This negative right may be absolute, as for example ‘This is my pen’. I can exclude everyone from everything in relation to it. Or it may be limited – even isolated as in for example ‘I have a right to light over (your) land’. I can prevent you from building in a certain way on your land. Sometimes the negativity imposes a positive obligation on another person, as in ‘You owe me £10...’.⁶⁸

This concept of property as a right can be traced to the work of Hohfeld which was used by Honoré as a basis for his classification of rights as a framework to define property.⁶⁹ In the context of biobank research, if property rights are exercisable over tissue and associated data as tangible and intangible objects of property, it

⁶⁴ Harris, C. I. (1993). Whiteness as Property, 106 *HARV. L. rev*, 1707(1782), 10-2307.

⁶⁵ Radin, M. J. (1982). Property and personhood. *Stanford Law Review*, 957-1015.

⁶⁶ Chen, Jim. ‘Embryonic Thoughts on Racial Identity as New Property.’ *U. Colo. L. Rev.* 68 (1997): 1123.

⁶⁷ *Woodworth v. Woodworth* [1983] 337 N.W.2d 332, 126 Mich. A258, 126 Mich. 258 (Ct. App).

⁶⁸ Mathews, (1995). Man of Property, The. *Med. L. Rev.*, 3, 251.

⁶⁹ Honoré, A.M. (1961). Ownership. *Oxford essays in jurisprudence*, 107-147.

will give the tissue source a right to exclude the use of his tissue and data from research that he has not specifically consented to.

For a number of reasons which may include religious and moral, individuals may not want their cells immortalised.⁷⁰ Immortalised cells are population cells which would not normally proliferate indefinitely, but due to mutation can keep undergoing division. A HeLa cell is an example of immortalised cells and also an example of why people may not want their cells immortalised. HeLa cells are a cell line derived from Henrietta Lacks, an African American woman who died of cancer and whose cells were taken from her tumour without her consent. The cells have been used in multiple researches since her death without any recognition or compensation to the family. The HeLa genome has laid the foundations for the multi-billion dollar biotech industry, but the Lacks' family have never shared in any income generated by the immortal cell line. It was only in 2013 that the American National Institute of Health conceded to give some control to the family over scientists' access to the cells' DNA code, as well as giving acknowledgement in the resulting studies to the Lacks family.⁷¹ The agreement came about after the relatives raised privacy concerns when German researchers published Lacks's DNA code.

The control of biological materials becomes significant when materials are used to obtain personal genetic information. This is because, privacy and the possibility of invasions of privacy from secondary uses of biological materials is a matter of concern. These are some of the reasons why individuals seek to control the use of biological materials. In the context of genetics, the right to confidentiality of genetic information could form the basis for the protection of a person's privacy as well as a basis to exclude others from using such information without prior consent. Grubb

⁷⁰ Skloot, R. (2010). *The Immortal Life of Henrietta Lacks*. Random House Digital, Inc.

⁷¹ Callaway, E. (2013). Deal done over HeLa cell line. *Nature*, 500(7461), 132-133.

describes three rules that define a proprietary relationship.⁷² One is user entitlements that allow a person to exploit or enjoy the thing, the second is exclusionary control that prevents a person from dealing with it, and the third is dispositional liberty that allows them to transfer it as a gift or by sale. A different approach to defining the nature of property or a property is taken by Gray whose main criterion is excludability. According to Gray:

‘...a resource can be propertised only if it is ... excludable. [It] is excludable only if it is feasible for a legal person to exercise regulatory control over the access of strangers to the various benefits inherent in the resource. ... Property’ resides not in consumption of benefits but in control over benefits. ‘Property’ is not about *enjoyment of access* but about *control over access*. ‘Property’ is the power-relation constituted by the state’s endorsement of private claims to regulate the access of strangers to the benefits of particular resources. If, in respect of a given claimant and a given resource, the exercise of such regulatory control is physically impracticable or legally abortive or morally or socially undesirable, we say that such a claimant can assert no ‘property’ in that resource and for that matter can lose no ‘property’ in it either. Herein lies an important key to the ‘propertiness’ of property.⁷³

If property relates to control and access then a property right can be the basis of the entitlement of a tissue source to control or refuse future unspecified research on a sample or data. Based on Gray’s analysis, control over access should entail being in a

⁷² Grubb, A. (1998). ‘I, me, mine’: bodies, parts and property. *Medical Law International*, 3(4), 299-317 at 301

⁷³ Gray, K. (1991). Property in thin air. *The Cambridge Law Journal*, 50(02), 252-307. At 301

position to give consent on use of sample or data. Gray⁷⁴ described property as being not a thing, but rather a power relationship of social and legal legitimacy existing between a person and a valued resource. He described property not only as a relationship but as a tool of control:

‘Once property is recognised as a relationship of socially approved control, it becomes infinitely more accurate to say that one has property *in* a thing rather than to declare that something is one’s *property*. To claim ‘property’ in a resource is, in effect, to assert a strategically important degree of control over that resource. ‘Property’ is simply the word used to describe particular concentrations of *power over* things and resources, and every claim of ‘property’ comprises the assertion of some *quantum* (or amount) of socially permissible power as exercisable in respect of some socially valued resource. The implications of this perspective are significant’.⁷⁵

Whether an individual has an established right to determine what happens to biological materials that were once a part of him remains an unanswered legal question. However the foregoing description by Gray describes the underlying position of this chapter that while property is viewed as a thing it is more helpful in relation to the tissue source that property is seen not only as a right but also as a relationship between persons over a thing in this case sample or data.

In spite of the foregoing arguments justifying excised tissue or data as capable of being property, and that the property rights of the tissue source to his biological materials should be recognised,⁷⁶ others contend that the property rights of the tissue source are not

⁷⁴ Gray, K, and Gray S.F. (2011), *Land law*. Oxford University Press.

⁷⁵ *Ibid* at 32.

⁷⁶ Hammond, C. (2002). Property Rights In Human Corpses and Human Tissue: The Position in Western Australia. *University of Notre Dame Australia Law Review*, 4, 97-113.

justifiable, and that the rights of the recipient should be recognised. The current position of the common law remains one of no property rights in tissue.

The current approach to property rights

Many parts of the body have been judicially treated as property. Blood,⁷⁷ semen,⁷⁸ hair, teeth, sweat, and urine have been treated as commodities capable of theft and sale, however, the law is yet to pronounce authoritatively on excised tissue and who has property rights if any. Skegg commented on the lack of clarity of the law on the issue of property and body parts,

‘It would be desirable for the English courts to go further than Scots authority yet does, and take the view that it is only while corpses or the remains of corpses are buried, or dispersed following cremation, that they are not the subject of property. This would enable the courts to extend more effective legal control, not only over corpses awaiting burial and cremation, but also over ashes which had not been buried or dispersed, and human remains which had been disinterred’.⁷⁹

The acceptance of organ donation is an example of how the law treats some parts of the body like property and does not recognise others. The concept of donation in itself is conception of property.⁸⁰ The giving voluntarily of something is typically envisaged as the giving of some sort of ‘thing’ which is considered

⁷⁷ *R v. Rothery* [1976] R.T.R. 550.

⁷⁸ *Hecht v. Superior Court*, (1996) 59 Cal. Rptr. 2d 222; *Jonathan Yearworth and others v North Bristol NHS Trust* [2010] 1 QB 1

⁷⁹ Skegg, D. G. (1975). Human corpses, medical specimens and the law of property. *Anglo-Am. L. Rev.*, 4, 412.

⁸⁰ Gift is defined as a ‘voluntary transfer of property to another made gratuitously and without consideration.’ Black’s Law Dictionary 688 (6th ed. 1990).

property. Some gifts of certain parts of the body are highly esteemed in current society, because they are considered desperately needed.

Conclusion

In the light of the foregoing arguments, it is concluded that excised tissue can be treated as property and as a consequence of that, the entitlement of the tissue source to having a say in what happens to his sample or data should also be recognised as a property right. Given the various arguments and apprehensions about according the body and its parts the status of property, safeguards could be introduced as may be agreed by society through the legislature to further restrain commercial trafficking⁸¹ and exploitation. The analysis presented in this paper, shows that most of the reasons presented for rejecting the idea of property in human tissue have a common theme in the reification of property i.e. the notion of objectifying the human body. This Blackstonian notion of property is not applicable in the context of biobank research in light of the 21st century technological advances in science. A mission to abandon the 'thingification' of tissue and embrace a rights based notion of property is the position of this paper. With regard to the recognition of a proprietary approach to tissue, it appears that the courts are not keen on intervening, which shifts the burden of this subject to the shoulders of the legislature.

The interest that should be protected is the right of the tissue source to have a say over whether or not his sample or data are used in future unspecified research, and it has been shown that a proprietary approach can be applied to enable the tissue source express their choice. A proprietary approach confers on a claimant the advantage of continuing control that is lacking in non-property frameworks. The consent model, and in particular the broad consent model has significant limitations that make it imperative

⁸¹ HTA 2004 s.32. This section prohibits the use of the controlled, biological materials for financial gain.

for alternative or complementary models to be considered for the protection of the right of the tissue source in biobanking research.