BLOOD, BLESSINGS AND TECHNOLOGY IN INDIA

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Introduction

I am going to speak about the reproduction of the substance of blood through a technological procedure called blood component therapy; I will then link this to some Indians' ideas about the reproduction of families and the calculability of spiritual credit.

Organisation of the giving of blood for medical purposes on a large scale by voluntary donors from many different social backgrounds in India is now a major religious and political activity which involves much more than mundane everyday hospital procedures. I undertook 15 months of fieldwork in the complex metropolitan setting of Delhi in order to gain compelling understandings of the motivations of diverse sets of blood donors, and to explore the increasingly striking religious and political character of blood donation in modern medical settings. My interaction with a wide range of blood donors in sensitive environments, which included blood banks, Hindu temples, Sikh Gurdwaras, churches and political rallies enabled me to gain intimate insights into people's lived experience of donation.

Blood component therapy is a technology designed to enhance the efficiency of distribution and accuracy of prescription of donated blood. A centrifuge machine spins whole donated blood, thereby separating it according to the relative gravity of its constituent components. These are principally red cells, platelets and plasma.

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1 This talk is an excerpt from my current in-depth work on procedures of component separation in India. The full argument is deferred to a subsequent publication - what is presented here is emphatically an argument 'under construction'. The talk also draws on my previous more general discussion of these procedures (Copeman 2005).

2 Platelets are disk-like structures which are the foundation of clots (Starr 1998: 211). Plasma is the colourless coagulable part of blood in which the fat-globules float (OED) - usually frozen after extraction and centrifuge, it becomes known as Fresh Frozen Plasma (FFP). Red cells contain haemoglobin which helps carry oxygen from the lungs to other parts of the body. Red cells also collect carbon dioxide waste, moving it to the lungs for expulsion (Ray 2003).
The divisions of blood component therapy are held by doctors and donors alike to multiply the substance because this permits the treatment of at least three people from one donated unit of blood. Component separation is held to produce both quantitative and qualitative benefits: more patients can be treated from a single donated unit; and not only that, blood division also allows patients to be treated for the specific ailment from which they are suffering - the transfusion of a whole unit of blood, now re-perceived as three components as opposed to a single unit, would not only represent the quantitative waste of two units, it would provide patients with components that are qualitatively unnecessary for their specific condition. The re-production of blood therefore introduces a new particularism into transfusion therapy. Developed in the United States in the 1950s (Copeman 2005: 471), the technology had become widespread in developed countries by the late 1960s. The technology requires a linked set of three blood bags (called triple bags) for the components to subsequently be separated into. Indian blood banks, however, only began to move beyond crude glass bottles and introduce PVC collection bags in the early 1980s. It has been estimated that 25% of donated blood in the country is now separated into components. In Delhi the percentage is much higher. Blood banks that do not possess this technology invariably plan to acquire it just as soon as sufficient funds become available to them. Blood separation technology may be said to be a ‘default descriptor’ (Corsín Jiménez 2005: 167) of modernity and sophistication in Indian blood banking circles. According to medico-marketing campaigns, those who persist in prescribing whole blood are abject and benighted. I once heard a proselytiser of ‘componentisation’ refer to a colleague who prescribes whole blood as a thief (chor in Hindi). The prescription of whole blood ‘steals’ use-value. Advertisements which inform the public that ‘One blood donation of yours can save three lives, not just one’ point to the inadequacy of the singular. Saving only one life is insufficient, derisory.

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3 Interview with Dr N.K. Bhatia, Director of Rotary Blood Bank, Delhi, 2004.
4 In my experience, government blood banks are less likely to possess the technology than private or NGO blood banks. The biggest government hospitals in Delhi do, however, practice separation techniques.
5 In a work on ‘operable persons’ in India, Cohen (2004: 170) notes that the availability of transplantation techniques advertises ‘the hypermodernity of a clinic’.
6 Compare to Scheper-Hughes’ (1996) article ‘Theft of Life’ in which theft of life derives not from irrational prescription but from illicit extraction.
In a discussion of different forms of counting and their relation to concepts of ownership, Marilyn Strathern (n.d.) writes of contrasting types of multiplicity: the ‘multiple origins’ of Euro-American commercial creations are multiple by virtue of ‘the way persons are added to one another’s enterprises’. For Melanesians, conversely, ‘multiplicity comes from the way persons divide themselves from one another’. Both of these types of multiplicity surface in the blood-banking scenario: transfusion is archetypally an aggregate term – rather than the transfer of a single unit, a transfusion should be multiply composed through addition. Donations, on the other hand, are made multiple through division – the additions of transfusion being made up of divided donations. The ‘singular’ transfusion derives from multiple origins; the ‘singular’ donation is propelled toward multiple destinations.

In this paper I explore the effects generated by the intersection of several forms of multiplication. The reproductive powers of donated blood in terms of familial ‘life-saving’ are explored in relation to the divisional reproduction of the substance itself by blood banks via the use of centrifuge technology. I take blood component therapy to be a technique that re-produces blood outside of bodies in order that it may be inserted into more than one body – and, further, these will be bodies for which it will now be qualitatively appropriate. Many Indian donors I encountered hold donated blood itself to be reproductive in a rather standard ‘kinship’ sense. The sum of these two arguments is that blood is both re-produced and reproduces; and that it is because blood is itself re-produced technologically that it can reproduce more in a familial sense. Donated blood is objectively reproductive insofar as it facilitates the familial reproduction of ‘saved’ persons. Additional interest lies in the fact that slogans of solicitation – and quite a few donors as well – seek to give donors and the blood they donate ‘credit’ for the future generativity of those that are ‘saved’. In a discussion of song transactions in Melanesia, Strathern (n.d.) explains that those who obtain a song become its source just as much as those who previously held the song (i.e. it has multiple origins). Thus, she writes, ‘other people’s generative power can be appropriated for oneself’; potency is an ‘appropriatable phenomenon’. One could similarly say that attaining ‘fruits’ or any other kind of credit for the primary recipient’s ability to produce

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7 This is important for the same reason that dividing blood is important - the single unit transfusion, like the ‘whole’ unit, is a figure of censure, an ‘irrational’ waste of precious substance. For if one can give a unit of blood with no resulting physical harm, say reformist doctors, then what possible benefit could occur from transfusion of the same quantity?
future descendants both enables and appropriates those persons’ generative power.\(^8\)

**The Multiplication of Blessings**

Indian blood bag manufacturer Terumo Penpol has produced a poster which asks, ‘How many patients can benefit? Since your blood is going to be separated into components, you can save more lives every time you donate blood’. Like an investment or share that yields great fruits through very little effort, or a supermarket which advertises its prices as enabling customers to make more of their money, the value of donation is stressed to donors as consumers of a technology that enhances not only blood banks’ but also donors’ extensional effectiveness. This ‘effectiveness’, quantifiable in terms of the number of destinations, can possess, I hope to demonstrate, a correlative spiritual feedback, quantifiable in terms of the number of obtainable blessings (ashirvad) or fruits (phal).\(^9\)

The most unambiguous promulgation of such a correspondence was provided by a donor at a Sathya Sai Baba donation camp in

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8 I define ‘primary recipients’ as those into whom donated blood is transfused. ‘Secondary recipients’ can be variously the primary recipient’s dependents and descendents.

9 In anthropological writings on Hinduism’s apparatuses of return, blessings (ashirvad), merit (punya) and fruits (phal) are related but differentiated concepts – all are ‘benefits’ that can be secured by donation (dan ka labh). Punya is ‘merit’ which results from ethically good actions. For the donors I had dealings with, blood donation, roughly speaking, may result in both punya and blessings, with the benefits of blessings likely to bear fruit in this life rather than the next. The blessings that donors can expect to receive from transfusion recipients are continually stressed by blood bank donor recruiters – ‘Give blood, get Blessings’, as one Indian Red Cross slogan puts it rather bluntly. Blessings may predominate, but punya also – which is likely to come not from recipients but from a higher authority or impersonal spiritual mechanism – is a feature of poetry of solicitation and also of donors’ own expectations. One recruitment poster, for instance, declares, ‘rakt-dan punya ka kaam’ (‘Blood donation is the work of a good deed’). In my experience, phal (fruits) can stand for both punya (merit) and ashirvad (blessings). The point I wish to emphasise is that though different words, and formally different concepts, ashirvad, phal and punya often appeared to me during fieldwork mixed together and difficult to distinguish. For example, a devotee of a guru-led devotional order called the Dera Sacha Sauda, who had recently narrowly survived a car crash when I met him, told me on one occasion that he had been saved through the punya of his guru seva (service for the guru – which can include blood donation) and on another that it was simply the guru’s blessings (ashirvad) that had saved him.
Chennai. The devotee in question had played an organisational role in the camp, and made it clear that the choice of a collaborating blood bank had been influenced by the blood bank’s use of component therapy. He painted a picture for me of blood donation as a supremely efficient means of both helping numerous others and acquiring blessings: ‘Four persons will be treated from my one unit. The name of the blood bank is Jeevan – this means life. Four persons will get life and I will get blessings from four persons’. I asked what these blessings would mean for him, and he replied: ‘maybe I will live longer, be successful, maybe my son gets a good job’. Several others I spoke with made the same connection. ‘There is no time to earn punya (spiritual merit) anymore’, said a government employee at a camp in the centre of Delhi, ‘but they bring the camp here (that is, conveniently close to his place of work), and they say the blood will be divided (taksim kara jayega) so three people will be helped (isliyetin logó ki madad karega), so the gift’s benefit is more for me also’.

The centrifuged donation is thus the efficient donation, not only for blood banks, but for donors who attain three or four blessings, fruits or merits from singular donations. Punya (merit) in India paradigmatically results from the giving of generous gifts (Laidlaw 1995: 27). The technology of component separation makes a generous gift more generous, the technological multiplication of substance viewed by some donors at least as multiplying their attainment of punya. Meritorious feedback is calculated according to the quantity of effects rather than quantity of actions. There are obvious precedents for this in India – oftentimes, the same act, performed in different spatio-temporal circumstances, produces different magnitudes of spiritually advantageous effects. At certain times or in certain spaces there occurs a special economy of worship, or as Michaels (2004: 288) puts it, ‘(i)dentifications can be dilated or compressed. Thus, in Benares there is the Pancakrosi Temple with 108 reliefs, which represent the (108) shrines of the procession (which circles the city); there, walking around Kasi – an ancient name of Benares – can be performed in one place: with a walk around the temple, which brings as much religious merit as the five-day procession (around the city)’. If there is agency evinced here by pilgrims, it is that of performing alignment – one aligns oneself with compressed identifications in order to attain a compressed set of credits. The point is that one does

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10 Chennai was formerly known as Madras. Sathya Sai Baba is a charismatic ‘godman’ based in Andhra Pradesh, south India, who possesses a large international following. See Babb’s (1986) interesting study of his Indian devotees.
not necessarily have to ‘do’ more to ‘get’ more. Hinduism’s ‘calculative repertoire’\textsuperscript{11} extends to the giving of dan (gifts, donation). A male schoolteacher told me that, ‘especially in kaliyug (the present dissolute age), dan gives great blessings (dan, maha kalyan). It says this in all the religious books. And in holy places like in mela or by the Ganga, your charity is multiplied by thousands. If you give Rs.1/, you have given Rs.1000/ . Just as prayers are multiplied by thousands if you pray between three and five (in the morning), similarly your charity is multiplied at an eclipse’. Or as one Sikh donor put it to me on the occasion of the Punjabi Lohri festival,\textsuperscript{12} on this day his ‘thoda-dan’ (that is, his ‘small’ donation of blood) becomes ‘maha-dan’ (a great or big donation). Spatio-temporal alignments can thus produce multiplications. This is not just a feature of Hinduism’s calculative repertoire. For Muslims, too, a prayer in Mecca is said to be worth 100,000 elsewhere. But the multiplication of ‘benefits’ through specific kinds of alignment is particularly pronounced in Hinduism – multiplied spiritual returns accumulate not necessarily through the giving of more but through the correct alignments of the giving practices themselves.\textsuperscript{13}

I suggest that the proliferation of advertisements for component separation in the subcontinent have the effect of priming a connection between the novel arithmetic of component separation and Hinduism’s existing calculative repertoire.\textsuperscript{14} It is not difficult to see why this might be appealing to (principally Hindu) blood donors. India is not the only country that uses component therapy as an

\textsuperscript{11} The phrase is after Zaloom’s (2003: 263) usage in the context of trading technologies and financial markets. She uses it to refer to factors influencing decision-making by Chicago traders.

\textsuperscript{12} Lohri, celebrated annually on the 13th or 14th of January, is the Punjabi version of the famous Makar Sankranti and Pongal festivals of northern and southern India respectively.

\textsuperscript{13} Cf. Ramanujan’s argument (1989) that India is a predominantly ‘context-sensitive’ society.

\textsuperscript{14} The phenomenon can be inscribed within a wider context: I make a similar argument elsewhere (Copeman n.d.), in a paper on body donation in India, concerning the division of body substance and correlative multiplication of ‘benefits’, recording the possibility that ‘the post-mortem divisibility of the body serves the bio-spiritual purpose of multiplying benefits to donors. Deh-dan (body donation) is perhaps an arena of collaboration between Hinduism’s model of karma in its most calculating aspects and medical rationality’s own concern with maximizing utility... The imaginary defeat of opportunity cost through maximally disseminated bodies perhaps represents a double victory for two optimising and mutually facilitating calculative apparatuses’.

advertisement for donation. I am certain, however, that the intensity
of the Indian focus on these techniques is unique. The examples I
have already given of donors who have made just such a connection
suggest that the subtext of such advertisements has either been
effective or will be so. A Mumbai doctor told me that his blood bank
advertises the technology precisely to prime an association between it
and correlative multiplied feedback: ‘we tell them about component
therapy because, it’s like, give a little and get a big result’ (again,
thoda-dan becomes maha-dan). The Rotary blood bank in Delhi
provides every donor with a mug adorned with a picture of four
sunflowers symbolising the four lives they claim are saved. The same
picture is reproduced on a poster with the slogan, ‘Save four lives – not
just one’.

On 1st October 2004, India’s National Voluntary Blood Donation
Day, the Delhi State AIDS Control Society placed a notice in several
newspapers which read, ‘Remember, just one unit of your donated
blood can save as many as three lives’. One Mumbai donor recruiter
delivers lectures to students in the city:

I tell them a story. I tell them your blood will be split into three
components. The red cells will go to a thalassemic child, the platelets
will go to a cancer patient and the plasma to a third person. There will
be at least three beneficiaries of your one act of lying in a bed. I
compare it to a film situation in which the hero is dangling from a
rope, battling the bad guys to save the heroine. I say, you can save
three heroines by lying flat on a bed!

I have found several examples from the United States. In one of them, the
Detroit Red Cross, publicising a forthcoming camp, reminds donors that ‘A
single blood donation can benefit as many as four different patients’
(http://www.umich.edu/~urecord/9899/Mar15_99/7.htm). The English National
Blood Service website does not ‘advertise’ component therapy as such, but in
a section called ‘All about blood’ does explain that donated blood is
centrifuged and separated by the service ‘so it can be put to its individual
uses’ (http://www.blood.co.uk/pages/e17comn.html).

And yet there is a countervailing movement by some blood banks in India to
conceal separation procedures. The reasons for this are monetary – the fear is
that if donors are cognisant of the multiplicity of their ‘one’ donated unit,
then, rather than mere spiritual ‘credits’, they will demand material or
financial ‘credits’. Concealment of separation forms part of the wider
discussion on component therapy from which this presentation is an excerpt.

I am not suggesting that the designers of the advertisements have necessarily
produced a strategy to connect the quantity of lives saved and the quantity of
rewards to donors. I suggest that the effect occurs, however, because it is
implicit in their own thinking.

Formerly known as Bombay.
Dr Kumar, from the Association of Voluntary Blood Donors, Tamil Nadu, told me how he explains the procedures to donors: ‘Rasam is a food of liquid tamarind and dal. If you keep it for some time the upper portion is liquid. And this is like plasma which is on the upper side. The down side of the rasam is thicker, like red cells. Then they understand and I tell them this: it is such an advantage – you save so many more lives now with component separation!’ The ‘advantage’ is that just as certain times and spaces produce an economy of worship, the gift of blood possesses an analogous efficiency in terms of the attainment of ‘spiritual’ remuneration or feedback. It is just such a connection, I suspect, that is primed by the proliferation of ‘component therapy’ publicity.

Existing Calculations

Monica Konrad (2005: 41) distinguishes between ‘reproductive gifts’ (e.g. ova, sperm, embryos) and other corporeal donations which do not engender new life but ‘help sustain an existing life’ (she mentions hearts, kidneys and corneas). This is, of course, a valid distinction, with donated blood seeming to fall unambiguously into the latter category of sustenance rather than reproduction. This section, however, illustrates that blood donation is held by many Indian donors not merely to sustain but to engender new life; for example, in saving the life of someone yet to produce offspring.

It should be emphasised that a concern with the quantification of effects of blood donation was well-established even before the advent of component therapy. I therefore do not claim that component therapy has resulted in a set of unprecedented multiplications. Rather, component therapy, as it were, adds a new multiplication to an already existing set of multiplications – this is pertinently illustrated by the recruitment tactics of two donor motivators from Vellore: ‘We used to say that your one donation will not only save one, but a whole family also. Now we say your donation will save not only one but three, and not only three people, but three families also’. Blood is both re-produced and reproduces – in the sense of facilitating reproduction – and, as I noted above, it is because blood is itself re-produced that it can reproduce more.

Recruiters are keen to attribute to donors an effectiveness that goes beyond helping merely the transfusion recipient – to do this, as the example of the Vellore recruiters indicated, they engage in a rhetorical projective maximisation of donation’s effects which emphasises the present and future kinship implications of donation. In so doing, they formulate new categories of primary and secondary
recipients, and construct the family as a kind of infinity of eternal reproduction that is safeguarded and maintained by donated blood.

First, there is the emotive idea of saving kinship relationships. A very prominent recruitment poster depicts a child alongside the text, ‘My mummy is back home because you donated blood’. Additionally, the idea of saving one upon whom others are dependent – and hence saving them as well – is particularly powerful, and is reflected in the common rhyming slogan, ‘ap ke rakt ka ek ansh bacha sakta hai kisi ka vansh’, that is, ‘a part (ansh) of your blood can save somebody’s generation/family line (vansh)’. ‘Give blood save vansh’ says another slogan. One’s vansh can be passed on only through the male line. If your blood saves a providing male at a certain point of time, the assumption is, his whole family will be saved, not only in the present, but generatively speaking also. According to such slogans, donated blood acts as a kind of progenitor. Far from there being merely one recipient, both dependants and descendants are factored into a substantially enlarged category of ‘recipient’. The slogan thus emphasises the familial reproductive power of blood. The familial aspect is stressed in addition by donors; for instance, in a discussion with a student donor I was told, ‘A drop from me can be a life for someone. A drop from me may be life for a full family. Who knows? The patient who survives may be the earning breadwinner of the family’. Other donors I spoke with alluded to the possibility or the hope that their gift would save a person – male or female – who was yet to produce children. Such imaginings depict donated blood as a profound force of genealogical continuity.

In saving family relationships, dependants and descendants in addition to primary recipients, donated blood is defined as a substance imbued with ‘temporal potentiality’ (Gold 1987: 48). Like the ova donated by the British donors studied by Konrad (2005: 124), which she sees circulating as ‘“other” time’, full of generational potential, donated blood is viewed as ‘reproductive’ in its capacity to produce infinitely ramifying generational effects. Examples of the focus on the gift’s magnitude abound – for instance, a slogan used by a Delhi motivator reads, ‘thoda sa rakt-dan bachata jivan mahan’, that is, ‘a little donation of blood saves many lives’. A poem read at a motivational gathering of school students by medical trainee Meera Gupta contains the lines: ‘Just sit and think for a while. / Your donated blood may save millions of smiles’. A slogan at a government 19Konrad’s phrase ‘intergenerational altruism’ (2005: 241), which she uses in reference to genetic donation as a possible ‘new form of communitarianism’, is also evocative in the present context.
blood bank in Delhi encourages fantasies of enumeration: 'ek ikai rakt-dan bacha sakta hai kitnõ ke pran' ('one unit of blood can save how many lives!?').

The kinship effects of donated blood – the saving of present relationships, of reproductive potential and of all those whose births would otherwise have been foreclosed – are potentially so great as to defy the specificity of number. One can ‘count’ them in a projective, hypothetical manner, whilst accepting that they are beyond counting – such may be their magnitude.

The enumeration of possible future effects is by definition a practice lacking specificity. Donation’s ‘uncountable’ effects share the quality of numeric abstraction with a spiritualised rhetoric of solicitation which emphasises that blessings and merit will be ‘multiplied by a thousand’. Another poem delivered in front of an audience of schoolchildren contained the lines, ‘Come sisters, come brothers, all come forward. / You will win the credit of hundreds of thousands of merits’ (‘bahanõ ao, bhayiõ ao, sab age ao / tum karoge lakhon lakh punya’). At another public presentation in front of prospective donors, one donor recruiter declared, ‘When you give blood you get the fruits (phal). I will quote from the epics to prove this to you. A devotee was sitting at the feet of God and he said “I am hungry for you Oh Lord. Give me such courage (himmat) that I can do work to benefit (bhala) others, since when I benefit others it will benefit me.” I say concentrate on God, organise a camp, give blood and earn the greatest good deed (acha karm) multiplied by a thousand (hazar guna)’.

The important point is that this propensity towards spiritual inflation and hyperbolic numbers comes to share imaginative terrain and intersect with the projective inflation of future secondary recipients (that is, dependants and descendants of primary recipients). In a debate before schoolchildren on the ‘merits’ of blood donation, one lady declared that ‘the blood you give goes to the blood bank, and when, to whom, and where (kab, kise, aur kahan) this blood goes, you never know. And how many blessings (duã) that person and his family have given you, you never know. They will come to you and give you inner strength (atma-shakti). At that time the blessings are unknown to you, you are spending your life peacefully’ (my emphasis). The reference to receiving blessings from both primary recipient and from this person’s family members (the gift’s ‘secondary recipients’) is significant, suggesting that it is certainly not far-fetched to propose a correlation or ‘secret sympathy’ between projective quantification of ‘humanitarian’ effects and the ‘quantity’ of reverberating spiritual effects.
Conclusion

It has been established that projective multiplications were already operational before the coming of the new arithmetic of component therapy. The incorporation of the technology into Hinduism's calculative repertoire, however, underlines the adaptability of Hinduism's apparatuses of return, pointing once again to the religion's faculty of "'translat(ing)" one group of basic meanings into (an)other' (Wagner 1981: 9).\(^{20}\) I have tried to show the ways in which the arithmetic of component therapy has begun to be enrolled into an already existing and polyvalent concern with quantification and 'spiritual efficiency'. More evidence has been provided that the Hindu tradition is 'not static but endlessly protean and full of creative possibilities' (Babb 1986: 1). Energetic publicisation of the gift's division draws attention to the gift's quantifiable effectiveness; an effectiveness which, I have attempted to demonstrate, is potentially convertible into increased magnitudes of spiritual return.

I do not claim that enhanced 'spiritual return' necessarily motivates a majority of donors. I do hope to have demonstrated, however, the possibility of translation between the gift's multiplicity and its reverberating 'credits'. It is of course significant that the division of blood multiplies a saleable product, three or four prices emerging from where there had been only one; but I do not think that this suggests the instrumental usage of a spiritualised rhetoric of solicitation. Publicity centring on component therapy indeed enables the blood bank to attain more divisible blood, and therefore more 'prices', but, as I explained earlier, the therapeutic benefits of the technology are understood to be as much qualitative as quantitative, so it would be overly cynical to propose naked instrumentalism as primary stimulus behind the publicity. Instead, interests are accommodated in a way which is of mutual profit: the division of the gift, for donors, makes their generosity more generous; for doctors, it makes their profits more profitable. The profane and the sacred nourish each other, demonstrating 'the power of the gift to move between the two realms of the ostensibly “sacred” and the ostensibly “secular”' (Coleman 2004: 432).

\(^{20}\) Wagner was writing here of anthropology, but the sentence aptly describes the ways in which Hinduism sees 'connections', 'equivalences', 'homologies' and 'correspondences' (Smith 1989: 218-19). See also Bayly 1989 on Hinduism's faculties of assimilation.
Acknowledgements:

I am grateful to Monica Konrad for her invitation to speak at the workshop on reproduction. My thanks also to Susan Bayly, Matthew Carey and Prasannanshu for helpful comments on the text, and to Marilyn Strathern for permission to cite from a draft paper.

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