Managing Potential in Assisted Reproductive Technologies

Reflections on Gifts, Kinship, and the Process of Vernacularization

by Bob Simpson

Assisted reproductive technologies (ARTs) offer an ever-widening repertoire of possibilities for how bodies, substances, and relationships might be brought together in the accomplishment of reproduction. This article reflects on the tensions that arise around universalizing and secularizing discourses (e.g., bioethics, regulation, and the law) and those of vernacularization whereby these discourses are rendered into local idioms of kinship, body, and exchange. The examples used to illustrate this are drawn from Sri Lanka (Sinhala Buddhist) and the United Kingdom (Pakistani Muslims). In both instances, United Kingdom–inspired guidance on the delivery of services meets with very particular visions of hope and becoming as they figure in ideas of reproductive potential. This encounter introduces areas of mismatch and dislocation that are made evident through ethnographic inquiry and analysis. The article concludes with a discussion of gift and debt relationships in the context of gamete donation, connecting these with wider processes of cultural transformation in complex plural democracies. Those engaged in this negotiation are characterized not just as moral pioneers but as social pioneers locating their own beliefs and practices within the global diffusion of ARTs and their ethical and clinical governance.

In this article I set out to gain some analytical purchase on the idea of reproductive potential in the context of infertility. The individual and collective experience of frustrated reproductive desire is a particularly rich theme to reflect on because it touches on each of the meanings of potentiality outlined in the introduction to this volume (Taussig, Hoeyer, and Helmreich 2013), that is, potentiality as a hidden or inchoate force, a matter of choice, and a way of thinking about the social and material world that points to a genuine sense of plasticity and possibility. Specifically, I am concerned with the resort to assisted reproductive technologies (ARTs) to achieve pregnancy and parenthood and the ways in which this accomplishment entails wider questions of relationality and exchange. Such techniques are increasingly available to meet a global and not merely a European and North American burden of infertility. Where third-party gametes are used, impaired reproductive capacity is realized by the simple artifice of drawing on the reproductive vitality of others. However, the simplicity of the artifice is in sharp contrast to the complexity that arises in attempts to name and frame the sub-

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stances, sentiments, and relationships to which it gives rise, a process that I characterize here, following Strathern (2009), as a form of vernacularization. A central theme in what follows is the tension that arises between local worlds of meaning, morality, and kinship on the one hand and the powerfully naturalizing discourses of law, regulation, and bioethics in which they are encompassed on the other. At one end of the spectrum, ARTs are incorporated into familiar projects and idioms; far from changing the world, their potential is to make the world conform to expectations that already exist. As Strathern (1995) puts it, "Instead of the potential of unexpected combinations, the creation of unique individuals and unplanned effects, the future seems increasingly trapped by present choice. It is as though creativity were trapped by artifice" (434). At the other end of the spectrum, ARTs betoken challenge and the possibility of radical shifts in the way that relationships and indeed society itself might be thought about and, quite literally, conceived.

However, where reproductive projects are concerned, things do not always turn out as intended. Incorporating the reproductive vitality of others introduces instability, risk, and unpredictability into the attempt to overcome unwanted childlessness, particularly where gametes, embryos, and bodies begin to be brought together in novel combinations. Hoping, willing, dreaming, desiring, expecting, waiting, and all the other works of human imagination that see beyond present

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personal reproductive frustrations are brought together with and shaped by biomedical, ethical, and economic readings of reproductive potential. My reason for this focus is not to suggest that there are essentialist and primordial urges to reproduce at work but rather to draw attention to the diverse social and cultural imperatives attached to the desire to reproduce (see Gammeltoft 2013; Vora 2013). We are not dealing with mere reproduction but reproduction of kinship in some form and according to some configuration of imagined future relations. Central to my argument here is that the vernacular is not always congruent with the push toward globalization, standardization, and universalization evident in the ethics of ARTs. To demonstrate this fundamental disjunction, I begin by introducing two examples taken from ethnographic fieldwork carried out in very different settingsamong infertility doctors in Sri Lanka and in a Pakistani Muslim community in the United Kingdom. In each of these examples, I explore what happens when the use of ARTs not only offers potential that is wanted but also brings in relationships and social knowledge that are unintended or unwanted and, perforce, must be absorbed, modified, or negated. Using these examples as a stepping-off point, I then go on to consider some of the idioms in which these transactions are framed and notably the fate of kinship, gift, and magic in the context of complex plural societies.

Echoes of Past Polyandry in the Management of ARTs in Sri Lanka

In 2002-2003 I undertook a period of research in Sri Lanka. New genetic and reproductive technologies were making their appearance on the island, and I was curious to find out more about how they were being received culturally as well as in terms of the more familiar ethical, social, and legal implications (see Simpson 2004a for a fuller account). As far as in vitro fertilization (IVF) was concerned, there were seemingly few objections to the technologies themselves. Indeed, an important aspect of paving the way for ARTs throughout the nineties was a rhetorical alignment of Buddhism and the scientific progress that these technologies signified (Simpson 2009). For the majority Buddhist community, these novel therapies were seen as offering a solution to the considerable stigma and distress of unwanted infertility. Moreover, the donation of gametes and embryos could readily be linked to the widely held practice of meritorious giving (dana). However, the relief of infertility using ARTs brought with it possibilities that lay outside of dominant models of familism and the ideas of substance and consubstantiality on which local ideologies of kinship are built. As at other times and in other places, embrace of the new brought with it troubling questions about the meaning of biogenetic connection, anonymity, confidentiality, consent, and ownership as well as practical requirements for screening donors, proper record keeping, effective consent provisions, and proper storage facilities. Models for

what regulation might look like were sought from other jurisdictions—such as Australia, the United States, India, and Europe—that had already gone down the route of addressing the anxieties that ARTs bring in their wake. In particular, the United Kingdom's Human Fertilisation and Embryology Act (HFEA) and the authority that it established were used as an important template when it came to thinking about a national policy. Anglophone and accessible, the regulatory framework of the HFEA was also the one within which many of the foreign clinicians who helped establish IVF locally operated. However, the interplay of values and assumptions suggested potentialities that could not always be encompassed by others' guidelines. At these points of friction and reflection, local ideas of culture and identity became visible for ethnographer and subject alike.

During my research I met frequently with a leading fertility specialist in Sri Lanka. On one occasion we chatted in his recently opened clinic, which was at that time one of the most up to date facilities on the island. He was a kindly and dedicated man who had devoted much of his life to improving maternal health and teaching others why and how to do this. Unlike others in his field, he understood why an anthropologist should be interested in the development of ARTs and, moreover, was interested in the fact that I was interested. Despite his absurdly demanding schedule, he was keen to help me with my questions. It would seem that our meetings gave him an opportunity to reflect in a para-ethnographic way on an aspect of biomedicine that was rapidly changing but also one that he was actively shaping. Not long into the conversation he raised a topic that was of some fascination to him. It is one that we had discussed several times before.

He, along with other fertility doctors, regularly received requests from couples to use the sperm of a close relative, usually the husband's brother, to achieve pregnancy. As far as he was concerned, such requests were to be discouraged on ethical grounds. The HFEA and other guidelines were clear on anonymity and secrecy, with the clinician located in a mediating role between the donor and recipient. As it is recorded in a consent form issued to patients in another fertility clinic, "We request and agree that the donor shall be an unidentified person selected by the doctor performing the procedure, whose choice we sincerely and unquestionably approve and is deemed to be our own choice." As in other countries, the clinician is interposed between the donor and recipient, in effect cauterizing any kin-like relationships and sentiments that might emerge from the transaction.

However, these requests presented something of a puzzle for which he and other doctors felt obliged to offer an explanation. The source of these "unethical" requests was linked to the fact that polyandry was formerly practiced by Sinhalas. In these explanations, the link between intrafamilial donation of sperm and polyandry was considered to be a throwback to an earlier kinship, and this was precisely why passing sperm between known persons, particularly if they were brothers, might be thought to be a culturally appropriate way for people

to approach this technology. Although now entirely extinct as a practice, it is well known that an earlier system of indigenous laws (Kandyan law) gave women particular marital rights and allowed for the recognition of multiple paternity (Hayley 1993 [1923]). With colonial domination, however, these systems were replaced by one that located exclusive male power within the marriage and introduced new definitions of "illegitimacy" derived from the ancient Roman concept of patria potestas (Goonesekere 1998). Although polygamy was outlawed by the British government in 1859, the practice appears to have continued, albeit with lesser frequency, for another 100 years among peasant cultivators in some parts of the Kandyan highlands (Tambiah 1966). Although rare in practice, polyandry offered a well-recognized solution to some of the practical problems that threatened effective social reproduction among peasant cultivators. Corporate property relations appear to have been paramount, and claims that could prove divisive were minimized—people, it would seem, passed through property and not vice versa (Leach 1961). Likewise, individual male interests were subordinate to the interests of house $(g\bar{e})$ and blood $(l\bar{e})$. Survivals of the corporate nature of the sibling group are to be found in commonly used kinship terms; for example, a child will address a father's brothers by terms such as bāpa or loku tāte, which carry the sense of younger and senior or "big" father (Simpson 2004b).

The availability of a vestigial memory of polyandry as part of a distinctively local mapping of relationality provided a vernacular model for copaternity. This could be drawn on to make sense of transactions involving semen in ways simply not available within Western traditions of marriage and descent. That couples should make this request emerged out of a cultural logic that made it both obvious and expedient. It was consistent with ideas of blood ($l\bar{e}$) as a metaphor for shared descent as well as ideas of fraternal solidarity within the sibling group. Couples acting within the context of a new biomedical modernity were seeing relational potentials that the "ethical" management of ARTs simply did not allow. In making this connection, a tension was evident between local preferences and the medicolegal constructs of relationality that arrive prepackaged with ARTs. One reading of this piece of cultural information was in terms of an alignment with global biomedical advance. Another reading, however, pointed to a hegemony of sorts in which local preferences and perceptions of reproductive potentialities were eradicated in the face of Western ideals of the gamete as an anonymous gift and the sentiments that propel it.

An Ambivalent Embrace: Pakistani Muslims and ARTs

The second set of examples presented are drawn from a piece of research carried out in the United Kingdom among Pakistani Muslims, mostly of the Sunni branch of Islam. The research was carried out in the context of new guidelines

issued in 2004 on the provision of fertility treatments in National Health Service hospitals in the United Kingdom. If certain conditions were met, then patients could expect up to three cycles of IVF to be provided funded by the state. Ethnographic research was carried out within a Pakistani community and one of the regional hospitals providing fertility treatment to their community. The aim was to get a better understanding of how the attempt to widen access to IVF would be received and acted on by a community with its own distinctive attitudes to fertility and infertility and its treatment. On the face of it, this community's impotentiality was seen as the same as anyone else's, and therefore so were the solutions—but it was clear from the research carried out in this community that as with the Sinhala example, there were a number of frictions underlying these assumptions.

On the one hand, ARTs were welcomed because they touch on the powerful and pervasive desire among Muslims to have children and thus offer solutions to a condition that blights public and private lives. The use of ARTs is also easily lined up with teachings in the Qur'an, which explicitly encourage treatment for infertility, and providing that gametes are taken from a husband and wife, both Sunni and Shi'a traditions are broadly permissive when it comes to IVF (Clarke 2009; Inhorn 2003; Tremayne 2009). There was a general consensus on this view among our informants, their religious leaders, and, importantly, clinicians they came into contact with who were themselves practicing Muslims. ARTs were to be welcomed because on balance, reproductive imperatives were believed to outweigh any ethical qualms that there might have been about helping couples become parents.

If used in accordance with Islamic teachings on family and reproduction, ARTs were therefore accepted as being able to overcome primary infertility. As such they could also reduce the potential need for other measures such as adoption, which many felt was an unacceptable practice within Islam. Most important, however, they enabled couples to avoid the evident and very public misfortune of being childless. As one woman explained,

We have read up on the religious side to it, and he [husband] has talked to people about it in the mosque, and, to be honest, we don't believe it's wrong because as long as it's my eggs and his sperm there is nothing wrong with that, it's only wrong when we start using someone else's sperm or if I use somebody else's eggs, that's when it's wrong, so we are alright with it, and hopefully we are doing the right thing. It makes sense as well, and we are both using our own stuff, it's just we are not doing it the normal way how people do it, we are getting help.

In their quest for "moral" guidance, this couple not only

1. The target of three cycles on demand has mostly become an aspiration, with many trusts being unable to afford any treatments at all (e.g., see http://www.independent.co.uk/life-style/health-and-families/health-news/rationing-babies-ivf-is-still-a-postcode-lottery-1682308.html [accessed August 25, 2011]).

received endorsements from their local imam but also from one consulted back in Pakistan who reassured them that their actions would not violate Islamic law. In such accounts, reproductive potential appears to be safe and contained.

However, ARTs opened up more problematic possibilities. Engaging with ARTs, at least for Muslims seeking treatment in the United Kingdom, can draw attention to sexuality, family arrangements, and reproduction as subjects of choice rather than as incontrovertible givens, and in so doing it might challenge and possibly undermine traditional values and structures. Concerns were evident that rules about adultery (zina) might be violated, honor (izzat) might become threatened, and people might end up "spoilt" (kharaab), just as they are seen to be in many other parts of British society. As the following examples show, ARTs bring with them risk and the suspicion that the medical profession may wittingly or unwittingly introduce unwanted relationships and connections. Furthermore, engaging with novel technologies to address frustrated desires to reproduce is to be drawn into the possibility of mutual knowledge and understanding of bodies, relationships, and emotions that go beyond the levels of understanding that most couples had previously had in relation to one another.

This kind of ambivalence surfaced at many points in interviews with couples and clinicians and in focus groups in the community. For example, the following extract is from conversations recorded during a focus group conducted by coresearcher Mwenza Blell at a local women's center. The discussion captures some of the contradiction and confusion that are generated when ARTs are publicly contemplated in a community in which infertility is not only a personal but a collective catastrophe. After some debate, consensus eventually settles on just what is permissible within Islam. In the extract, the first woman has raised the issue of IVF in reference to a close relative who is having difficulty becoming pregnant.

"Because she is not very big, you know, I tell her, . . . 'you make a test-tube baby,' and she says 'no, my uncle don't like it because in our religion they think it's haraam." . . . A second woman comments, "But some people do, but it's not allowed in our Islam." [Room gets loud with people's comments.] The second woman continues: "If we study our Islam, it's not allowed." I ask, "Which part is not allowed?" The first woman explains, "Because if they think your husband, you know, his eggs [sic], it's all right then God give it, they, they make some other man's eggs and giving it, I think." I say, "And that's the problem?" and there is a chorus of "Yes," and the first woman says, "It's not halal."

In other words, providing that a couple's own gametes are used, IVF is perfectly acceptable, but there is evident suspicion that "they"—a predominantly Caucasian and non-Muslim health service—will use other people's gametes to achieve a pregnancy. The fear centers on the possible use of donor sperm and the expression of a powerful linkage between the materials of reproduction and the sexual intimacy of the act

of reproduction itself. To introduce the sperm of another man into a relationship would be tantamount to having had sex outside of marriage (zina) with the dire consequences that this would bring for the couple. A legitimate child is a blessing and the basis of connection to family, community, and humanity, but the mixing of agnatic descent (nasab) is abhorred because with illegitimacy, the basis for connection is lost along with any right to position or recognition within the community (Clarke 2009:95). For the Sunni Muslims we spoke to, the use of donor sperm would bring just such a catastrophe and one that could not easily be framed within a prevailing idiom of the gift.2 For some, it would seem that the anxiety was not merely about the substances themselves. One of the nurses working in the infertility unit serving the area from which many of our informants came commented that some Pakistani couples she had dealt with were under the misapprehension that use of donor sperm would actually involve sexual intercourse with the donor at the hospital.

Failure to uncouple assisted reproduction using donor sperm from sexual intercourse may be an extreme case, but it nonetheless highlights an important point about the levels of knowledge that are presumed when these technologies are being contemplated and the possibilities for the imagination to fill these gaps. Indeed, couples more often than not simply wanted a solution to their problem, a medical cure for their affliction. As one embryologist explained, "Sometimes people really don't care: just do the treatment, I just want to be pregnant, just do it, we don't need to know any detail." However, the way in which the treatments were presented typically involved some level of biological commentary, explanation, and an expectation of dialogue around sensitive topics. Implicit in the engagement with ARTs were attempts by medical staff to educate about biological processes that could displace what couples themselves know and that often exceeded what they felt comfortable knowing. Yet being informed is the sine qua non of the consent that each couple must, in theory, provide before treatment can go ahead. One consequence of an engagement with ARTs, therefore, is that husbands and wives may have to respond as "couples" in ways that they have never had cause to do before. Acceptance of ARTs and the expectation that it is couples that are treated and, as might typically be the situation in Muslim families, not just women unsettles the boundaries between public and private, men and women, husbands and wives. Amplifying the couple as the locus of primary decision making through joint appointments, information giving, and informed consent procedures and an emphasis on confidentiality is apt to set them at odds with wider networks. As one woman put it,

2. My colleague Steve Lyon (personal communication, October 13, 2011) has made the interesting observation that rather than the gift, the idiom that would make most sense of gamete transactions in the Islamic context is that of sacrifice (*qurbani*). Sacrifice is offered to the poor and needy, and as it states in the Qur'an, "It is neither their flesh nor their blood that reaches Allah; it is your piety that reaches Him" (Qur'an 22: 37).

Community does have a major impact on a person, on a couple, on whatever decision they do take, and this is why we haven't told many people about it. It's not the fact that we want to keep it private but the fact that it will be harder for us, and people will comment and some people won't accept it, so we have left it between ourselves really.

In deciding to keep the details of IVF treatment "between ourselves," this couple was making a decision not to invite the kinds of kinship solidarity and support that would normally be mobilized in the early stages of family formation. In this case we thus see how reproductive potential sometimes involves an overflow of meaning destabilizing social relations.

Reproductive Potential and the Problem of the Gift

That the essential materials of human reproduction can be taken from bodies, manipulated, stored, and brought together in a wide range of combinations has triggered a profound contemplation on reproduction and the means to accomplish it. Since the birth in 1978 of Louise Brown, the first so-called test-tube baby, a plethora of techniques have been developed that have played a consequential and far-reaching role in transforming the way people think about reproduction (Franklin 2012). With their appeal to the plight of those who are involuntarily childless and the profound sympathies and passions that this stirs, these techniques have ushered in wide and surprising levels of acceptance of new forms of intervention in reproductive processes as well as novel forms of substitution and artificiality. As Rabinow (1996) has argued in relation to the new genetics, the power of these technologies to reshape society is such because they "will be embedded throughout the social fabric at the micro-level" (100). However, as the examples above illustrate, "embedding" is a twoway process that involves not only the presentation of novel forms of medical knowledge and technology to ever-new publics but also an active engagement by those publics with these technologies through processes of vernacularization. At its simplest, the obvious potential of gametes and embryos to produce human life is set against their potential to produce relationships that are undefined and uncertain, as well as ones that are desired and intended, once these objects begin to circulate extracorporeally (see also Vora 2013). As is well attested, the techniques of IVF and cryopreservation linked with gamete and embryo donation create a variety of spatial and temporal dislocations, and with these come new possibilities for how human beings might be thought of as linked, not simply in biogenetic terms but also in socially, culturally, and economically imaginative ways. These interventions often go far beyond the treatment of primary infertility within conventional models of heterosexual conjugality. For example, mothers may donate eggs to their daughters, thereby creating children who are both their grandchildren and children at the

same time, as in the Melanie Boivin case.³ Or cryopreserved sperm might enable a woman to produce a man's children long after his demise, as in the Diane Blood Case.⁴ Or male couples may employ the services of surrogates and egg donors to produce offspring that are biologically, socially, and economically their own, as in the case of Tony Barlow and Barry Drewitt.⁵ The possibilities for combination proliferate with new conundrums seeming to arise at every turn. In all these examples, what appear to be threatened are established orders and systems of classification. What is desired and logical from one perspective is construed as anomalous and problematic from another. Such perturbations emerge once all these possibilities—from the seemingly radical to the avowedly conservative—are brought together within a singular framework of reproductive possibility.

To date, this framework has tended to carry with it Western models of relationality and personhood, but as the Sinhalese and Pakistani examples illustrate, there is not just one social fabric in which these technologies are becoming embedded. As IVF moves beyond its development and use in Euro-American and anglophone societies, it is becoming increasingly and inexorably incorporated into other modernities (e.g., Inhorn 2007; Inhorn and Van Balen 2002). The pace and penetration of this diffusion is evident from a growing number of accounts of how IVF operates in different settings, highlighting the capacity of IVF to alter conceptions of identity and relationality within distinctive "national" IVF cultures (e.g., Bharadwaj 2006; Birenbaum-Carmeli and Inhorn 2009; Bonaccorso 2008; Gibbon and Novas 2007). However, while these "cultures" are distinct, they are also situated within assemblages made up of global networks of infertility treatment, markets, technologies, and regulatory apparatuses (Knecht, Beck, and Klotz 2012). The ethnographic field of reproductive potential is thus one that brings together interests that are personal, medical, economic, political, and ethical and, moreover, these interests are increasingly both intranational and indigenous as well as international and exogenous.

One area of tension that arises in this diffusion is in the encounter between ethics, regulation, and governance on the one hand and local ideas of substance, exchange, and connection on the other. For those who seek to resolve their reproductive difficulties with the aid of the new technologies,

- 3. In this case a Canadian woman secured legal permission for a future donation of her eggs to her daughter, who was rendered infertile as a result of being born with Turner Syndrome (Edwards 2009; http://www.nature.com/news/2007/070702/full/news070702-5.html [accessed August 27, 2011]).
- 4. In the case of Diane Blood, sperm was extracted posthumously from her husband, and using cryopreserved sperm, she was able to produce two children over a period of years who were the biogenetic offspring of her dead husband (Simpson 2001).
- 5. In this case, two gay men have formed a family of five children using their own sperm and the services of egg donors and surrogates (http://www.guardian.co.uk/lifeandstyle/2010/jul/17/gay-fathers-drewitt -barlow [accessed August 28, 2011]; see Simpson 2004b for a novel South Asian reading of this case).

there is a moving back and forth between mundane worlds of family, home, and community and the worlds of those who are expert not only in the techniques of assisted reproduction but also in what in ethical terms they can and cannot do with them. For those shifting in and out of expert worlds, the biomedical gaze is extremely powerful, and what is apt to be lost in the fixity of its stare are the attempts at vernacularization, acts of meaning-making that find their orientation in local moral worlds (Kleinman 1992) rather than biomedical or indeed bioethical ones. As much as the specialist technicians who seek solutions to infertility work to create an untethered and fragmented materiality and ethicality of bodies, substances, and reproductive moments, there is inevitably a messy entanglement of interests, beliefs, and desires. These perpetually intrude into treatment and artifice to remind all concerned that bodies and substances are not easily prized away from persons and relations. As Lambert and McDonald (2009) assert, "Scientific practices, while they may imagine themselves shorn of the social and the personal, have an inherent sociality" (5). Where these interests settle on reproductive materials, the entanglements are particularly dense given what is at stake.

Impotentiality and frustrated reproductive desire act as powerful drivers of hope, imagination, and the considerable will that is involved with seeing through the physical and emotional rigors of IVF (Franklin 1997). Unlike potentiality, which in an Aristotelian sense carries the idea of an actuality not yet realized, impotentiality begins with a very clear idea of what is desired and wanted but that a person is powerless to achieve. In other words, impotentiality carries a strong sense of imagined future relations that a couple might be unable to realize. This wished-for potentiality is thus one not of an infinite plasticity of forms but of a more precise repertoire of narratives of being and becoming (see Gammeltoft 2013; Taussig, Hoeyer, and Helmreich 2013). This is hardly surprising given that in all societies normative models of expected reproductive potency abound, and there is often a relentless representation of children as the embodiment of an envisioned future. One can extend the net wider: without children there can be no lineals (grandparents/grandchildren) or collaterals (cousins, aunts, and uncles), and there are a host of other teknonymic frustrations, as glimpsed in the Pakistani Muslim example given above. The scale of the personal and social catastrophe that failure to extend the line can bring is all too evident from the stigma and marginalization of those who are unable to reproduce, with the burden falling particularly on women. Yet the frustration of reproductive desire as a result of social or biological inability to conceive is nothing new. The wide-ranging and long-established practices of adoption, fostering, surrogacy, sexual infidelity (sanctioned or otherwise), posthumous reproduction (as in, e.g., Nuer ghost marriage), and other novel strategies to ensure social reproduction in the face of threatened biological reproduction all signal the strength of intent to overcome frustrated reproductive desire. Crucially, they also signal the latitude that family and community are prepared to allow in realizing this desire to reproduce in ways that enlist the reproductive potential of others, specified as well as unspecified. The manipulations of gametes and embryos that ARTs make possible bring together different readings of potentiality and, furthermore, ones that are not always congruent.

In the encounter with ARTs, an intriguing vision of how ideas of reproductive potential are being shaped thus begins to emerge. The mixing of reproductive desire with powerful new medical technologies produces complex layerings of beliefs, values, and practices. For example, Sinhalese couples who wish to use new technologies do so with a very different mapping of potential connections than that of the doctor treating them. Here particularly there is a need to understand how the proliferating networks of relationship that are made possible by the use of donor gametes and embryos might be "cut" and who might do the cutting (Strathern 1996) as efforts are made to limit ambiguity and thereby stave off confused and dystopian mixtures of biogenetic and social connection. In short, creating mixed or hybrid potentialities is a delicate and conflicted business that for providers and consumers alike entails both creating and denying connection, facilitating and preventing the flow of substance and the knowledge with which it is invested (see also Svendsen and Koch 2013).

In the United Kingdom, the idiom in which transactions in gametes and embryos is typically cast is that of donation, altruism, and "the gift." For example, a slogan taken from the United Kingdom's National Gamete Donation Trust website reads, "Your donation of eggs or sperm to help a couple have a child is one of the most generous gifts anyone can give" (http://www.ngdt.co.uk/becoming-a-donor). This powerfully rhetorical trio of ideas links philosophical ideals of virtuous human conduct (altruism) with folk theories of how society should be constituted (i.e., people prepared to give freely to help others) in order to realize a certain kind of society and the relations out of which it is constituted. It is also an idiom that has traveled widely and one that features in the "ethical publicity" (Cohen 1999) of donor campaigns in many parts of the world. The fact that these materials emanate from the body gives these transactions a further symbolic load once put into circulation; these are materials with special designation that can be used to reference solidarity, trust, and social responsibility (Titmuss 1970). For example, speaking in terms that could have been taken directly from Titmuss, the journalist Max Pemberton (2011) recently wrote in defense of voluntary egg donation as follows:

I like living in a country where people are altruistic and do things for the greater good; where there are no concerns about exploitation; where there remain some sacrosanct areas of life that are free from commercial concerns or financial imperative. I don't want us to lose that. It is clear that the shortage of donors needs to be addressed. But is money and bribery the answer? Donation is a gift and should remain so.

The pronomial movement from "I" to "us" through a "country" bound together by "altruistic" acts is significant not least because it suggests an imaginary—which might be variously characterized as "public" (Carrithers 2005), "community" (Anderson 1983), or "social" (Taylor 2004)—that has to be reckoned with in deliberations over the meaning of gamete and embryo donation. In the United Kingdom and many other countries, the line that separates the commoditization of human bodily materials from constructions in which they circulate, at least in theory, as gifts freely given to strangers is one that is vigorously upheld. At its simplest, not to do so would see the Kantian predicament of human beings used as means rather than ends. However, where gametes and embryos are concerned, the "gift" as proxy for detached notions of altruism, beneficence, and liberty also brings in practical entanglements of mutuality and connection to say nothing of self-interest, obligation, and indeed "poison" (Raheja 1988). Beneath the general, the abstract, and the exhortatory use of the "gift" in gamete and embryo transactions, there are specific issues of how in local moral worlds the meaning of connection and disconnection is managed.

Reproductive Potential: The Fate of Gifts in a World of Antikinship and Antimagic

The potential I have delineated in this article is neither the potential of "life itself" (Franklin 2001; Rose 2007) nor the potential that lies at the heart of a global neoliberal turn in which gametes, embryos, stem cells, and other tissues manifest themselves as various forms of "biocapital" (Franklin and Lock 2003; Sunder-Rajan 2007). My focus has been on an aspect of potential that is closely imbricated in these forms but one that features in a rather different register. It is the potential that might be glimpsed at the point where the frustrated project of social reproduction encounters the possibility of enlisting the reproductive vitality of others. Specifically, the reach of ARTs has extended significantly and articulates readily and rhetorically with diverse narratives of reproductive desire and intent. This spread now encompasses multiple and varied traditions of how human relationality is created and given meaning. Making sense of how transactions involving the generative materials of human life might become part of these traditions is a task that anthropology is particularly suited to take further. Crucially, it involves understanding the way that people "draw on pasts and predict futures" (Edwards 2009:139), and in so doing it highlights what might be thought of as the being of becoming.

To draw on the terms used by Ernst Bloch, the being of becoming lands us in the province of the possible, the not yet, the unbecome (Bloch 1986:6). Philosophers, according to Bloch (1986), have been limited in their capacity to comprehend these states: "The world (as an entity) full of propensity towards something, tendency towards something, latency of something" (18). For Bloch this orientation has in particular impeded an understanding of the character of hope.

In his monumental three-volume work *The Principle of Hope*, Bloch (1986) sets about relocating hope as a method of engagement with the world and offers the possibility of breaking out of a philosophical heritage that predisposes us to study "a closed world that has already become" (8). This dynamic is also evident in the paradox that drives Mivazaki's thoughtful meditation on hope as method (Miyazaki 2004; cf. Malkki 2001). Drawing heavily on the work of Bloch, Miyazaki suggests parallels between an anthropological inability to grasp the importance of contemplating future states in the present and the philosophical disenchantment with a world that has already become. This is not then a study of the future in the present as one might get in a disquisition on divination or prediction (Lock 1998) but a complex existential argument about the inheritance of a sense of hope as the basis for anticipation in the present and one that inevitably resonates powerfully with ideas of reproductive potential and impotence. Along with hope, however, lingers fear of relational disruption. I would be content to register here, based on the two ethnographic illustrations given at the beginning of this article, that ARTs give new possibilities for how relational worlds might look not just in the present but when projected into the future—genealogies do not just extend into the past, they are also projected into the future.

Following a Levi-Straussian trajectory for the development of human kinship from elementary (all is prescription) to complex (in which spouses may be chosen) forms, Viveiros de Castro posits the existence of a postcomplex kinship, that is, one in which consanguinity as well as alliance has become the subject of choice (Viveiros de Castro 2009:261). One of the main ingredients that make a postcomplex kinship world possible are ARTs because of the novel combinations of social and biological connection they appear to allow. Making choices about such combinations is itself a future-oriented act: it expresses intention and hope for certain consequences and outcomes. However, choice is not infinite, or at least not when it comes to its practical implementation. On the one hand it is limited by laws and guidelines, and where biotechnologies are concerned, these are informed in part by particular modes of public reasoning. Typically, this reasoning involves efforts to draw limits around what may be done in the name of reproduction. Moreover, these are optimal limits; that is, they seek to encompass the increasing breadth of choices that people might wish to make while at the same time trying to cause least offence to the greatest number of people. On the other hand, it is limited by the desire to use ARTs to replicate a future that is deeply inscribed in the past. The work of classification and analogy reveals a process of vernacularization in which the abstract potential of gametes and embryos is incorporated into distinctive imaginings of what present and future kinship could and perhaps should look like.

The examples given above reflect on sperm donation in the context of ARTs in Sri Lanka and more generally on the take up of ARTs by Pakistani Muslims in the United Kingdom. In

the Sri Lankan example, a regulatory framework adopted from the United Kingdom's HFEA guidelines is confronted by relational potential that does not quite fit its assumptions and intentions. By contrast, the Pakistani Muslim example highlights the way that the relational potential opened up by ARTs offers hope of conception but en route brings in knowledge and practices that prove threatening and undermining of dominant ideas of relationality and connection. The Sinhalas, with their interest in siblings donating sperm, appear rather progressive when set against HFEA guidelines albeit "primitive" in terms of local kinship practices. By contrast, the Pakistani Muslims appear conservative and anxious when faced with the range of options that donor gametes and embryos could open up, although as users of ARTs, they seem progressive in terms of local norms. Although the two contexts, or more precisely the vernacular connections that are being made in each, are very different, in both instances there are anticipated concerns about inclusion and exclusion; what might be thought of as legitimate forms of kinship and connection and what might not and, crucially, what this might mean for the future: confusion of relationships, categories, public and private boundaries, inheritance, and so forth. Also, common to both is an engagement with systems and processes that have broadly similar readings of what gametes and embryos are in medical terms and how they might be put into circulation in the context of ethically sanctioned infertility treatments. In short, enlisting the reproductive vitality of others brings together different projections of what is desirable and undesirable. Managing the two in the context of a singular transaction creates some important and productive disjunctions.

In his attempt to "by-pass our all enveloping cosmology of nature and culture," Viveiros de Castro (2009:237) draws on insights from his work on Amazonian animism to put forward a scheme in which kinship, gift, and magic are but different modalities of an intersubjectivity that can connect human as well as nonhuman entities. This provocative trilogy weaves together relations, objects, and intentions in an attempt to understand the way that different forms of relationality are realized. To contemplate this trilogy lands us in the realm of inclusiveness held together by the "mysterious effectiveness" of qualities such as fellowship and mutuality (Viveiros de Castro 2009:243). Moreover, this is a realm that is set apart from a world of commodity relations in which the alienability of things and the instrumental and short-term nature of relations prevails.

Illuminating though these insights might be, they do not altogether fit with the context sketched out here. According to the dominant bioethical framing of ARTs, gametes and embryos are explicitly required to be gifted, but inverting Viveiros de Castro's logic, we might think of the effect as antikinship and antimagic (cf. Sahlins 2011). I use the term "antikinship" here to refer to the designation of some relationships as unwanted or at the very least ambivalent and the term "antimagic" to refer to the desire to deny or negate the

effects that a person might wish to generate in another person or object through the use of law, bureaucracy, official classification, or implementation of guidelines or codes of practice. For some Sinhala Buddhists, an example of these antiresponses can be seen in anxieties about incorporating reproductive material from outside the sibling group; for Pakistani Muslims, there is little concern among couples at the prospect of using their own gametes in infertility treatment, but serious anxieties surface when suggestions are made in relation to sources of material that lie beyond the marital pair. In other words, ethical transactions in gamete and embryo donation, as these are currently conceived, involve a problematic endeavor to separate kinship and magic from the gift—things that are easily transposed into one another and typically come all of a piece when thought about in the vernacular. Reproduction becomes marked by contradictory processes: a disenchantment of the vernacular and its reenchantment according to more universalist frames of meaning. This problem has been explored in interesting ways by Konrad in her work on egg donation practices in the United Kingdom (Konrad 2005). In an elegant theorization, Konrad elaborates on the apparent contradiction in the exchange logics that ova donation ushers in. These are "gifts of life" that create an anonymous sociality and "nameless relations." For ova donors and their recipients, rules about anonymity loom large in preventing the sentiment and spirit of the gift connecting them directly. Anonymity here might be said to intervene as an antikinship, antimagic practice. Konrad introduces the idea of transilience as a way of envisioning connections across this divide. The term "transilience," taken from geology, suggests an arching across from one stratum to another: donors do not know who the recipients of their "gifts" are, and recipients will not ever be in a position to pay back the debt that they have incurred. As the examples above show, however, this does not stop the work of the imagination that the debt is likely to inspire.

It is on the idea of debt that I want to conclude. Much is said of the gift and the donor. Rather less is said of the recipient and the debt. I would suggest that in the two examples given, reproductive materials are presented to potential users of ARTs as universal and anonymously donated gifts. Yet the capacity to bestow the gift of life is in itself brought into the realm of local understanding; that is, it is vernacularized. The gift of life has broad appeal as an idiom for reproductive transactions, but to receive the gift of the gift of life is not merely to risk the unpredictability of anonymous relations or allegations of adulterous behavior or categorical confusions that arise as local worlds attribute different kinds of spirit to the gift. A more overarching concern is that of being drawn into the realms of the anonymous sociality that characterize a postcomplex kinship world and in which choice transcends contexts and boundaries. In these realms, reproduction, which should betoken the fluid transformation of gift into kinship into magic and back again, is threatened with disruption and fracture. As such, engagement with ARTs simultaneously reflects aspirations of reproductive control and connects to an ever less predictable and impersonal world. The debt of the gift of the gift of life is not held with an identifiable individual in mind and for which there are routines and expectations regarding how to respond and manage the debt over time; the debt is to a particularly modern conception of society—democratic, plural, inclusive, egalitarian, and in which an individualistic bioethical reasoning features as a means of cutting and preserving networks in the face of different kinds of being and relating. For people living in postcolonial Sri Lanka or diasporic Pakistani Muslims living in the United Kingdom, however, this conception of society does not conjure up images of a stable, benevolent, or unproblematic inclusivity but rather evokes suspicion and concern. It is in this world that accepted traditions of kinship, gift, and magic must be brought into creative dialogue with the choices that ARTs open up for those prepared to become not just moral pioneers of the kind described by Rapp but also social pioneers, giving shape to reproductive and thus relational potential (Rapp 2000).

Acknowledgments

I would like to extend my gratitude to the Wenner-Gren Foundation and its staff for hosting the symposium on potentiality; to Klaus Hoever and Karen-Sue Taussig, who organized the event; and to the other participants for making the meeting so stimulating. My thanks also go to Mwenza Blell, Michael Carrithers, Kate Hampshire, Steve Lyon, Peter Phillimore, Stavroula Pipyrou, and Marilyn Strathern for their comments on earlier drafts of this paper and to attendees at the Durham University Anthropology Department senior seminar, where much valuable feedback was forthcoming. The Sri Lanka research was carried out between 2002 and 2003 with the aid of a Wellcome Trust Fellowship under the Medicine in Society Programme (Biomedical Ethics GR067110AIA). The Pakistani Muslim research was carried out with Kate Hampshire and Mwenza Blell with the aid of a grant from the United Kingdom's Economic and Social Research Council (RES-000-23-1488).

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