Property Rights in Mr. X-man's Human Tissue

Part 2 of Property Rights in Human Tissue – a review of the current status of Hong Kong law in relation to human body parts

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Abstract

If human tissues and body parts can be treated as property, will such rights be recognised by Hong Kong courts? By analysing a hypothetical dispute between a tissue provider and the recipient research institute, namely Mr X-man v Biotechnology Ltd, and predicting the outcome from a trial court the authors have identified lacunas in the current laws where there are legal uncertainty and inadequate safeguards to the interests of relevant stakeholders of separated human tissues. It is therefore submit that reform in this area of law should be undertaken to address such deficiencies.

Keywords: Property law, human tissues and body, morality, biotechnology.

Introduction

As following the arguments in 'Property Rights in Human Tissue – a review of the current status of Hong Kong law in relation to human body' ("Part 1"), what about the situation in the Hong Kong SAR as applied in a case? The authors' views are that Hong Kong is lagging in both judicial and legislative development in this area of law as explained in Part 1. This paper will analyse a hypothetical dispute between a tissue provider and a recipient research institute, namely *Mr X-man v Biotechnology Ltd*, and predict the outcome from a trial court. Therefore by identifying lacunas in the current laws where there are legal uncertainty and inadequate safeguards to the interests of relevant stakeholders of separated human tissuesthe authors assert that reform in this area of law should be embarked on to address such deficiencies.

The Hypothetical Case

The hypothetical case is called *X*-man *v Biotechnology Ltd*. Some cellshave been obtained from Mr X-man (who has supernatural power of lifting things by will power) by Biotechnology Ltd with the aim to clone into an embryo to study the secret of Mr X-man's supernatural power. Mr X-man has consented to the use of the removed cells for scientific research only and not for commercialisation. The cloned embryo was dead before any result materialised, and Mr X-man was informed of the abortion of the research accordingly. Unknown to Mr X-man some of the stem cells from the embryo had been extracted by Biotechnology Ltd and cultivated into organs of heart and kidneys, which were later sold to patients in need of organ transplants (assume this does not violate the then criminal law¹).

Although commercial dealings in organs removed from human bodies are strictly prohibited by the Human Organ

Also, Biotechnology Ltd was able to crack the DNA sequence of Mr X-man and developed a drug from such DNA sequence which can give the user temporary supernatural power as that possessed by Mr X-man. Biotechnology Ltd then applied and was granted a patent for the drug. The drug turned out to be one of the best selling drugs in the world following a series of marketing campaigns.

Mr X-man now claims for the profits of the selling of the transplanted organs as well as a fair-share on the profits of the drug. The following issues arise out of this case pending determination by the trial judge:

- 1. Is there any property right over the stem cells and the transplanted organs? If so does Mr X-man possess such right?
- 2. Is there any property right over Mr X-man's DNA sequence? If so, does Mr X-man own any such right?
- 3. Other than the proprietary claim, does Mr X-man have other recourses?
- 4. If the answer to any of the aforesaid question is affirmative, how should the interest between Mr X-man and the Biotechnology Ltd be divided in light of the various competing public policies?

Can there be property in human body parts?

1.1 Introduction

To be able to answer this question, one should start from the definition of the concept of property. Traditionally property has been defined as the relationship between a person and an object referring as the 'sole and 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'. In formulating where there can be property in human tissues one has to go through the legal analysis to determine what attributes there are in the concept of property and how well human tissues are compatible with such attributes. Different notions of this benchmarking exercise usually appear as one form or others of the following tests: The Recognised Category Test, the Commerce Test, the Excludability Test, the In Rem Test, the Ainsworth Test and the Core Bundle of Right Test.

In the rest of part, the authors will briefly outline each of the above tests, followed by an application to examine the property claim in the current hypothetical case.

1.2 Outline of tests for the property concept

1.2.1 The Recognised Category Test

This test originated from the case of *Victoria Park Racing and Recreation Grounds Co Ltd v Taylor*, which posits that only rights in previously recognised categories could be property. 5

The authors regards that this test as too restrictive in limiting the development in property law to cope with sociotechnological advancement. Such effect would be incongruous to the foreseen remark of Rose LJ that 'common law does not stand still''6 as well as the caveat on reception of precedents made by Holmes in his renowned article 'The Path of Law' using the dragon metaphor. The logic forming the decision in the Victoria Park Racing case has been subjected to criticism by a High Court judge and similar disagreement by Bennett-Moses. The authors therefore exclude this test in our subsequent analysis.

1.2.2 The Commerce Test

This test emphasises the consistency between the legal meaning and commercial meaning of a property, which

Transplant Ordinance (Cap 465) s4, the position is unclear if the organs are cultivated in a laboratory, e.g. Quick, D. (28 Aug 2011). New Technique delivers "real" lab-grown muscle tissue' Research Watch. [Online], http://www.gizmag.com/lab-grown-muscle-tissue/19640/?utm_source=Gizma. (Nov 10, 2011).

²Blackstone, W. (1765-69). Commentaries on the Laws of England, Book 2. UK, Oxford. (Chapter 1) p.2.

³Bennett-Moses, L. B. (2008). The Applicability of Property Law in New Contexts: From Cells to Cyberspace. 30 Sydney Law Rev 639-662, p.647.

⁴(1937) 58 CLR 479.

⁵Ibid, see Dixon J's reasons at 509.

⁶ See Part 1.

⁷ Holmes, O. W. Jr.(1897). The Path of the Law. 10 Harvard Law Review 457.

⁸Australian Broadcasting Corporation v Lenah Game Meats Pty Ltd (2001) 208 CLR 199 at 321–2 (Callinan J).

⁹ Bennett-Moses, above n3, p.648.

suggests that something commercially valuable should in general be regarded as property in law. 10

This test has been observed often in taxation and stamp duties cases. 11

The converse of this test however is not necessarily true, that is, the mere lacking of commercial value should not prevent a thing from becoming property. ¹² In other words, this test is a sufficient test but not a necessary test.

Since this test makes commercial sense which is an underlying driving force in the history of commercial law, the authors will include this test in the subsequent legal analysis.

1.2.3 Excludability Test

The right to exclude others is commonly regarded as the most fundamental common factor of all property rights. 13 It asserts that something can be property only if it is possible to prevent others from using that thing physically, legally or conceptually. ¹⁴ For example, air has been precluded from the property's domain on the basis of failing this test. 15

Bennett-Moses highlights one conceptual difficulty of applying this test on technological contingency, and argues that it is more appropriate to treat things which one cannot currently exclude others as not presently anyone's property instead of assuming such things can never be property at all. ¹⁶ The authors would supplement another flaw – easement, for example, is a kind of property in land. Yet it does not confer the holder exclusive use of the land (e.g. the access path). Thus it is perhaps more accurate to add another qualification – 'the excludability test is a necessary test of complete ownership of a thing. Failure of the excludability test would prevent one from exerting full ownership of a thing, but does not prevent him from having some proprietary interest over such thing.' Moreover, this test can be seen as incorporated into the Core Bundle of Right Test to be discussed in section 1.2.6. For the above reasons the authors will exclude this test in the legal analysis.

1.2.4 The In Rem Test

A right is said to be in rem if it is enforceable against a broad and indefinite group of people. It is a necessary test for property rights as evident in common law. ¹⁸ In contrast, it is *in personam* if such right can only be exercised against a particular person.

As cautioned by Bennett-Moses, it is crucial to differentiate property rights from some non-proprietary rights which can be effected over a large class of people (e.g. statutory right to tax) by entailing the property right relates to a thing. 19 This will be borne in mind when applying this test.

1.2.5The Ainsworth Test

This test originates from Lord Wilberforce's dictum in National Provincial Bank Ltd. v Ainsworth²⁰:

'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. ²¹

Though the Ainsworth test has been applied in a number of cases, it does have a conceptual difficulty in particular

¹⁰Halwood Corporation Ltd v Chief Commissioner of Stamp Duties (1994) 33 NSWLR 395 at p.403.

¹¹See, for example, A-G of Hong Kong v Nai-Keung [1987] 1 WLR 1339 at 1342 (textile export quotas); Pennington v McGovern (1987) 45 SASR 27 (abalone licence) and 2 Day FM Australia Pty Ltd v Commissioner of Stamp Duties (NSW) (1989) 20 ATR 1131 (commercial radio licence).

E.g. Thin air space above one's land is property, see *Kelsen v Imperial Tobacco Co. Ltd.* (1957) 2 QB 334 and *Bernstein v* Skyviews (1997) 2 All ER 902.

¹³See Gray, K. (1991). Property in Thin Air. 50 Cambridge Law Journal 252, 294.

¹⁴Gray, ibid, at 299.

¹⁵Bennett-Moses, above n3, 651.

¹⁶Ibid.

¹⁷Re Ellenborough Park [1956] Ch 131.

¹⁸Wily v St George Partnership Banking Ltd (1999) 84 FCR 423 at 426 (Sackville J).

¹⁹Bennett-Moses, above n3, p.651.

²⁰(1965) AC 1175.

 $^{^{21}}$ Ibid at pp. 1247 - 8.

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with the third element – capable in its nature of assumption by third parties.

As noted by Nwabueze, the strict application of this test would treat human tissues as non-property, apparently ignoring the scientific and economic reality as evinced from the increasing exceptions to the *no-property rule* discussed in Part 1.²² This particular point will be observed in the subsequent legal analysis.

1.2.6 The Core Bundle of Right Test

This is by far the most comprehensive test on whether something can be regarded as property. Under this test, property is characterized as a 'bundle of rights' common to all mature legal systems. ²³ These comprise the followings: ²⁴

- i. the right to exclusive possession;
- ii. the right to personal use and enjoyment:
- iii. the right to manage use by others;
- iv. the right to the income from use by others;
- v. the right to the capital value, including alienation, consumption, waste, or destruction;
- vi. the rights to security (that is, immunity from expropriation)
- vii. the power of transmissibility by gift, devise, or descent;
- viii. the lack of any term on these rights;
- ix. the duty to refrain from using the object in ways that harm others;
- x. the liability to execution for repayment of debts; and
- xi. residual rights on the reversion of lapsed ownership rights held by others.

Generally speaking a person is said to be the owner of an object if he controls all or most of these rights of that object. 25 Nevertheless, not all these rights must be satisfied before property over a thing can exist. 26

The beauty of this test is expansion of the traditional property / no-property dichotomy as imposed by other tests, such as the Ainsworth Test and the Excludability Test, into a multi-attribute concept. Thus it can embrace new forms of property evolving through technological advancement, such as easements and restrictive covenants. It can also recognise inalienable property such as non-assignable leases and certain type of shares in private company.²⁷

The drawback of this test, however, is the lack of definitiveness. It is not always certain how much of the 11 core rights must exist before recognising property over an object. Yet this should not become an encumbrance for using this test as our courts are conversant in deriving useful principles out of similar template approach in many different areas of the law, such as determining the existence of employer – employee relation in employee cases and so forth.²⁸

1.3 Application to the hypothetical case

Based on the previous discussion, the authors will use the following tests to analyse the property nature of human tissue in the given hypothetical case: The Commerce Test, *In Rem* Test, Ainsworth Test and Core Bundle of Right Test.

1.3.1 Property of organs derived from the cells of Mr X-man

The Commerce Test Analysis

Nwabueze, R. N. (2007). Biotechnology and the Challenge of Property: Property Rights in Dead Body Parts and Genetic Information. Ablingdon: Ashgate Publishing. p 81.

²³ Honoré, A.M. Ownership in A.D. Guest (ed), Oxford Essays in Jurisprudence 107-128.

²⁴ Ibid.

E.g. Munzer, S. R. (1990). A Theory of Property. New York, CUP. 27. And Reeve, A. (1986). Property. Hamshire; Macmillan. pp.14-21.

Bovenberg, J. A. (2004). Inalienably Yours? The New Case for an Inalienable Property Right in Human Biological Material: Empowerment of Sample Providers or a Recipe for a Tragic Anti-Commons? 1(4) SCRIPT-ed. p.652.

²⁷Barrows v Isaacs [1891] 1 QB 417.

²⁸See e.g. *Chan Kwok Kin v Mok Kwan-Hing & Another* [1991] 1 HKLR 631; *Tsang Kar Lee & ors v Rich Long Transactions Ltd & Anor* [2000] HKEC 1339 English Judgment.

There is definite commercial value of human biological materials.²⁹

For example, blood and sperms are regarded as commodity in the US,³⁰ and there exists black markets for human organs and tissues for transplants in the US.³¹ Ironically it has been reported that some men have been robbed for their sperms for selling in South Africa.³² Similarly, there should be strong commercial value in the cells from Mr X-man and the derived organs because of his unique supernatural power, satisfying the Commerce Test.

The In Rem Test

The right to possession as determined in *R v Kelly* and some other cases discussed in Part 1 is not only exercisable against the defendant but in theory also applicable to other people. Hence, such right to possess human tissues is consistent with the *In Rem* Test.

The Ainworth Test

According to the ruling of *York v Jones,YearworthandothersvNorthBristolNHSTrust*and some other cases discussed in Part 1, the right to possess human tissues has been clearly established to be definable, identifiable by third parties, and have some degree of permanence or stability. Although early cases concerning human embryos and gametes ruled that they are not capable in its nature of assumption by third parties, they have been clearly overridden by the recent cases such as the aforesaid *York* and *Yearworth*. Accordingly the Ainsworth Test is also satisfied.

The Core Bundle of Right Test

Both Goold³³ and Boovenberg³⁴ have independently conducted a thorough analysis on the 11 rights of this test over human body parts. Goold argued that in theory all the 11 rights can be satisfied in one way or the other. ³⁵ While holding a similar view, Boovenberg highlighted three potential problematic areas associated with the use of this test, namely the right to security, the power to alienate (i.e. the power to sell, under the right to capital), and the liability to execution. The authors will address his concerns below.

Boovenberg argued that a person's right to security over his biological material is inconsistent with the general power of a State to expropriate such 'private property' subject to compensation, such as to conduct medical researches. There is indeed a defect in his logic. Assume for the contrary his argument is correct. Then one can also assert that a person's right to security over his flat does not concur with the State's general power to expropriation subject to compensation – since in general the State cannot freely exercise such power and it is subject to the stringent control under constitutional and administrative law. The state of the possibility that under certain circumstances the State can expropriate a person's body material e.g. preventing spread of a deadly virus. Another circumstance is removing hair found on a suspect's comb from his home for forensic examination.

Regarding the power to alienate, Boovenberg asserts that it is incompatible with the power to retain certain control over the alienated body parts, rendering them unfit with the property concept. Ignoring morality and policy concerns which will be dealt with in the next chapter, there is no reason why a person cannot alienate (sell) his body tissues e.g. spleen cells, and impose a covenant that the buyer cannot resell such body tissues to a third party without the seller's consent. This makes perfect sense if the seller realised uniqueness in his body tissues and wish to control further distribution of such cells to safeguard his own interests. Similar covenants are also

²⁹Bovenberg, Jasper A., above n26, at p.566.

Potts, W. (2005). Increasing The Supply Of Transplant Organs By Way of Financial Incentives. 31(5) Monash U Law Rev. p.228.

³¹ See e.g.Porter, D &Johnson, C. K. (July 24, 2009). First case of organ trafficking in U.S.?[Online] msnbc.com. http://www.msnbc.msn.com/id/32132371/ns/us_news-crime_and_courts/t/first-case-organ-trafficking-us/ (Nov 18, 2011).

³²See e.g. Gweru, S. (Oct 14, 2011). Too busy whoring no time to dispose sperm filled condoms'. MetroZibabwe, [Online] http://www.zimbabwemetro.com/?p=28686. (Nov 18, 2011).

³³Goold, I. (2005). Sounds Suspiciously like Property Treatment: Does Human Tissue Fit within the Common Law Concept of Property? 7(2) UTS Law Rev.

³⁴Bovenberg, above, n26.

³⁵Goold, above n33, pp.8-18.

³⁶E.g. Basic Law art 6, 29 & 39; Bill of Rights Ordinance (Cap 383).

³⁷Bovenberg, above n26, p.568 at para (vi).

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commonly observed in tenancy agreements, and in staff purchases of discounted computer products from IT vendors.

Liability to execution implies an owner's property can be seized by a creditor to meet an overdue debt. Boovenberg questioned its viability by making a satire that a debtor would be liable to sell his blood to meet his obligation until he is drained to death, possibly echoing a scene of the great play 'The Merchant of Venice' written by Sir William Shakespeare.³⁸ The authors wish to point out that this emotional argument cannot stand on legal analysis. First of all, our discussion is premised on human materials already removed from a person out of consent, rather than removing body parts by force which is tantamount to the tort or even criminal offence of battery. Secondly, in the limited cases where preserved body parts are held to be property, e.g. *R v Kelly*, should the owner become bankrupt there is no logical reason why the receiver cannot sell such body parts to meet the claims of the creditors, except perhaps society countenance. Hence this concern from Boovenberg is also surmountable. In conclusion, there is no show stopper to affirm severed human parts as property under the Bundle of Rights Test.

1.3.2 Mr X-man claim over the profits of the drug derived from his DNA

So far the analysis has been focused on the tangible property of body tissues. A new angle is required to address this second issue. The right claimed by Mr X-man, if any, is possible in the form of right to commercialisation, as considered in the cases of *Miles, Inc v Scripps Clinic and Research Foundation*³⁹ and *The University of Colorado Foundation, Inc vAmerican Cyanamid.*⁴⁰ Yet such right has been held either belong to the inventor or patent holder who has exerted intellectual effort in upbringing the concerned intellectual property, ⁴¹ or be inferior to the right of the patent holder in *Monsanto Canada Inc vSchmeiser*. ⁴² Such right is viewed as a kind of intangible property in the above cases in which conversion was held not an available remedy to such intangible property *per se*. ⁴³

Another possibility is to argue that Mr X-man's DNA is akin to a kind of confidential information. Originally, the UK court held that confidential information could be property, as seen in the 3:2 judgment of the House of Lords in *Boardman v Phipps*. Subsequently the courts in UK and Canada have moved away from this line of thought. In *Oxford v Moss* the UK court ruled that confidential information was not intangible property under the Theft Act 1968. In *R v Stewart*, the Canadian Supreme court took a similar view that information was not regarded as property under the Criminal Code. Such position was later reinforced in the UK case *R v Dept of Health, ex parte Source Informatics Ltd* and *Douglas v. Hello! Ltd (No.3)*. Thus although the common law is unsettled on whether confidential information is regarded as property, the chance of such recognition is rather slim. Thus the confidential information analogy will offer little assistance to our proprietary analysis of this second issue and we would resort to a general proprietary analysis similar to that for human tissues.

The Commerce Test

The drugs obviously are worthy assets. It follows that the rights claimed by Mr X-man, if exists, would also be worthy of money. Hence the Commerce Test is satisfied.

The other tests

Since Mr X-man's claim will at most grant him entitlement over some of the profits from the drug, it is not clear

³⁸Act 4, scene 1.

³⁹810 F Supp 1091 (US Dist Cal, 1993).

⁴⁰880 F Supp 1387 (US Dist Col, 1995).

⁴¹Nicole, D. (2004). Property In Human Tissue And The Right Of Commercialisation: The Interface Between Tangible And Intellectual Property. 30(2) Monash U Law Rev, 139. p.155.

⁴² [2004] SCC 34.

⁴³Nicole, Dianne, above n41, p.157.

⁴⁴(1967) 2 AC 46, at pp.89-90 and p.107.

⁴⁵ (1979) 68 Cr. App. R. 183, at p.186.

⁴⁶(1988) N.R. 177 (SCC).

⁴⁷(2000) 1 All ER 786.

⁴⁸(2005) 3 WLR 881.

⁴⁹Nwabueze, Remigius N., above n22. p. 182.

whether this is right *in rem* or *in personam*. Hence the *In Rem* test is inconclusive. Also, whether such right is capable of assumption by third party is also unknown, rendering the Ainsworth Test indecisive.

Finally, there is lack of precedents of how much of the rights in the Core Bundle of Rights tests are matched by this particular claim. Hence the 4 tests cannot provide a conclusive answer and perhaps we should look at the court decisions related to genetic information directly.

There are limited relevant cases and the position in courts is still evolving. In *Pioneer Hi-Bred Inc v Holden Foundation Seeds*, ⁵⁰ genetic information was ruled to be property within the narrow window of trade secrets. ⁵¹ It has also been argued that the case of *Greenberg v Miami Children's Hospital* ⁵² indirectly recognised the existence of property right in genetic information. ⁵³ Note that in above two US cases the court is safeguarding the effort exerted in producing the genetic information, not the spontaneous possessor of such information.

Hence, the position of proprietary analysis on genetic information is still unclear.

1.4 Conclusions

In this part, the authors have conducted a proprietary analysis on two particular categories of objects, namely separated cells and genetic information. Six commonly adopted tests have been identified from literatures, of which two of them have been filter out. This leaves four, namely the Commerce Test, the *In Rem* Test, the Ainsworth's Test and the Bundle of Rights Test.

Applying the four tests, the authors have demonstrated that separated human tissues satisfy the definitions of property. On the other hand, the position related to genetic information is more subtle. Analysis based on a confidential information analogy offers little assistance. Likewise, result from a general proprietary analysis is also inconclusive. Based on the few available case laws, it is possible that property right on genetic information is recognised by the US courts in limited circumstances.

Application to the Hypothetical Cases and Implications for Law Reform

In this section, the authors will first apply the results of the previous sections to analyse the hypothetical case of *Mr X-man v Biotechnology Ltd*. A number of lacunas on the existing law as reflected in this exercise will then be highlighted for consideration of future law reform.

2.1 Analysis of Mr X-man v Biotechnology Ltd

First, it is necessary to establish the likely courses of action for Mr X-man. In view of cases like *Moore* v *Regents of University of California*⁵⁴ and *Greenberg*⁵⁵, two kinds of claim are available to Mr X-man. The first kind concerns his removed cells, where the possible actions are conversion and breach of fiduciary duty. Breach of bailment will not be available since there does not exist a *prima facie* case of bailor – bailee relationship, as the severed cells would not be preserved in their original state after the research, and there is no intention that Mr X-man would collect those cells even if the research did not proceed. Detinue is also a possible action but since the recovery of the original cells and the transformed organs are practically infeasible, an award of damages is the only remedy on a successful action which is no different from an action on conversion. Hence to simplify our analysis detinue will not be considered.

The second kind of claim is about the genetic information of his DNA. The analysis in section 1.3.2 concluded that there is little hope of raising any proprietary claim on such genetic information, and even in the limited cases recognising such property right the courts have ruled in favour of the researcher / research institute as the owner of such intangible property. Yet it may be possible to bring an action on a right for commercialisation ⁵⁶ and

⁵²Greenberg v Miami Children's Hospital264 F Supp 2d 1064 (Fla DC, 2003), p.1077.

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⁵⁰35 3F3d 1226 (8th Cir. 1994).

⁵¹Ibid, at p.1247.

⁵³Ibid, at p.1075, where property rights were held abandoned once tissue is voluntarily donated to a third party.

⁵⁴Moore v Regents of University of California 51 Cal.3d 120 (Cal SC 1990). A case involving the dispute of the ownership of a patented cell line. The plaintiff's claim on conversion was rejected but his claim on a breach of fiduciary duty was allowed ⁵⁵See n52.

⁵⁶See s1.3.2.

Claim 1A - Conversion of organs derived from Mr X-Man's cells

For this claim, since there is no precedent in Hong Kong, the court is at liberty to look at the common laws and interpret the relevant statutes to form his opinion. As discussed in the Hypothetical Case section, relying on the provisions in the Basic Law⁵⁷ Mr X-man is entitled to initiate an action of conversion if his body cells are regarded as his property.

Other legal analysis and especially those in Part 1 has concluded that there are authorities in other common law jurisdictions to recognise the proprietary interests on the detached body tissues. In section 1, it has established policy justifications to recognising such property nature, albeit a court has the discretion not to make new law by regarding the legislature as the more appropriate forum to enact new statute. If the court refuses to affirm such property nature, this is the end of story in this claim.

Assuming the court will incline towards recognising property in severed body tissues *de bene esse*, which we will come back on this policy issue later. Next we consider the claim of conversion. For this claim to succeed, the plaintiff must establish he has a better possessory right than the defendant.

Since the organs in this case were cultivated in the laboratory by the defendant and exhibited distinct characteristics distinguishable from the original cells, the defendant can rely on the 'work and skill' exception to the *no-property rule* to establish a lawful proprietary interest on those derived organs. Conversely, the plaintiff may argue relying on the case *Silsbury v McCoon*. In that case, the plaintiff's maize was stolen and made into whiskey by a thief, which was later grabbed by the defendant who was the creditor of the thief. The judge held that the whisky was owned by the plaintiff at the moment of apprehension, ⁵⁹ affirming the conversion claim.

The authors' views are that *Silsbury* will not assist Mr X-Man. This is because in *Silsbury* the judge has agreed that the plaintiff's title to the maize and the subsequent whisky would have been lost if the 'transformation had been performed by an honest possessor'. ⁶⁰ In the Hypothetical Case, the defendant was an honest possessor since it has obtained Mr X-Man's cells with his consent in the first place. On the other hand, it can be argued that the plaintiff's residual property right on those excised cells, if any, would have been evaporated since the cells have been transformed into a new substance with different characteristics, as supported by the principle developed from those retention of title cases. ⁶¹

Combining together, the action of conversion would fail irrespective of whether human body parts can be regarded as property. Yet one may condemn the above ruling from the eye of equity since Biotechnology Ltd has clearly breached the trust and confidence of Mr X-Man. This will be considered in the analysis of the next claim.

Claim 1B – Breach of fiduciary duty

For this action to succeed, one has to establish existence of a fiduciary duty from a relation of trust and confidence between the parties, and a breach of that duty by the defendant. In the Hypothetical Case, it can be argued that a relation of trust and confidence did exist since their relationship is akin to that of the plaintiff and the defendant in the case $Moore^{62}$ and Greenberg. To determine whether Biotechnology Ltd has breached such duty, one can consider the following test:

Had Mr X-Man been informed of the intention that his cells would be grown into organs for sale, would it be reasonable to expect Mr X-Man to consent to such additional use on a *pro bono* basis?

The answer to the above test is apparently negative from a rational analysis. Hence Biotechnology Ltd has also breached its fiduciary duty.

⁵⁷Articles 6 and 105.

⁵⁸3 NY 379 (NY CA 1850).

⁵⁹Ibid, at 390.

⁶⁰Ibid, at 387.

⁶¹See e.g. Borden (UK) Ltd v Scottish Timber Products Ltd [1981] Ch 25, at 44; Re Peachdart Ltd [1983] 1 Ch 131, at 143.

⁶²Above, n54

⁶³Above, n52.

Since equity will prevent unjust enrichment, applying *Moore* ⁶⁴ and *Greenberg*, ⁶⁵ Mr X-Man can claim for equitable damages.

Claim 2A - Right of Commercialisation

For this claim, the case of *Monsanto* ⁶⁶ clearly indicates that such right even if does exist will succumb to the claim of the patent holder, i.e. the defendant in this case. Hence his claim on this ground will be bound to fail.

Claim 2B – Breach of Fiduciary Duty

Similar to claim 1B, it is unlikely that Mr X-man would consent to the commercial exploitation of his DNA without any form of compensation had he be informed of such purpose in the first place. Thus it is likely that the court would rule in his favour on the basis of equity.

Summing up, there is a high chance that Mr X-man will fail in his claim of conversion and right of commercialisation. Nevertheless, he should be entitled to equitable relief to his claim of breach of fiduciary duty.

Remedies

Since the original cells have been transformed into the kidneys and hearts and sold away, it is impossible to return them to Mr X-man. The remaining recourse is therefore an award of damages.

Assessing the quantum of damages to Mr X-man will be a difficult task since there is neither precedent nor an available market to determine the market price of his equitable right. On the other hand, it is quite sure to be more than mere nominal damages as there is strong interest on Mr X-man's cells because of his unique supernatural power. Mr X-man may proclaim that his future earning power would be compromised since his supernatural power will lose its uniqueness with the availability of the drug developed by the defendant. Yet the court may not entertain such speculative assessment which is difficult to quantify. A possible assessment value of the damages is therefore the time and efforts incurred by Mr X-Man in the research, as equity would operate to prevent unjust enrichment of the defendant.⁶⁷

2.2 Implications for Law Reform

The above analysis on the hypothetical case of Mr *X-man v Biotechnology Ltd* has further revealed certain lacunas in the present law of Hong Kong concerning property rights on human body parts.

First, a plaintiff in the position of Mr X-man can at best obtain a modest equitable compensation. Not only will such a plaintiff be unlikely to be satisfied, there is no guarantee that the interest of such plaintiff will be protected as equitable relief is discretionary in nature. Besides, since our analysis is premised on other common law cases not binding on Hong Kong courts, ⁶⁸ in a real case the court is not obliged to follow the ratios adopted in the analysis.

Secondly, in a broader sense, there will be virtually no control on the subsequent uses of the biological materials obtained from the provider who has only consented to a limited purpose initially e.g. diagnostic or medical research, even if such later uses are against the wish of the provider or even to his/her detriment. In such case the provider can at best to receive a modest compensation.

Thirdly, the existing law can only afford a personal action to the sufferer of which the claimed human tissues (e.g. cord blood, gametes, etc.) have been misappropriated. Thus one can imagine if a bio-bank becomes insolvent and the stored human tissues are confiscated by its creditors, there will be no recourse to the sufferer. Likewise in our hypothetical case, had the defendant assigned the property interest on those cultivated organs and the drug patent to a third party and then gone bankrupt, even the limited remedy from our analysis will likely vanish. ⁶⁹

⁶⁷See the judgment in *Moore* and *Greenberg*.

⁶⁴*Moore*, above n54, at p.31.

⁶⁵Greenberg, above n53, see the analysis on the claim of unjust enrichment by Moreno J.

⁶⁶See discussion in s1.3.2

⁶⁸Since the handover in 1997, all common law cases that are not held in Hong Kong become only of a persuasive effect.

⁶⁹Though it may be argue the doctrine of piercing the corporate veil may offer a remedy in such case, it is only limited in rare

Thus, it can be clearly appreciated that the status quo of the law on this aspect is unsatisfactory. In contrast, adopting a property framework on human tissues can offer a feasible solution to the above deficiencies. It could supplement the protection under existing informed consent doctrine by granting the provider continuing control on the body tissues after their provision to the research institute. Such residual dominion would enable the provider to partake in the profits from the commercialisation of his/her tissues in a fair and equitable manner. In addition, the provider could forbid uses of his/her tissues being regarded as taboos in his/her religion or culture. Furthermore, a research institute can also protect the human tissues under its custodian should they be damaged or stolen by a rival institute, through the action of trespass, conversion or detinue under a property regime.

Alternative to a property framework is to adopt a statutory regulatory regime such as the UK Human Tissue Act 2004, and the privacy doctrine of Australia. Yet they still cannot fully address the problems. Besides, Hong Kong legislation development is also lagging behind in these two areas of law.

Although it can be established that there already exist case laws affirming property rights of certain human tissues in various contexts such as assisted fertilisation, and taxation, etc., and there are good policy justifications for affirmation such rights in human tissues, the court is at liberty to make that new precedent or not. Relying on judicial activism instead of legislation will therefore run the risk of legal uncertainty, as seen from cases where the court has been reluctant to make new law via statutory interpretation in lieu of legislative resolution when facing controversial issues affecting constitutional rights. ⁷⁰

As bio-banks have emerged in Hong Kong and Hong Kong is promoting biotechnology development, it is only a matter of time that disputes concerning the provider and the custodian of the separated body tissues would arise.

The authors therefore submit that relevant government authority should look into this matter and fill up the legal lacunas, such as by establishing a clear property regime over human body parties to afford the balanced protection to all concerned stakeholders, if that is consistency with the consensual view of the society after conducting thorough consultations.

occasions and it is beyond the scope of this paper.

⁷⁰ See e.g. Moore, above n54, at p.13.