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The Lady Vanishes: What's Missing from the Stem Cell Debate

Donna Dickenson

Abstract

Most opponents of somatic cell nuclear transfer and embryonic stem cell technologies base their arguments on the twin assertions that the embryo is either a human being or a potential human being, and that it is wrong to destroy a human being or potential human being in order to produce stem cell lines. Proponents' justifications of stem cell research are more varied, but not enough to escape the charge of obsession with the status of the embryo. What unites the two warring sides in 'the stem cell wars' is that women are equally invisible to both: 'the lady vanishes'. Yet the only legitimate property in the body is that which women possess in their reproductive tissue and the products of their reproductive labour. By drawing on the accepted characterisation in law of property as a bundle of rights, and on a Hegelian model of contract as mutual recognition, we can lessen the impact of the tendency to regard women and their eggs as merely receptacles and women's reproductive labour as unimportant.

In most public discussion of the ethical issues in stem cell research, only the status of the embryo seems to count. Yet because ova are crucial to stem cell research, there are also important regulatory issues concerning protection of women from whom ova are taken (Holm, 2002; Dickenson, 2001; Jacobs et al., 2001). Rarely are these issues aired: hence the title of this article, 'The lady vanishes.' In most commentaries and debates, the women from whom the ova are taken have virtually disappeared from view.

In the new biotechnologies, we are witnessing the feminisation of all bodies, whether biologically male or female: all are now being reduced to the status of objects, as women's bodies have long been objectified. (Dickenson, in press) Tangible rights in human tissue and intangible rights in the human genome have been said to be the subject of a new enclosure movement by researchers, biotechnology corporations and governments (Boyle, 2003). This phenomenon is linked to the general absence of property rights for donors in both civil and common law, because the protections afforded by law have been insufficient to prevent these incursions.

We do not own our bodies in law: they are not the subject of property rights in any conventional sense, although traditionally in the common law they have been somewhat shielded by what James W. Harris calls 'protected non-property holdings'. (Harris, 1996, p. 351). Thus, while corpses cannot be owned at common law, those charged with their disposal—hospitals, families and public or religious authorities—are restricted by certain duties and endowed with certain powers, although these are now ownership privileges or powers. Once tissue is removed from the living body, however, the common law

generally assumes that it has either been abandoned by its original ‘owner’ or that it is and always was *res nullius*, no one’s thing, belonging to no one when removed. (McHale, 2000) Under previous circumstances the tissue would have been presumed to have been removed because it was diseased, and thus of no further value to the person from whom it was extracted. Civil law systems, such as that of France, typically view the body as *res extra commercium*, a thing not subject to contract or exchange. (Fagot-Largeault, 1998) In both civil and common law systems, contracts in bodily tissue and materials are difficult or impossible to enforce, although for different reasons. In both systems, patients have no further property rights in their tissue once informed consent to its extraction or donation has been given.

Commodification of tissue, broadly construed to include private property rights by third parties in organs, parts of organs, DNA samples, umbilical cord blood and other substances derived from individuals’ bodies, has caused great if sometimes belated concern among patients’ rights organisations, academic commentators, journalists and the general public, in both the developing and the developed worlds (Radin, 1996; Weir, 1998; Harrison, 1999; Holland, 2001; Marshall, 2000; CCNE, 2002; Dickenson, 2001, 2004b, 2005). Men’s bodies are now increasingly subject to the objectification and commodification which women have long endured. The ‘new enclosures’ movement, whereby the ‘genetic commons’ is enclosed by intellectual property laws and human tissue becomes the tangible property of researchers and corporations, has aroused ire because it affects men and women equally. In the stem cell technologies, by contrast, we see little outrage about the exploitation of female reproductive tissue: indeed, there is almost no awareness in the mainstream media and bioethics literature that female tissue is even involved. By default, this phenomenon supports the view that the appropriation of human tissue is only controversial when men also suffer from it.

It is widely assumed that if the need for embryos disappeared in the stem cell technologies, they would be ethically unobjectionable. Women have already vanished from the ethical equation; if embryos did likewise, there would be no conundrums, by this account. Several such ‘embryo-lite’ techniques have recently been mooted (Murray, 2005). The first involves genetically manipulating a nucleus from an adult cell, inactivating certain genes, before inserting it into an enucleated ovum. Because the genetically manipulated nucleus would lack certain essential parts, proponents of the technique argue, no embryo would result, and hence no ethical issues arise. This is a sort of New Scholasticism: how many angels can fit on the head of a pin? How many genes need to be switched off if something formally called an embryo is not to result? More importantly, however, it still requires an ovum, just like conventional embryonic stem cell technologies. So does the second sort of technical fix, producing a ‘parthenote’ (an unfertilised egg induced to begin dividing) or the third, recovering cells from a non-viable embryo and then injecting their nuclei into enucleated ova. All that these inventive methods have in common, in fact, is that they are blind to the ethical issues involved in ‘harvesting’ and ‘sourcing’ ova. (The terms themselves indicate how far along the path to objectification and commodification we have already proceeded.)

Although stem cell banks such as that recently established in the United Kingdom may aim at reducing the need for individual research teams to generate their own stem cell lines, and thereby the use of human tissues and embryos, there will continue to be a requirement for ova available to be enucleated. If stem cell therapies are successfully developed, the immune rejection problem is likely to mean that a given stem cell-based therapy for a particular disorder will need to be developed in a variety of lines differentiated by haplotype matches. Thus the pressures on supply of ova to be enucleated may well lessen with the establishment of public and private stem cell banks, but by no means will they disappear entirely, particularly not when research as well as therapy is considered. (Faden et al., 2003) Again, however, the ethical focus so far, even in the UK Biobank's Code, is almost entirely on the status of the embryo, rather than on issues concerning protection of women from whom the ova are taken.

A genuine public policy debate must take into account the way in which ova are sourced and used, particularly given documented instances of global commodification of body parts, including gametes. This situation is quite widespread in Eastern Europe, suggesting the risk of a 'Wild East' developing with relation to trade in ova (Dickenson, 2003, 2004a). In a recent Croatian case, an eminent gynaecologist was prosecuted for illicitly obtaining ova from his patients for possible export. At the end of 2004, media reports also unmasked the 'Global Arts Clinic' in Romania, which extracts eggs from Romanian women for sale to European Union countries. The UK Human Fertilisation and Embryology Authority sent a team to investigate whether these women were being paid more than 'expenses', which would breach current UK guidelines. (That position may change, depending on the outcome of a recent HFEA consultative exercise, which proposed to allow egg donors to receive up to £1000 compensation: HFEA, 2005. There is also a review currently under way into the future of the HFEA and the 1990 statute creating it: UK Department of Health, 2005.) Whether or not the HFEA should effectively be acting as a middleman in a dubious trade, it is at least some comfort that its regulatory remit extends to the international trade in ova for IVF, when UK clinics are involved. Were these ova to be supplied to stem cell researchers who fall outside the HFEA's governance, the sale of Romanian women's eggs could proceed apace. Perhaps it is already doing so, as one instance of a wider global trade in ova for the stem cell technologies, which has been a predictable development for some years now (Dickenson, 2002, 2004a).

Yet despite this evidence of a developing illicit trade in ova, ethical debate continues to be polarised around the status of the embryo: for example in the lengthy debates between the European Parliament and the European Commission on whether to include a provision concerning embryonic stem cells in the Directive on Human Tissues and Cells of December 2003 (Morgan, 2004). In the German situation, deriving from the *Embryonenschutzgesetz* of 1998 but more immediately regulated by the *Stammzellgesetz* of 2002, domestic production of stem cell lines is banned, as is any research using human embryos, but imported cell lines may be used, although only with the approval of the Siep Committee (set up by the *Stamzellgesetz*). About a dozen lines have been approved for research use to date (Hakke, 2004; *Stammzellgesetz*, 2002). German women will be protected because domestic production of stem cell lines is banned, although out of

concern for the embryo rather than for German women. But neighbouring Eastern European women may well find themselves supplying the ova used in stem cell lines imported by German researchers.

By contrast, the Netherlands Health Council advisory report and the Embryo Bill approved by the Parliament propose an approach more similar to that prevailing in the UK (Health Council of the Netherlands, 2002). Research using human embryos, including stem cell research, is permitted providing that the required approval has been obtained, that the research has a good chance of providing new developments, and that these developments can only occur through such research. The Embryo Bill permits embryonic stem cell lines to be developed from spare embryos from IVF but does not allow stem cell lines to be created specifically for research (sections 8 and 24). However, the latter ban is not irreversible (section 33(2)), in the event that therapeutic stem cell research becomes more practical and less experimental than it is at present. The report specifically identifies research dealing with nuclear transplants into enucleated egg cells as being of long-term importance for research into the possibility of preventing rejection, indicating a forecast need for enucleated eggs in the Dutch context as well (Health Council, 2002, Executive Summary, p. 23). The Dutch, with their characteristic openness, have at least identified the problem, but they seem to view ova as a commodity in short supply, rather than as the source of an ethical dilemma.

When the Korean group under Dr Woo Suk Hwang announced a new technology involving cloned blastocysts (Hwang et al., 2004), followed by a later announcement of patient-specific embryonic stem cells derived through human somatic cell nuclear transfer (Hwang et al., 2005), the media debate predictably revolved around the implications for human cloning and the status of the embryo. Almost no attention was paid to the fact that of the 242 eggs collected from sixteen ‘volunteers’ in the first study, presumably entailing quite intensive ovarian stimulation, only 30 blastocysts were obtained, and just one colony of stem cells. It was later revealed that these ‘volunteers’ were Dr Hwang’s female postgraduate students-- a situation with clear potential for exploitation, whether or not exploitation actually occurred. What more needs to be said about the lack of protection for ovum donors, and their invisibility in public debate? Admittedly the Korean methodology may lead to reduced need for ovum donors, since the technique would eliminate problems of rejection and thus lessen the need for large numbers of ova in developing a wide range of haplotype-matched stem cell lines. A consequentialist argument could be made in favour of the technology on the basis that fewer women will be exploited in the long run, although a strict deontologist might not be willing to make any such Faustian bargain. The point is not which position in this argument is correct, but rather that the argument has not yet been couched in those terms, because women have remained invisible.

What are the risks?

On the one hand, the recalcitrance of opponents of embryonic stem cell technologies is generally grounded in the twin assertions that the embryo is either a human being or a potential human being, and that it is wrong to destroy an existing or potential human

being in order to produce stem cell lines. Proponents' justifications of stem cell research are more varied, but not varied enough to escape the charge of obsession with the status of the embryo. What unites the two warring sides in the stem cell wars is that women are equally invisible to both.

The revealing title of an article by Gilbert Meilaender illustrates the presumption that respect for the embryo is the only relevant question: 'The point of a ban, or, how to think about stem cell research.' (Meilaender, 2001) Although Meilaender tries to provide a more nuanced examination of the proposition that it is wrong to destroy an existing or potential human being, he shares with other opponents of stem cell research a concentration on harms to the embryo. Taking the notion of respect for embryos seriously, Meilaender claims, may mean that the counterweight of relieving suffering through scientific progress is 'a real but not supreme imperative.' (Meilaender, 2001, p. 9) No mention is made of the suffering inflicted on women who donate ova; that simply doesn't enter the utilitarian calculus. 'How to think about stem cell research' does not, it seems, require thinking about its effect on the women from whom oocytes are taken. Although Meilaender explicitly sets out to widen the debate beyond 'a seemingly endless argument about the embryo's status' (ibid.), he does not broaden it all that far. Apparently there is nothing else to think about in relation to stem cell research than respect for the embryo: is it or is it not an absolute imperative, when consequentialist arguments favouring relief of suffering are weighed against it?

Proponents of the technologies, such as David Resnik (Resnik, 2002), also typically fail to distinguish between their impact on men and their impact on women. In his modified pro-market view favouring largely unregulated commodification of stem cells, Resnik asserts that 'the potential for exploitation that arises in ES [embryonic stem] cells is much less than the potential for exploitation in organ donation because the risk and potential loss to donors in [sic] much less. Selling gametes is not like selling kidneys.' (Resnik, 2002, p. 147) Clearly Resnik thinks of 'gametes' as sperm. Selling ova is in fact very much more like selling kidneys than like selling sperm, in terms of potential loss: ova are finite in number, like kidneys and unlike sperm, and ova extraction is a surgical procedure, like the removal of a kidney and unlike masturbation to produce semen.

In fact, the removal of ova is arguably *more* risky than the excision of a kidney. The surgical procedure is only the third and last of three risk-laden stages: shutting down the woman's own ovaries, stimulating them to produce multiple follicles rather than the single follicle usually produced in a cycle, and then—only then—extraction of the resulting ova. The usual drug in the first process is leuprolide acetate, which has been reported as causing symptoms ranging from arthralgia (severe non-inflammatory joint pain) to dyspnoea (difficulty in breathing), and also including chest pain, nausea, depression, dimness of vision, loss of pituitary function, hypertension, tachycardia (rapid beating of the heart), asthma, generalised edema, and abnormal liver function. (Norsigian, 2005) Irreversible losses of bone density, up to 7.3 percent of total bone, have also been reported. (Lazar, 1999)

In the second stage, hyperstimulating the ovaries may produce cysts, enlargement of the ovaries and severe fluid retention, with a potentially fatal outcome. Other complications of ovarian hyperstimulation syndrome (OHSS) include increased risk of clotting disorders, kidney damage and ovarian twisting. Even in the absence of full-blown OHSS, ovarian stimulation in general has been linked in trials to pulmonary embolism, stroke, arterial occlusion and other life-threatening risks. (Norsigian, 2005, p. 2) The incidence of this syndrome ranges between 0.5 and 5% of cases. (Delvigne and Rozenberg, 2002 cited in Norsigian 2005, p. 2) Some commentators term this risk ‘small’ (Norsigian, 2005), which seems debatable, particularly in light of the potential risk of death.

Large or small, the risk is iatrogenic, and it may well be asked whether it is part of the duties of a doctor to impose such risks on women who derive no clinical benefit from the procedure, unlike women undergoing egg extraction during IVF. It has been said that egg cell removal breaks with the medical mandate to heal. (Schneider and Schumann, 2002, p. 74) That is also the position recently taken in a statement from the Royal College of Obstetricians and Gynaecologists Ethics Committee. (RCOG, 2005) Such moves by professional bodies are encouraging, but it remains to be seen how widespread they will become.

A ‘technical fix’ may be sought instead: for example, new techniques of in vitro maturation, by which extra egg follicles are removed before ovulation and matured outside the women’s body. Even if those techniques were reliable, however, women undergoing egg extraction for use in stem cell technologies would still be subject to a surgical procedure—the equivalent of Resnik’s kidney excision—and doubtless to other long-term risks, such as earlier menopause, all for no therapeutic benefit to themselves. They are effectively being used merely as means to another’s end, in contravention of the Kantian categorical imperative never use another solely as a means and of the medical duty of *primum non nocere*: first do no harm, irrespective of whether consent has been obtained. Although paid ‘donation’ of ova for the production of embryonic stem cell lines has been reported in the US (Lanzendorf et al., 2001), in the UK and the rest of Europe the official position has more often been that the ova used should be ‘surplus’ from IVF, but that becomes less and less tenable: most clinics report shortages, not surpluses (UK Science and Technology Committee, 2005). In order to create a ‘surplus’, clinicians may also be tempted to induce even riskier regimes of ovarian stimulation, again failing in the primary duty of non-maleficence.

In egg extraction for use in stem cell technologies, there is even more of a temptation for clinicians to extract multiple eggs than in IVF, and even less ethical basis for doing so. Multiple egg extraction has become the norm for IVF because it increases the chances of success; if only one egg is extracted per cycle, fertilisation is less likely. Asking a woman undergoing IVF to submit to intensive ovarian stimulation for multiple egg extraction does at least lessen the likelihood that she will have to return for treatment again and again. But by some sleight-of-hand akin to that in which women become invisible in stem cell technologies, multiple egg extraction has also become the norm in the ‘harvesting’ of ova for the stem cell technologies. Few commentators on the Korean blastocyst acknowledged the existence of the sixteen ‘volunteers’, let alone noticed that the clinical

rationale for ovarian hyperstimulation in the IVF case cannot possibly have applied to these women. They were exposed to risk for no medical benefit.

The commodification of ova has already resulted in unacceptably high rates of eggs being extracted for sale to IVF clinics-- up to seventy in one cycle (Jacobs, Dwyer and Lee, 2001). We have very little idea of the long-term risks of accelerated menopause, fragile bones and other harms to health, but we can be sure that the short-term risks of OHSS are considerable. In the case of extraction for stem cell research, they are not offset by any clinical benefit to the women. Although some women may genuinely wish to volunteer in order to help scientific progress, and although we do allow volunteers in phase I trials to deliberately impose risks on themselves, we require a higher standard in that case, as well as an entire apparatus of randomised clinical trials and meta-analyses in evidence-based medicine. Furthermore, we generally impose higher standards for fully informed consent in research than in treatment. (Montgomery, 1997, p. 344) Finally, we require the approval of a local research ethics committee.

That standard of monitoring rarely seems to apply in egg extraction, for the simple reason that few commentators have noticed that the process is going on at all. They are even less likely to notice when it is going on with vulnerable women in Eastern Europe or the Third World, who are pleasantly invisible to sight. Because enucleated ova contain no genetic material (except perhaps for traces of material mitochondrial DNA) the racial or ethnic background of the women donors does not matter. As I have argued elsewhere (Dickenson, 2002, 2004) this phenomenon is an invitation to wholesale exploitation of women in the Global South.

Women's property in their reproductive tissue

For some years I have been arguing what I believe to be a novel position: that the only legitimate property in the body is that which women possess in their extracted reproductive tissue, specifically in tissue products of their reproductive labour (Dickenson, 1997b, 2001) However, I do not believe that there is any such thing as a generalised right to dispose of one's body or body parts; I am certainly not a laissez-faire, free-market libertarian. My argument is grounded in my interpretation of what Locke really said, and in a Hegelian notion of contract as mutual recognition. (There are also marxist elements in terms of alienation and exploitation, developed further in Dickenson 1997b and 2001, but not covered here for reasons of space limitation.) Essentially, however, this is my own argument rather than that of any canonical theorist; other feminist theorists have recently begun to develop it further. (Brace, 2004; McLeod and Baylis, in press) The phenomenon of the vanishing lady should itself vanish from the stem cell debate, if my interpretation is true.

Although Locke is usually regarded as the intellectual grandfather of the free-market approach to tissue, in fact that is a bastardised interpretation of Locke. The right to property in Locke's *Second Treatise on Civil Government* (Locke, 1989) is founded, famously, on the 'mixing of labour' with resources: when we do so, we acquire property rights in the results. Now although the conventional belief that we do own our bodies

implicitly rests on Lockean foundations, in fact Locke never says that we have a property in our physical *bodies*: rather that we have a property in our *moral persons*, our agency or subjectivity. (Dickenson, 1997b) He is careful to distinguish between persons and bodies, and between the labour of our bodies and our bodies themselves, when he says that ‘Every man has a property in his own person; this nobody has any right to but himself. The labour of his body and the work of his hands we may say are properly his.’ (Locke, 1689, in Cohen, 1997, p. 209). Jeremy Waldron makes this distinction very ably: ‘Humans, then, do not have creators’ rights over their bodies. But they can be regarded in this strong sense as the creators of their own actions (and *a fortiori* of their work and labour).’ (Waldron, 1988, p. 179) The implication, then, is that we have a title to that with which we have ‘mixed our labour’ because our labour is the expression of our agency and status as *persons*, not because the raw materials have touched our *bodies*. The connection is not literally between our bodies and the hoe, flute or pen, but between our skills and the fruit, music or poem that flow from the labour for which we use those tools.

Further—and this is crucial for property in tissue, body parts or ova—we only have a title to that which we have worked to make; we do not have a property in that which we have *not* laboured to create. We do not own our bodies merely because ‘we’—whoever that disembodied ‘we’ may be-- inhabit them. In Locke’s view, we do not own our bodies at all; God does, because He alone created them. The final proof that rights in what one has created flow from subjecthood or agency rather than from possession of a physical body must be God’s own disembodiment. God has no physical body, but he possesses absolute creator’s rights over that which he has laboured to create.

Absent or present Locke’s belief in God, the premiss remains the same: we have not laboured to create our own bodies. Those who argue, on a purportedly Lockean basis, that we do have a property in our bodies actually ignore this distinction in Locke between property in the moral person, which I equate with self-ownership, and property in the physical body. The liberal basis of a right to property is thus intimately linked to self-ownership; it derives from the connection between our value-creating labour, our purposeful activity and our agency, although not from our ownership of our physical bodies. That labour is an expression of our agency and not of our bodies as such; it derives its value from that agency, but it is done through the medium of our bodies. This interpretation is consistent with the view of the subject as embodied, and with the desire to avoid the objectification or commodification of the body, which opens up as a possibility once we admit the notion that bodies can be owned by subjects.

There is one crucial exception to this interpretation: women’s labour to create certain forms of extracted reproductive tissue, including all the stages involved in the production of oocytes used in the stem cell technologies. We have seen in the preceding section that oocytes do not just come out of nowhere: they are extracted, in multiple and unnatural quantities, through laborious and risky procedures. Put more properly in the active rather than the passive voice, women labour to produce extracted ova, in the purposeful manner which characterises the sort of labour which grounds property rights in Locke. The intricacies of the stem cell technologies should make it clear, once and for all, that what women do in producing extracted ova is not simply ‘natural’. Because what women do in

pregnancy and childbirth has been likened to what the earth does by many theorists, including those like Marx who should have known better, it has been easy to ignore their reproductive labour: to make the lady vanish. What a woman does in giving life, to Marx, is natural, not social; constitutive of an object, rather than a subject, part of the 'material substratum' that is not subject to social analysis (MacKinnon, 1989, p. 11). To Marx, what gives labour its transformative power is intentionality and control. Pregnancy and childbirth, in his view, lack those qualities. But it takes a great deal of intentionality and control to undergo the threefold processes of ova donation; of course it is labour, and hard work at that.

Women have a genuine Lockean property in the labour of ova extraction, and likewise in that which they have laboured to create. It is clear this is not just what nature does, clear that value is created through their labours, and clear that ova are treated as a commodity with exchange value, even if the women themselves are not necessarily compensated in monetary terms, if they are 'volunteers', although they may receive something else in exchange (e.g. possibly the 'gift' of patronage, for Dr Hwang's postgraduate students). I have argued elsewhere that women also have a property in the labour of contract motherhood or surrogacy, but that their entitlements cannot extend to the child so produced, since a person cannot be a thing, and property can only be in things. (Dickenson, 1997b) Some critics have rejected this notion because they wrongly assume I am trying to claim what I explicitly reject, that the woman's labour in pregnancy and childbirth gives something akin to a slaveowner's rights over the child. In the case of ova extracted for the stem cell technologies, that confusion clearly cannot arise, since no child is created. There can be no argument against women having a property in their own labour there, if the argument is only based on possible implications for the status of the child created through a woman's reproductive labour.

Stem cells, in fact, constitute the ideal example to clinch my argument, although I have also illustrated it in relation to the commodification of aborted fetal tissue, where I argued that women also possessed a property right, conceived alternatively as a privilege, power or immunity (Dickenson 1997b, pp. 166-170). There I predicted that we would risk tumbling down some increasingly slippery slopes without a firm notion that women and women alone own their labour in producing reproductive tissue. The phenomenon of the vanishing lady in the stem cell wars is proof of that prediction. However, I was also sceptical even then of regarding women's rights in aborted fetal tissue as unqualified and complete property rights, and the same applies to my position on ova. Although some commentators generally sympathetic to feminism have argued in favour of allowing women to enjoy unqualified property rights in their bodily tissue (Andrews, 1986; Macklin, 1996; Momberger 2002) I am more inclined to limit those rights in order to prevent the untrammled commodification of practically everything. My approach is more typical of most feminist responses, I think, particularly outside the United States (Dodds, 2003; McLeod and Baylis, 2005; Schneider and Schumann, 2002).

Property as a bundle of rights

Having established that women's property in their extracted oocytes can justifiably be regarded as conferring a Lockean property right, I will now briefly delimit what sort of right that might be, before going on to discuss how such a right could be secured through a Hegelian model of contract. Here I am drawing on the accepted characterisation in law of property as a bundle of rights, or set of relationships. (Honore, 1961; Grey, 1980; Penner, 1996, 1997; Resnik, 2002; Schroeder, 1994) We can possess none, some or all of the sticks in the bundle.

It will be of enormous importance that we think long and hard about which rights we want to protect. The proponents of unfettered commodification are prone to assume that once researchers, biotechnology companies or funders acquire proprietary rights in tissue, including rights in stem cell lines, those rights are complete and undifferentiated. Although some legal decisions, *Moore* (1988) among them, do seem to give aid and comfort to this view, it is incoherent. Property rights can be and should be disaggregated and distinguished. This is the conventional view in jurisprudence, to the extent that some commentators even doubt whether there is such a thing as 'property', as a single coherent concept. (Penner, 1997)

Honore's classic list of entitlements and duties involved in the property relationship (Honore, 1961) demonstrates the variety of entitlements and duties into which the concept of property can be disaggregated. The owner of object X may have some or all of the following:

1. A right to the physical possession of X
2. A right to its use
3. A right to its management, that is, to determine the ways in which others can use it
4. A right to the income that can be derived from its use by others
5. A right to its capital value
6. A right to security against its being taken by others
7. A right to transmit or alienate it to others by gift or bequest
8. A right to transmit or alienate it to others by sale
9. A permanent right to these other rights, without any limit or term
10. A duty to refrain from using X in a way that harms others, that is, liability for harm caused by X.

Which of these rights do we want women who provide ova for the stem cell technologies to have? Those rights that we most need in order to protect women from 'vanishing' in the stem cell debates must include protection against unauthorised taking, certainly—entailing rights 1, 3 and 6. I am much less convinced that women need the right to the capital value of their ova or the right to sell those ova, rights 5 and 8. Even right 7, the right to transmit by gift, seems dangerous to me because the 'gift relationship' is increasingly used to exclude tissue 'donors' from any further say in how their tissue is used, once they have consented to the initial tissue donation. (Waldby and Mitchell, 2005) Altruism already tends to be mandatory for women: one commentator has even predicted 'a new contract between the sexes and the generations, where young, fertile

women are expected to provide the material resources for the treatment of the old and the sick' through provision of ova for therapeutic cloning. (Schneider and Schumann, 2002, p. 76) However, I do not want to rule out the right to transmit by gift altogether: altruism remains an important value, provided that it is not expected of women alone.

Contract and mutual recognition

All the rights and duties summarised in the 'bundle' model of property can be seen as forms of relationship between two parties, and thus as linked to a Hegelian model of contract as mutual recognition. The focus in the Hegelian model of property (Hegel, 1967) is on the experiential process of identity formation and recognition of others' subjectivities, and the Hegelian notion that 'everyone must have property' does not mean that everyone must hold private wealth. The emphasis is on relationship rather than appropriation. Property, in Hegel, is not merely about relations of possession and control, but rather about the broader dynamics of social recognition. Contract in Hegel is a first stage of progress from the self-absorption of the immature subject into the social domain. By recognising women's labour in producing stem cells as conferring a Lockean property right, and adding the Hegelian contract analogy involving contract as mutual recognition, we would move two steps beyond the immature debate now dominating the stem cell discourse.

Although Hegel's *Philosophy of Right* is concerned with the development of the subject, it begins with property and contract, which appear to belong to the realm of objects. Only by engaging with the world of objects, however, can we become full subjects. 'The Hegelian subject always has to go outside itself to know what is inside; by seeing itself reflected in the world it discovers relations constitutive of itself.' (Ferguson, 1993, p. 41) Unlike in liberal theory, the high road to individual autonomy and self-awareness is through the recognition of others who also possess self-consciousness, who also own themselves-- to put the matter in terms more familiar to liberal thought. Our individuality is not given but created, through active relationship with our environment, which of course includes other subjects. It 'translates' itself into reality 'through the use of its own activity and some external means,' of which the first is property'. (Hegel, 1967, p. 9) Perhaps more accurately, property is the first venue of interaction with the world, followed, in the *Philosophy of Right*, by contract, the family, civil society and then, only then, the state. Whereas in liberal contractarianism, disconnected individuals in the state of nature form the state in order to assure the security of their property and lives, in Hegelian thought the state is the final and highest stage of mutual recognition. Property is not guaranteed by the state apparatus subsequent to its formation by the social contract; rather, the order of events is reversed, so that property is a lower but still essential stage in the process of mutual recognition that eventually culminates in the state. Rights, including the bundle of claim-rights, privileges, powers and immunities that constitute property (Hohfeld, 1978), are consequent to society, rather than prior to it.

However, the first stage of contract as mutual recognition, for a Hegelian, would presumably be the awareness that social life is not contract all the way down. Instead, contract in Hegel is merely a necessary but preliminary stage among many, in terms of

social relations and mutual recognition. Contract reflects relationships, but not all relationships can or should be reduced to contractual ones. Furthermore, contract in Hegel is not merely the instrumental means by which property is protected, as in liberal thought; rather, it has value in itself, as the symbol of the common will and mutual recognition of the parties. As a simultaneously symbolic and practical mechanism of recognition of other wills, contract represents a limited but significant progress from self-absorption:

A person by distinguishing himself from himself relates himself to another person, and it is only as owners that these two persons really exist for each other. Their implicit identity is realized through the transference of property from one to the other in conformity with a common will and without detriment to the rights of others. This is contract. (Hegel, 1967, s40, original emphasis)

Furthermore, the way in which Hegel deals with a central paradox of contract casts a clearer light on the ongoing duties of the recipient of a gift, such as blood, biodata or oocytes. Although contract symbolises the recognition of my entitlements, normally when I alienate something to you through a contract, I apparently cease to have entitlements in it. (This paradox holds whether I sell or give away the object of the contract, that is, regardless of the manner of its alienation.) As Hegel puts it, however, ‘Contract is the process in which there is revealed and mediated the contradiction that I am and remain the independent owner of something from which I exclude the will of another, only in so far as in identifying my will with the will of another, I cease to be an owner.’ (Hegel, 1967, s72). His answer to this contradiction of his own creation reminds us that property is not mere physical possession, but rather ‘the social recognition that something belongs to me’. (Connolly, 1988, p. 117) This is why Hegel can make this rather surprising statement:

In a contract my purpose is both to acquire property and to surrender it. Contract is real when the action of both parties is complete, i.e. when both surrender and both acquire property, and when both remain property owners even in the act of surrender. (Hegel, 1967, s76A)

If this is so, then the natural tendency of contract, as opposed to the one-off nature of informed consent, is to require *ongoing* recognition of the donor by the recipient. A simple example about the continued interest donors have in the use of their gifts might be the rudeness of selling something one has received for Christmas. This common-sense metaphor has serious philosophical content in Hegel. A Hegelian perspective on the purpose of contract as mutual recognition actually makes contract more attractive than informed consent as the model for setting up stem cell banks, I would argue. Whereas in informed consent the patient or donor is too often the more passive partner, accepting or rejecting what the doctor or researcher proposes, in a Hegelian contract both partners are equals. Their nature as equals requires the ongoing recognition of each other’s rights even after the transfer or alienation of the object which the contract concerns. That object is less important than the mutual recognition itself.

Because contract interpreted on a Hegelian basis is primarily about ongoing mutual recognition, it should not be viewed as a one-off event, but neither should the rights of the ‘donors’ necessarily be regarded as all-embracing. The use of contract in protecting women ovum ‘donors’ for the stem cell technologies should be limited to the rights to protection against unauthorised taking, and to the management of ‘downstream’ uses of the ova, so that women are able at any time to withdraw consent to a use which they find ethically objectionable, such as uses of reproductive tissue to manufacture cosmetics (Parfit, 2005) This is itself a major concession, one which even comparatively enlightened guidelines-setters such as the Human Genome Organisation ethics committee has been unwilling to recognise (HUGO, 2000).

It may be thought impractical to allow donors an ongoing right to withdraw consent to specific uses of their tissue; indeed, HUGO thought so. Other jurisdictions have grappled more seriously with the mechanisms that might be required in the case of biobanks and other tissue repositories, because they rightly view public trust in biobanks as vulnerable to later disclosures that altruistically donated tissue has been used for commercial purposes. The French and German national ethics committees, which generally take a strong line against commodification of human tissue, have acknowledged that donor anonymity would rule out a repeat consent procedure. However, they recommend that the onus should be put on the biobank governing body to contact those donors whose initial consent form specifies certain conditions under which they would want to withdraw consent. (CCNE and Nationaler Ethiksrat, 2003) If that were the case, then the initial consent form would need to be much more extended than is now typical. This proposal is itself a good example of Hegelian mutual ongoing recognition.

It may be objected that the relationship between medical researchers and ovum donors is not literally contractual. In many cases it is, of course: where oocyte donors are paid, the transaction looks commercial and contractual. Where women who donate oocytes receive no benefit, in the form of either payment or treatment services, it may well seem that the conditions for a contract do not exist: normally a contract must involve a benefit or ‘consideration’ for both parties. On the other hand, it appears that many researchers do view the donation as a contractually binding transfer.. Hence the ‘second consent’ box on Medical Research Council-approved forms for tissue donors in the United Kingdom, stipulating that the signatory understands that she possesses no further rights in any developments arising out of the donation. Whatever this is, it is certainly not an informed consent in the usual sense of a consent to the procedure itself; its purpose is not to protect the clinician from a possible battery action, but to preserve the commercial interests of researchers and their funders from later claims such as those launched by Moore.. I think it is better understood as part of a contract in which something of potential value is being transferred for a price below its market value, or for no price at all. Effectively, the unrestricted second consent to all further uses of the tissue, now prevalent in consent forms, is already a contract, but one weighted entirely in the interests of the recipient of the tissue. (Waldby, 2004)

The model ‘contract’ for oocyte providers should not include an unfettered right for researchers, private firms and commercial funders to profit from the sale of their tissue,

to hold complete rights over its capital value, and to dictate any ‘downstream’ uses of the tissue. All the sticks in the property bundle need not be held by the recipients of reproductive tissue, if we employ a disaggregated concept of property which permits more complex and differentiated rights and powers available to be claimed by both parties to a ‘contract’. Even these isolated rights (protection against taking and rights to control management of the tissue) would be a significant advance on current practice, ensuring that women’s interests do not vanish altogether. We do not need to award such rights to oocyte providers as the right to profit from the sale of one’s tissue; indeed, we should not, for reasons I discussed earlier. The point of contract as limited protection and as mutual recognition for women is precisely to avoid complete commodification of female reproductive tissue, rather than to enhance it. Contracts along these deliberately limited lines for the use of women’s ova in the production of stem cell lines would probably be upheld by the courts, since a contract weighted entirely in the interests of one person is invalid in law. Current practice in ova ‘donation’ is arguably so unbalanced as to be legally void, if ever tested..

The limited model of contract which I advocate is philosophically coherent as well as practically sound. It is consistent both with the interpretation of property in most jurisprudence as differentiated forms of relationship to objects, and with a Hegelian approach emphasising the developmental, identity-creating benefits of property. The Hegelian model does not view property as merely instrumental to the pursuit of ends that have already been decided, in Lockean fashion. (Ryan, 1984) Rather, it suggests that the **relationship** between me and what I own is indeed a bond of **relationship** rather than of appropriation, which seems more appropriate for women’s reproductive tissue, itself the locus of relationship with future generations. (Dickenson, 1997a) In addition, the Hegelian outlook incorporates a view of contract as a bond between myself and others, the first stage in a process of engagement with the existence of other moral subjects. The model of contract which I am proposing here also chimes with much feminist theory’s emphasis on relationship.

The woman as receptacle and the limitations of contract

The impetus of Hegel’s argument is about the mutual recognition embodied in contract. A contract alone, however, will not protect ‘donors’ of ova to be enucleated unless their equal role in creating the stem cell line is recognised in that contract. This *caveat* already applies to ‘contract motherhood’: even in jurisdictions where contracts between ‘surrogate mothers’ and commissioning parents are valid, contract alone is not enough where the woman’s role is merely viewed as that of a sort of receptacle.

In the infamous *Baby M* surrogacy case, the court effectively held that genetic parenthood was privileged over gestational motherhood, by finding that the genetic father already had sole rights over the child, and that his contract with the genetic and gestational mother merely covered her willingness to be impregnated and carry ‘his’ baby to term (*In the Matter of Baby M*, 1987). A similar case, *Anna J. v. Mark C.*, held that the matter was even clearer where the gestational mother was not the genetic mother: the

legal parents were the genetic progenitors, the husband and wife in the commissioning couple (*Anna J. v. Mark C.*, 1991) This position does not apply in UK law, where the birth mother remains the legal mother, but a recent article on the first lesbian couple undergoing IVF at the Oxford John Radcliffe Hospital showed how widespread the belief remains that the genetic parent is the ‘real’ mother and the gestational mother merely a receptacle. The partner providing the ova to be fertilised and implanted regarded herself as the future child’s real mother, and the gestational mother agreed: she saw herself as merely carrying the other woman’s child. (*Oxford Times*, 22nd April 2005) Even women themselves, it seems, accept the widespread view of the carrying mother as a mere receptacle, what is sometimes called ‘a womb for rent’. (Brazier, 1999)

In the stem cell debates, we can see a similar prejudice in favour of genetic content. Although in somatic cell nuclear transfer enucleated ova are as essential to creating the new life of the stem cell line as is the genetic content, the genetic material transferred is afforded a privileged position over the mere ‘substance’ of the enucleated ovum. This view is consistent with ancient metaphors presenting women’s reproductive role as merely housing the active male element in generation: as Aeschylus writes in the *Eumenides*, ‘A stranger she preserves a stranger’s seed.’. (Dickenson 1997b, p. 160) Such a limited understanding of women’s role in reproduction is likewise found in Aristotle, who views woman as a mere receptacle for the active, energizing, soul-creating power of the male. (*The Generation of Animals*, 731b30) She is merely passive, manipulable, open to a higher force. In the stem cell technologies the receptacle is not the woman or her womb, rather the enucleated ovum; yet the implied metaphor is similar. The genetic material injected into the enucleated ovum is seen as the guiding force or intelligence producing the stem cell line.

A contract such as that in the *Baby M* case failed to protect the gestational mother in a socio-legal context, inherited from the common-law system of coverture, where the father’s genetic parenthood is privileged over the mother’s gestational role, even when the surrogate was both the genetic and the gestational mother. This is one reason why we need to be careful: contracts in women’s reproductive tissue are automatically different from other forms of contract, because women’s bodies have long been assumed to be open and available. That is the brunt of Carole Pateman’s notion of the sexual contract, which can indeed be made to encompass the stem cell technologies, as well as surrogate motherhood, private cord blood banking, and other uses of female bodies which are justified by their proponents as being like any other economic transaction. (Pateman, 1988) Pateman’s model is also valuable for its insight that once an initial consent has been given, for example to the marriage ‘contract’, all further rights are extinguished. This is also the effect of consent to further uses of donated tissue.

Where women’s bodies are concerned, the ‘normal contractual manner’ does not necessarily apply. There are profounder reasons why transactions concerning the use of women’s bodies, even if distinguished from the sale of women’s bodies, cannot simply be assumed to be the same as any other economic transaction. A feminist analysis such as Pateman’s should warn us against the use of oversimplified, knock-down neo-liberal arguments about choice, consent and contract where female bodies are concerned,--or

indeed potentially all bodies. (As I asserted in the opening pages of this article, all bodies now risk the sorts of objectification and commodification to which women's bodies have previously been particularly vulnerable.)

The answer to that problem, however, lies in extending the logic of contract to make it genuinely beneficial to women, in forcing its liberal defenders to recognise that contract has been used in such a one-sided fashion in the new reproductive technologies as not to be a genuine contract at all. The problem is not that the sexual contract is a contract, but that it is sexual, as I have noted elsewhere in relation to Pateman (Dickenson, 1997; Pateman, in press). Similarly, in relation to the stem cell technologies the problem is not the inherent limitations of contract as such, but the surrounding cultural beliefs concerning women's role in reproduction more broadly and in ovum donation in particular. The view of the woman as receptacle is one such belief.

In the case of 'contract' or 'surrogate' motherhood, gestational mothers can be protected by a contract providing remedies for the 'surrogate' if she miscarries, produces a child of the 'wrong' sex, or conceives more children than the contracting couple will accept. (For an example of this last eventuality, see Dickenson, 2003.) However, I emphatically disagree with those liberal feminists who insist that gestational mothers must adhere to strict contract observance—requiring them to deliver rather than keep their babies—if women's autonomy is to be taken seriously. (Andrews, 1986, Macklin, 1996) What this sort of analysis ignores is the power imbalance between the 'surrogate' and the contracting couple, who are typically of a higher socio-economic status (Ragone, 1996). The role of contract here, I would argue, should be to protect the rights of the weaker party. In a system such as the UK's, where 'surrogacy' arrangements are void at law, few protections exist for the weaker party, typically the 'surrogate'. Restrictions on absolute freedom of contract are recognised in other branches of law, such as employment protection or landlord-tenant law. (Mahoney, 1990) The choice is not between complete absence of contract and complete freedom of contract: we can make contract suit our feminist purposes, just as other constituencies such as trades unions have historically made it serve theirs. Our task may be more difficult in a globalised era of neo-liberalisation, I grant, but we should use whatever weapons are available to us.

It may be objected that just as no contracting couple would want to enter a surrogacy arrangement on the terms I have proposed, so no research team or commercial biotechnology company would want to invest in a stem cell line which could be nullified at a later date by an ovum donor exercising her right to refuse consent to a particular use. I find myself strangely unbothered by this possibility. The terms of the power imbalance between women who 'donate' ova and commercial biotechnology companies, stem cell banks and funded research teams are now so great that any power shift towards the 'suppliers' of tissue must be welcome. We are a very long way from the situation in which the 'supplier' calls the shots: the existence of the 'supplier' is not even recognised. In any case, it should not be beyond human wit to devise contractual or consent mechanisms that afford ovum donors some rights of later refusal: as we have seen, the French and German national ethics committees have already made concrete recommendations. Since the commercial stakes are immensely valuable, presumably

researchers and biotechnology companies would still want to invest in stem cell research, even if the protections afforded to ovum donors were somewhat less minuscule than they are at present.

Personal rights, such as consent, can no longer be distinguished from property rights; tissue donation represents a radical change in the political economy of human tissue (Waldby and Mitchell, 2005). What has not changed is the unbalanced power relationship between donors and recipients of tissue; or, perhaps more correctly, what has changed is that the imbalance has worsened, in the case of ova donors to the stem cell technologies. If the lady is not to vanish altogether, she needs protections such as contract, but a form of contract limited to the protections she most needs, and aimed at ensuring that women's contribution to the stem cell technologies is actually recognised. Without recognition of women's property in the labour of ova donation, not only are women estranged from their reproductive labour; the terms in which the stem cell debate is conducted are themselves deeply alienating.

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