



Thoughts on the ethics of gestational surrogacy: perspectives from religions, Western liberalism, and comparisons with adoption

Raywat Deonandan¹

Received: 30 January 2019 / Accepted: 3 December 2019 / Published online: 2 January 2020
© Springer Science+Business Media, LLC, part of Springer Nature 2020

Abstract

Background In gestational surrogacy, a woman incubates an embryo to which she is not genetically related. Genetic distance from both her and the commissioning parents is increased further when donor gametes are employed. Ethical implications vary depending on the extent to which the parents and surrogates share genetic material with the produced child.

Purpose This paper seeks to address two primary questions: What do selected ethical frameworks tell us of (1) the relationship between genetic motherhood, gestational motherhood, social motherhood, and marital fidelity? And (2) the effects of gestational surrogacy and gamete donation on our understanding of lineage and heritability?

Methods Current literature and thought on these questions were considered through the classical ethics lenses of religion, the adoption standard, and Western liberalism.

Results A genetic link between the parents and the child serves to simplify the adoption process (if one is required) and supports a family's desire to resemble as much as possible a traditional biological family, thus providing a minimum set of challenges to religious or conservative hesitations.

Conclusion Inasmuch as gestational surrogacy, with or without donor gametes, is tolerated in a variety of ethical contexts; the basis of its acceptance may be the Western liberal celebration of contractual agreement.

Keywords Surrogacy · Ethics · IVF · ART

Introduction

The act of women offering their wombs to clients for the purposes of creating babies is now a global commercial phenomenon estimated to be worth anywhere from \$US2.3 billion [1] to \$US6 billion [2] annually. Surrogates, or as many prefer “gestational carriers,” are one of a pantheon of services lumped under the broad heading of assisted reproductive technologies (ARTs), and are usually accompanied by additional services, such as in vitro fertilization (IVF), intracytoplasmic sperm injection (ICSI), and pre-implantation genetic diagnosis (PGD). While ARTs are new and technologically sophisticated, surrogacy in practice and as a concept has been with us for thousands of years. It is mentioned in the Book of Genesis

(16–18) in the story of Sarah and Abraham, in which the servant Hagar was solicited to carry the couple's baby, since Sarah could not conceive. It is claimed that as far back as the first century, Jewish philosophers considered the possibility of human insemination by artificial means [3]. The first true human artificial insemination took place in 1884 [4], while the first surrogacy legal contract was drawn up by lawyer Noel Keane in 1976, and the first compensated surrogacy agreement achieved in 1980 [5].

Up until the arrival of IVF, all surrogacy transactions involved a surrogate mother who provided both the egg and the womb in which the fertilized embryo would mature. This was accomplished using the technique of intra-uterine insemination (IUI). This is called “traditional surrogacy” or sometimes “ovum surrogacy,” since both the surrogate's womb and her ovum are used. With IVF came the ability to create an embryo in a petri dish from the egg of the commissioning woman, leading to the service we call “gestational surrogacy,” or that some call “gestational motherhood,” in which the surrogate bears no genetic relationship to the child she carries. Some theorists suggest that a gestational carrier is a “substitute

✉ Raywat Deonandan
rdeonand@uottawa.ca

¹ Interdisciplinary School of Health Sciences, University of Ottawa, 25 University Pvt, Ottawa, ON K1N 6N5, Canada

mother,” bearing a child for another woman who is subsequently seen as the “real” (social and legal) mother [6].

Today, the laws surrounding the provision of ARTs, the permissibility of surrogacy, which women are prohibited from providing or receiving the service, whether cross-border gestational services are tolerated, and indeed whether gestational carriers can be paid for their service vary globally [7].

As technologies become cheaper, more effective and efficient, legal, and ethical wrinkles are manifesting with increasing frequency. While traditional surrogacy has been part of the human story for some time, enriching to some extent our impressions of family, inheritance, and parentage, the advent of gestational surrogacy, has complicated this already tenuous understanding. Ethical issues abound, of course, and ancient modes of wisdom struggle to answer questions emerging from this new technology and mode of being. Uncertainties relevant to the gestational surrogacy phenomenon are manifold, and cover ground from whether paid surrogates is exploited [8], and whether commercial surrogacy is akin to baby selling [9], to whether ART is morally justifiable in a world with multitudes of orphans seeking parents and homes [10].

Our new era of complicated reproductive rights separates motherhood from pregnancy, sex from reproduction, and introduces third and even fourth parties into a family creation process that was mostly the domain of private couples [11]. Lineage and family identity have been mainstays throughout human history, regardless of social class, whether as practical guidelines for the cross-generational transmission of power and property or as qualitative context for developing personal identity. Parenthood has also been a fundamental aspect of the human life identity, with paeans to motherhood in particular immortalized in art, culture, and in how many people still view their roles, powers, and identities. The new reproductive technologies have complicated these identity mainstays, and ancient ways of thinking are inconstant in their capacities to navigate this new complexity. With respect to the specific scenario of gestational surrogates who, by definition, incubate embryos to whom they are not biologically related, on behalf of commissioning clients who or may not be related to those embryos, two questions have percolated to the fore: What do selected ethical frameworks tell us of (a) the relationship between genetic motherhood, gestational motherhood, social motherhood, and marital fidelity? and (b) the effects of gestational surrogacy and gamete donation on our understanding of lineage and heritability?? This paper explores the current thought on these questions, as viewed from the classical ethics lenses of religion, the adoption standard, and Western liberalism. This is done with a tacit understanding that individuals do not necessarily abide by theological dictates and directives, but are rather guided by laws, social norms, and personal drives and moralities.

Religious perspectives

ART abuts issues of life, death, identity, sex, and family: the traditional battlefields of the world’s great religions. When contemplating the ethics of ART in general, and of types of surrogacy in particular, reference to the depths of historical religious thought on the matter is obligatory. While humanity has hundreds of religions, each has a specific viewpoint contributing to our grander understanding of the ethics of ART and surrogacy within various cultural and epochal contexts; below is a presented summary of the perspectives only of six major religions. The conflicted thoughts reflected in these religions’ struggles with modern bioethics are not conclusive or indeed directive, but rather are merely indicative of the larger morass of ethical concerns affecting a universal human (and largely secular) contemplation of the issues.

Catholicism

As Pope Paul VI stated in his encyclical *Humanae Vitae*, “The transmission of life is a most serious role in which married people collaborate freely and responsibly with God the creator.” [12]. Similarly, paragraph 2376 of the Catechism of the Catholic Church states that “Techniques that entail the dissociation of husband and wife, by the intrusion of a person other than the couple (donation of sperm or ovum, surrogate uterus), are gravely immoral” [13]. Given this demand for the preservation and “transmission” of human life, especially within the confines of a marriage, it is arguable that the Catholic tradition would err on the side of the promotion of any practice that creates and preserves such life, up to and including the commission of gestational surrogacy. On its face, gestational surrogacy could be seen as yet one more vehicle for the creation of human life; and in most cases, it is done to help the expansion of family of married couples. But the Church does not see it that way.

Indeed, the Church’s 1987 document *Donum Vitae* concerned itself with the morality of modern fertility procedures. It expresses that some approaches are moral, while others are not, mostly because they “do harm” to the dignity of the person and to the institution of marriage [14]. In vitro fertilization, which is a necessary component of gestational surrogacy, was deemed in the document to be immoral, in large part because the technology obviates the necessity for the sexual act, which is seen as a sacred aspect of the marital bond [14].

In vitro fertilization combined with surrogacy can produce children that are or are not genetically related to the commissioning parents, depending on the choice of gametes. Leaving aside the Church’s perceptions of the morality of IVF, once a child is thus produced, its disposition must be considered within a larger ethical framework. Certainly, the Catholic tradition has historically shown no objection to the adoption of unrelated children. After all, Catholic institutions have long

been involved in the rescue and placement of foundlings, orphans, and relinquished children [15]. Thus, advocating for the placement of existing embryos, which the Vatican has stated that must be treated as human beings, is consistent with traditional Catholic teaching. Indeed, Dr. Janet Smith argued that gestational surrogacy can be seen as virtuous in the Catholic tradition, depending on the situation. She offered the example of a woman gestating the embryo of her sister who is being treated for cancer, and who therefore cannot carry the embryo herself without exposing it to harmful radiation [16]. It should be clear, though, that Dr. Smith is referring specifically to embryo adoption, “outside of [the context of] the in vitro situation,” i.e., resulting from natural conception, which is not possible in most cancer treatment situations.

The disposition of embryos is another matter, however, with much having been written on the ethics of embryo adoption in the Catholic tradition. In the USA alone, there are likely half a million frozen embryos, with about 90% of them in use by the couples who commissioned their creation [17]. While the *Donum Vitae* states that an embryo must be treated as a person [18], the follow-up *Dignitas Personae* [19], which sought to offer more direction on ART matters, called embryo adoption “a situation of injustice which in fact cannot be resolved.” In support of this more conservative Papal view was given by Rev. Tadeusz Pacholczyk, who saw surrogacy as a challenge to spousal rights. If another man’s sperm has impregnated a woman who is not his wife, then that woman (the surrogate) and her husband have had their spousal rights of biological intimacy violated [14]. In other words, the gestational surrogacy process itself, by virtue both of the embryo having been created by at least one gamete external to the surrogate’s marriage, violates the integrity of that marriage in the eyes of the Church. And, in one author’s opinion, “the Roman Catholic Church regards the indissoluble unity of marriage as the only setting worthy of truly responsible procreation” [20].

Flowing from the Catholic veneration of marriage-centered family, “fidelity involves acknowledgement by spouses that they become parents only through one another” [20]. While such a view of fidelity is flexible in regards to adoption, where a child is seen to be rescued from abandonment, it seems circumspect with respect to gestational surrogacy, where a third party intervenes in the sanctity of marital procreation. Conservative Catholic thought, then, would largely disapprove of gestational surrogacy as an intrusion into the sanctity of marriage. But when such a child is produced, its adoption by the commissioning couple would then likely be seen as moral act, so long as the surrogate is perceived to have “abandoned” the baby and thus her maternal responsibilities. Whether or not the parents or the surrogate are genetically related to that child is irrelevant in cases of abandonment.

The Church’s strong opposition to IVF and surrogacy, it seems, is at least partially grounded in its view of motherhood

as sacrosanct. The desire to avoid conflicted views of maternal identity flows from a general disapproval of any third party involvement or interference in the sanctity of the marital sexual and reproductive relationship. Matters of lineage do not arise in a strictly Catholic analysis.

Other Christian denominations

While IVF is not accepted by the Vatican, it may be practiced by Protestant, Anglican, and other denominations of Christianity [20]. Flowing from the Reformation of 1517, Protestantism and its heirs, including fundamentalist Evangelicals, differ from their Catholic roots in ways relevant to the present thesis, with respect to the absolutism of the Bible and provision of the central moral authority of the Papacy. According to some Christian theorists, “ownership of a child is contrary to the child’s dignity and nature. For this reason, the child has the right... to be the fruit of the specific act of conjugal love between his/her parents” [20]. Lacking the central Papal authority of Catholicism, other Christian denominations express a wider diversity of viewpoints. Some encourage surrogacy, arguing that fertility “is a blessing to be shared” [21]. Others point to Psalm 127:3 (“Behold, children are a heritage from the Lord, the fruit of the womb a reward”), which they interpret as the Bible dictating that children are a gift, not a right.

One Christian ethicist offers “Surrogacy risks blurring the child’s identity, disrupts the natural links between marriage, conception, gestation, birth and the rearing of the child” [22]. This is a disapproving view of the practice, regardless of whether the commissioning parent is genetically related to the produced offspring. The “blurring of identity” is suggestive of a weakening of lineage, though this is not an overtly stated criticism.

As with all of the faiths and philosophies explored in this treatment, with Christianity, there is a diversity of perspectives with respect to ART and surrogacy. No set of beliefs should ultimately be seen as intellectually homogenous or monolithic.

Islam

The heart of Islamic religious concern is its law (*sharia*), which “defines the pathway in which God wishes men to walk” [23]. Aspects of lineage and inheritance are prominent in its precepts. The definition of a firstborn son is particularly important, as he will carry the family name and its honor into the future. With ARTs involving IVF and the transplantation of embryos come uncertainty with respect to the age of the offspring: does its legal and spiritual viability commence at the moment of conception, implantation, or birth [23]? An embryo can be created years in advance of a younger sibling who is conceived and born

naturally, but that embryo, if stored and implanted later, is born after that sibling. Who is the true firstborn?

“The family is the basic unit in Islam. Safe motherhood, family planning, and quality reproductive and sexual health information and services and assisted reproductive technology are all encouraged within the frame of marriage” [24]. The disposition of gestational surrogacy within Islamic religious law is a hotly debated topic, with implications for the divisions between and within various sects. The Shiaa sect permits egg donation and surrogacy [24]. But the Sunni sect forbids any third party contribution to reproduction, thus excluding all surrogacy and gamete donation [25]. Those opposed to the practice of surrogacy say that surrogate motherhood “is not allowed because it is akin to *zina* (adultery), since the surrogate is carrying the fertilized egg of someone who is not her legal husband. The child produced therefore has no lineage through legal marriage and will have to be considered as illegitimate” [26]. Both the product (the child) and the process (the surrogacy) are therefore *haram*, or forbidden by Islamic law.

But another position argues that “Islamic law recognizes the preservation of the human species as one of its primary objectives (*maqasid*). It follows that allowing married couples to pursue conceiving children is also part of this primary objective” [26]. A surrogate can then be seen as a service provider and not an intruder into the marriage. Moreover, given Islamic law’s heavy weighting of the importance of lineage and inheritance, gestational surrogacy would be, according to this school of thought, preferable to traditional surrogacy, since the former is definitive and transparent about the genetic lineage of the offspring. Embryos formed from donor gametes would not be easily accepted, according to this school of thought, as it is unclear how they fit into the line of inheritance.

Judaism

The Jewish attitude towards procreation is derived from the first commandment of God to Adam to “Be fruitful and multiply” [27]. Tradition dictates that this is first of the 613 commandments of the Torah [28]. There is “near unanimity of opinion” that artificial insemination of a wife using the husband’s sperm is permissible under Talmudic law [18]. The use of donor sperm is more controversial, given the possibility that the arrival of another man’s sperm into a woman’s body might constitute adultery, which is strictly forbidden by the Torah [20]. This is further complicated by some rabbis’ insistence that donor sperm is allowed if the donor is not Jewish, as this would negate any heritability issues under religious tradition [20]. Legitimacy is still in question when a sperm donor is used.

According to Jewish law, maternity, like paternity, is irrevocably established as belonging to the “natural parent” [29]. It

should be noted that the term “natural” here can be divisive, and it is used in the cited context to mostly mean “biological” [30], to distinguish between biological and adoptive mothers; the definition of “natural” in the context of a gestational carrier is a key issue to be resolved in Jewish thought. The irrevocability of “natural” parentage mirrors Jewish takes on the heritable aspects of adoption, that while adoption is applauded in Jewish law, it does gain the legal power to replace the child’s natural parentage [31] in many scenarios, such as child abandonment.

And while the creation of an embryo outside the mother’s body is permissible, since the gametes are genetic products of the parents, some rabbis claim that “legal and biological ties are severed with the removal of the egg” from the woman’s body [20]. Where it comes to the inclusion of eggs or embryos unrelated to the woman who will birth the child, the main issue is which woman is truly the mother: the oocyte donor or she who incubates the embryo [32]? At the very least, since Judaism dictates that a child’s religious identity derives from its mother, a surrogate mother of Jewish offspring should also be Jewish.

Per Rabbi Goren, Chief Rabbi of Israel, the donor of the oocyte should be considered the mother [33]. Thus, in cases where a non-Jewish woman donates an oocyte to a Jewish woman, the child must officially convert to Judaism [23]. This has, of course, created some consternation among Jewish women using donor oocytes from non-Jewish donors. In the words of one such woman, “we do not need rabbis or halakhic (Jewish law) scholars to tell us if our baby is Jewish. Our children will tell us themselves that they are Jewish. They have known all along” [34].

Rabbi Jacovitz argued in 1975 that “to use another person as an incubator ...for a fee... [and then take from her the child that she carried and delivered is a] revolting degradation of maternity and an affront to human dignity” [35]. Similarly, Rabbi Moshe Tendler added that surrogacy is not a “curative modality,” but rather substitutes pathology involving many for the pathology of one woman [36].

After considering several case studies on the matter, scholar of Jewish law Michael Broyde offered the following three rules to consider when deciding motherhood in Jewish surrogate cases: (a) If conception occurs in a woman’s body, removal of the fetus after does not change the identity of the mother, according to Jewish law. The mother would be fixed at the time of removal from the womb and would be the woman in whom conception occurred; (b) Children conceived in a test tube and implanted in a host carrier are the legal children of the woman who gave birth to them since parturition and birth occurred in that woman, and conception is not legally significant since it occurred in no woman’s body; and (c) Children conceived in a woman who had an ovarian transplant are the legal children of the woman who bore them [29].

While there is no consensus among experts in Jewish religious ethics concerning the disposition of a genetically

unrelated child born to a surrogate mother, opinion seems to skew towards the belief that motherhood is conferred upon she who delivers the child. At the least, a forgiving Talmudic interpretation is that a child produced in the manner would have two mothers: the ovum donor and the surrogate [37]. The commissioning parents are, by this thinking, excluded from recognized parentage if they have no genetic connection and no physical role in the emergence of the child into the world.

Hinduism

About 94% of the world's one billion Hindus live in India, a country whose population is over 80% Hindu [38]. It is rarely defensible to casually conflate national with religious identities. But the fibers of Hinduism are still tightly woven into the fabric of Indian life, almost uniquely so, making it difficult to discuss the religion without also drawing largely upon the experiences of this particular nation.

Up until very recently [39], India was home to a thriving reproductive tourism industry which was known particularly for its provision of Indian surrogate mothers [40], many of whom are Hindu. The extent to which recent governmental restricting the legality and accessibility of surrogacy services is reflective of national values, and sentiments are still uncertain. But some authors claim that there is no conflict between the tenets of Hinduism and any aspect of ART [41]. Indeed, top Indian celebrities have been open about their use of gestational carriers to create their families [42]. The use of gamete donation is also accepted, though through somewhat of a patriarchal lens; while oocyte donation is accepted without restriction, sperm donation is preferably from a close relative of the male partner within the commissioning couple [43], suggesting that paternal lineage is the most important consideration.

Hinduism's ready acceptance of ART and surrogacy may stem from its conceptualization of infertility as a curse, and that the alleviation of that curse through whatever means available is, in fact, a godly endeavor. The foundational story of Hinduism, *The Mahabharata*, can be seen to advise on the acceptance and universality of all efforts to increase fertility, including extraordinary enterprises, like surrogacy, gamete donation, and other ARTs [44]. Some authors see elements of IVF, gamete manipulation, parthenogenesis, and ovulation induction, as well as other modern interventions, within the tales of *The Mahabharata* [44], whose core narrative is one of reproduction, dynasty creation, and the importance of lineage, however questionably achieved.

It is impossible to disentangle deep-seated religious ideals from non-religious cultural biases in any society, and India is no exception. While it has been argued that India's majority Hindu belief, so forgiving of extraordinary means for reproduction, drives the nation's overall attitude toward ART, it should be noted that the specifics of its practice are

nevertheless colored by its society's inner struggles and power dynamics. For example, while the race and skin color of a gestational carrier have no biological bearing on the health, appearance, or care of the biologically unrelated child she carries, in India, fair-skinned and high-caste surrogates are in greater demand and are paid more than their darker-skinned and lower caste compatriots [45].

Buddhism

Much like other great religions, there are multiple schools and styles of Buddhism, from Zen and Theravāda to Pure Land and Mahāyāna. The variety of schools, coupled with their development in so many different socio-cultural settings, make it difficult to speak about a singular Buddhist perspective on bioethics in general, and on reproductive ethics in particular [46]. But, widely speaking, Buddhist ethics follows one of two strands: monastic and householder [47]. The monastic strand holds celibacy (and hence no reproduction) as a high value, whereas householder ethics holds marriage and family life as high values.

Much like in Hinduism, there is not much Buddhist theory written about the ethics of ART or the disposition of the children of traditional or gestational surrogacy. In practice, Buddhist societies seem quite liberal with respect to all ARTs. The *Sigālovāda Sutta* might be the most relevant doctrinal text for application to ART [46], as it is the "key text for lay Buddhist ethics, including sexual ethics" [47]. Shoyo Taniguchi suggests that "as long as technology brings benefits to the couple who wishes to have a child, and as long as it does not bring pain or suffering to any parties involved, Buddhism would find no conflict in applying and using modern technology" [48].

Buddhism allows the use of IVF, for example, without restricting its access solely to married couples [43]. It also stipulates that a child produced from donated genetic material has a right to know its biological progenitors [49]. With this requirement, there is a passive acceptance that such a child is the moral and legal offspring of the parents who commissioned it, and not of the surrogates or donors who contributed to its creation. Though this allowance is not absolute, as the provision for the child's rights of "knowing" its biological progenitors suggests a strong ethical consideration for this new multifaceted version of parentage that includes some small role of the surrogate and/or gamete donors.

Dissenters would criticize ART for perpetuating "the disillusioned attachment to this life which sometimes motivates human beings' reproductive desires" [46]. The emotional desire for a child, this argument goes, can be as problematic as the bodily desire for sex, that ART actually obviates [46]. The *Vinaya Ptaka*, a monastic text, draws an equivalency between the desire for a child with the desire for wealth: predilections that distract from the path to Enlightenment [47]. Additionally, Damien Keown

points out that the creation of spare embryos through drug-induced superovulation would be frowned upon in Buddhism, in that life is created with the expectation that it will be discarded or experimented upon. This violates the First Precept of Buddhism, which is against the taking of (human) life [50].

Additionally, some critics will point to Buddhism's Third Precept, which forbids sexual misconduct or sex outside of marriage. Some might see a surrogacy arrangement as contrary to the Third Precept in instances both of traditional and gestational surrogacy, since reproductive tissue originating from the commissioning male has entered the womb of a gestational carrier who is not his wife. On the other hand, a surrogate shows loving kindness to an infertile couple, and is thus an agent and promoter of merit, an admirable role in Buddhist thought. Shoji Mori added that in Buddhist belief, "people are born of their own free will" and that the birth of a child "must focus on that child's self-determination and not the self-determination of the parents" [51], which can be interpreted both to oppose gestational surrogacy (since the practice is driven by the commissioning parents' desires) and to paradoxically support it (since the path of gestational surrogacy is the only option for the embryo to express its self-determination in the physical world) [52].

Buddhist ethics emphasize harm as "the yardstick against which an action's morality is measured" [46]. The very desire to "have" a child to satisfy the physical desire for procreation might, in and of itself, be sufficient "harm" to warrant disapproval of surrogacy. And yet the householder ethics strain of Buddhist bioethics might support surrogacy as a means to achieve harmonious family and marital life. Therefore, Buddhism mostly sees gestational surrogacy as neither good nor evil, and therefore offers little guidance or judgment on

matters of lineage or maternal identity/role. However, Buddhism may encourage exploring the factors that compel individuals to seek ART, and the likely consequences of those motivational factors on society as a whole [46].

Summary of religious perspectives

While there is no monolithic agreement on reproductive issues within the philosophies of any faith, Table 1 below summarizes the general trends of thought within each belief system, with respect to ART and surrogacy, to the extent that they have been explored above.

The adoption standard

When adoption and surrogacy are both mentioned in the same conversation, usually it is because the two options are pitted against one another. This dichotomy is contentious, as any kind of ART is sometimes seen as a selfish competitor to the more noble act of adoption [53]. Those who see the pursuit of ART as narcissistic would argue that the adoption procedure should be made simpler and easier, while commercial surrogacy should not be promoted [54]. Despite this seeming conflict, the commercial surrogacy process is itself often legally contextualized through adoption, which has a longer and deeper legal history. If a gestational carrier is engaged to incubate an embryo to which she is not genetically related, in some jurisdictions, legal lineage is often secured through formal adoption of the resulting child by the commissioning parent(s), regardless of whether or not they are genetically related to the child [55]. For a woman to genetically create a child

Table 1 Summary of religions' attitudes toward ART and surrogacy

Religious philosophical paradigm	Attitudes toward ART	Attitudes toward surrogacy	Defining principal or concern
Catholicism	Opposed	Opposed	The sacrosanct nature of motherhood; and the sanctity of the marital sexual relationship, such that surrogacy resembles infidelity.
Other Christian denominations	Generally accepted	Generally opposed	Surrogacy risks blurring child's identity through weakening of the ability to trace lineage; also, sense that a child is a gift and not a right.
Islam	Generally accepted	Generally opposed	ART affects primacy of inheritance, while surrogacy is akin to adultery.
Judaism	Accepted	Accepted, but with caveat	Maternity granted to the woman in whose womb the fetus gestates.
Hinduism	Accepted	Accepted	Infertility is a curse to be alleviated by whatever means necessary; supported by reproductive scenarios from foundational myths.
Buddhism	Conflicted	Conflicted	So long as pain and harm are avoided, all practices are acceptable. However, the very desire for a child through extraordinary means can also be seen as an unhealthy material attachment.

external to her own body via surrogacy, then to seek legal parentage of that child, is arguably a type of adoption, despite demonstrable biological lineage. However, some jurisdictions that permit surrogacy sometimes offer a way, for example, via court-ordered pre-birth parentage orders, for the commissioning mother to be recognized as the legal mother without going through the process of abandonment and adoption [56].

As argued by Atwell [57], “surrogate parenting is an attempt to create a new form of independent adoption.” She further argued, though, that in many jurisdictions, surrogate parentage is inconsistent with adoption laws and morals because of issues of (a) consent (specifically that surrogates might not be fully appraised of the physical, social, and emotional risks), (b) allusions to baby selling (since a child is produced as a result of a commercial exchange), and (c) the absence of the state in investigating the parental qualities of the adoptive parents [57]. In contrast, some courts, such as the United Kingdom High Court [58] have concluded that even though it is prohibited to exchange money in consideration of adoption, a payment to a surrogate is not technically in contemplation of adoption, but rather is compensation for gestational services and the for the recoupment of pregnancy-related expenses. This may seem like a technicality, but there is a subtle philosophical distinction at play: a surrogate is a service provider, much like a wet nurse; the creation of a child is incidental to this service, though it is the engagement’s true sole purpose. To be clear, in some countries, such as Canada and the UK, payment to a woman to explicitly serve as a gestational carrier is prohibited, though the recouping of reasonable expenses is permitted [59, 60].

When looking at the adoption standard as a guide for understanding the ethical role of gestational surrogacy in our society, it is important to keep in mind the prime motivation for the state’s involvement in adoption: to ensure the best parental match for the child in question [61]. The state bears a heavy responsibility in the brokerage of adoption, instigating a legal process aimed at “irrevocably terminating family life” between a child and its birth mother, and allowing said child to be “reborn” into a new adoptive family [62]. For this reason, the state reserves the right to investigate the finances, relationships, living conditions, and even the moral stature of individuals seeking to adopt a child. The ethical argument that justifies this right is that if the putative parent could not have a child without the active participation of the third party (i.e., the state or adoption agency), then it is the ethical responsibility of that third party to ensure the proper disposition of that child. One is, after all, ethically responsible for the foreseeable consequences of one’s non-compelled actions.

The state’s ethical responsibility with respect to adoption underlines the first of two important ways in which adoption differs from surrogacy. To reiterate, in surrogacy arrangements, the interests and well-being of the children are assumed to be assured by the commissioning parents [63], and not

necessarily by the state. Whereas adoption places an ethical burden on a third party (the state and its proxies, such as adoption agencies) to ensure the proper disposition of children; no such third party is identified in instances of surrogacy. Although, an argument could be made that the ART clinic that allowed for the surrogacy event to take place is in fact that responsible third party, and as such is ethically responsible for ensuring (a) the safety and rights of the child, and (b) that the commissioning parents are in fact responsible individuals who will provide a safe and healthy home for the child. Such an argument evolves in parallel to the above description of the state’s responsibility vis à vis adoption: the putative parent could not achieve parenthood without the active participation of the clinicians who prepared the embryo, thus ensouling those clinicians with the ethical responsibility to ensure the resulting child’s healthy disposition in society. While such an invasive role of the clinician might be seen as overly intrusive, such involvement would be morally justified, according to this analysis and extrapolation of adoption ethics.

The second important difference is the focus on the interests of the child. In the USA, for example, the legal focus is explicitly stated to be on “the interests of the child, rather than the interests of the birth parents, the adoptive parents, or anyone else” [64]. All ART, while ostensibly child-focused, is not necessarily built upon the best interests of the child. Rather, as noted in several examples above, including the monastic Buddhist view [46], many see ART as an expression of the selfishness of the parents [53]. In this sense, then, the ethics of adoption offer little useful guidance to understanding the ethics of gestational surrogacy.

However, to the question of lineage, society’s rich history with adoption has shown a variety of approaches to rationalizing the transmission of power and property in the absence of genetically related progeny. For example, James Watson described the practice of powerful Chinese families lacking genetic male heirs to seek to adopt an unrelated son rather than to allow a related agnate to inherit [65]. This suggests that in many communities, vertical familial lineage is more important than genetic relationship. As adoption has always taught us, for many people, parenthood can be more socially than biologically defined. The applicability of this lesson for gestational surrogacy is that a commissioning mother, being both genetically related to the offspring and the functional social mother, should have a strong and unchallenged maternal identity, just as the produced child should have a strong and unchallenged claim to familial lineage.

The western liberal framework

While traditional surrogacy transcends cultures and epochs, and while modern technological gestational surrogacy has found firm purchase in non-Western countries, the firmament

of its legality and ethical defenses rests comfortably in the Western liberal tradition [66]. This is partly to do with the commercial nature of medical tourism in general, which is a triumph of individualistic capitalism, and partly to do with the history of modern medical ethics having emerged from a Western liberal framework [67]. This, of course, is not without some controversy, as the dictates of health care might not be fully compatible with an ethic that sees profit as its primary virtue. In the words of Fronek, “business models conflict with the well-being of women and children” [63].

Western liberalism as an ethical framework or moral philosophy is characterized by its focus on individual liberties and equal rights. Locke first wrote of liberalism in the 17th century, declaring that all people being “equal and independent” should avoid harming or restricting others in terms of “life, health, liberty, or possessions” [68]. In the past two centuries, liberalism has become the dominant political and economic ethic of the Western world, with a strong reliance on the free market to assign value to products, services, and ideas [69].

The adoption standard itself can be described as being a liberal ethical model, as well, since privacy, autonomy, and self-sufficiency of the new adoptive family are emphasized [62], and since autonomy and the rights of the individual are hallmarks of liberalism. Involved in this liberal process is a focus on the consent of the birth mother and father. In all US states, for example, “adoption proceedings require the biological parents to voluntarily and knowingly consent to the adoption, except where this consent requirement is waived or forfeited” [64]. Gestational surrogacy involving an embryo made from the genetic materials of the commissioning parents renders moot the consent of the progenitors, since they and the adopters are one and the same. It does, however, necessitate the profound and thorough consent of the surrogate, who is the gestational mother who must accede to the abandonment of the child that issues forth from her body.

With liberalism’s focus on privacy and autonomy, then, the disposition of a child produced through gestational surrogacy is clearly determined by the private contracted agreement between the surrogate and the commissioning parent. Concerns about heritability, lineage, and marital fidelity are rendered moot by virtue of a fairly negotiated surrogate contract that was signed by all parties in good faith. For example, California family law (section 7962) states “the surrogate, her spouse, or partner is not a parent of, and has no parental rights or duties with respect to, the child or children” [70]. Some see the contractual relationship between surrogate and clients as a moral relationship, since each party has made a “moral commitment” to the other [71], one to provide the gift of a family, and the other to provide the means for social and economic advancement. The legal contract then, fairly and transparently negotiated, is the hallmark of both a capitalist transaction—the heart of liberalism—and of an ethical surrogate arrangement, if viewed through a classical Western liberal lens.

Another layer of complexity is added when the embryo was made from one or more donated gametes, and not from the bodies of the commissioning parents. The progenitor, then, is not the adopter, but a fourth party who has, it can be argued, a voice which is the disposition of the resulting child. The strength of that voice, according to liberalism, will depend again on the contractual nature of the gamete donation arrangement. An ethical liberal society seeks to uphold the virtues of a fair contract [72]. The sanctity of a contract is in its enshrinement of a moral obligation to keep one’s promises [73], which is a classical liberal reliance on the supremacy of individual autonomy and honor. But the irrevocability of such contracts has been questioned on moral grounds [74], as in Rawls’s call for moral justice to be a higher social value, such that the liberty of one individual should not infringe upon the liberties of others [75]. We must therefore question the following: is it moral for a contract to deny the arguable rights of a gamete donor to some kind of parental relationship with the child resulting from the embryo that he or she helped to produce? Similarly, is it moral for the resulting child to be denied knowledge of, and a relationship with, its genetic progenitors, even if they were gamete donors with assumed anonymity? It should be noted that in most jurisdictions, when gametes are offered through a donation program, the donors typically relinquish their parental rights and responsibilities.

These are obviously not easily answered questions. A simplistic default to the foundational tenets of Western liberalism would hold the promises enshrined in contracts as sacrosanct. But emerging modifications to liberalism, including those introduced by feminism [76], offer that the rigidity of such written agreements are immoral inasmuch as they sustain the oppression of the dispossessed and powerless, from whose ranks surrogates and gamete donors often arise. According to this view, “the very notions of the liberal individual, of self-ownership, of contract, and of social relations that depend on or even include contract depend on the prior subjugation of women” and of other intractable social power imbalances “are rendered incoherent” by the serious inclusion of the rights, needs, and perspectives traditionally disempowered individuals [77]. What evidence is available, though, suggests that most existing surrogacy contracts are satisfactory to all participants, with many lifelong positive relationships being forged between surrogate, clients, and progeny [78].

Table 2 below presents a summary of the attitudes broadly explored above, with respect to both liberalism and adoption ethics.

Final thoughts

The relationships between genetic motherhood, gestational motherhood, social motherhood, and marital fidelity are clearly complex, depending upon the moral frameworks used to

Table 2 Summary of attitudes toward ART and surrogacy as expressed by selected ethical paradigms

Philosophical paradigm	Attitudes toward ART	Attitudes toward surrogacy	Defining principal or concern
Adoption standard	Neutral	Generally opposed	Interests of the child are paramount. Surrogacy seen by some as “baby selling.”
Liberalism	Accepted	Generally accepted	Sovereignty and freedom of individual choice, as expressed through binding contracts, is paramount.

assess such things. They are further entangled by social and economic concerns, including property heritability, faith, and community membership. While discussions of lineage in a surrogacy context are often framed within a religious or ethical milieu, lineage can also be seen as a largely economic concern; according to Bell [79], the consequence of child illegitimacy “must always” be the loss of access to economic resources. Marital fidelity and monogamy, as well, are historically valuable in establishing legitimacy. In the words of Fellows [80], “female monogamy... is the only means by which a man can assure himself that his wealth will be inherited by his offspring.” It is therefore not surprising that ART arguments arising from religion and other moral traditions tinged with patriarchy focus on the technologies’ impacts on fidelity and lineage. Among ARTs, gestational surrogacy poses a particularly tortuous challenge to both heritability and to expansive definitions of monogamy and fidelity.

Per Goswami, “the cocoon of legitimacy protects marriage but the child born outside valid marriage is recognised as ‘illegitimate’” [81]. This is an attitude that deeply concerns conservative ethicists, particularly those arising from Judeo-Christian religious traditions. As has been well discussed, gestational surrogacy offers fewer challenges to family, lineage, heritability, and marriage fidelity than does traditional surrogacy. If the embryo is the genetic product of the commissioning couple, then the overall process can be seen as a variant episode of normal biological reproduction, only with the participation of a third party: the surrogate who did the incubating. But if the embryo was made from donated gametes, and thus is not biologically related to either the surrogate or the commissioning couple, then in some ways, the situation can resemble a complicated adoption.

Jurisdictions with thriving reproductive tourism industries, such as India, show an extreme prejudice against traditional surrogacy and a strong legal and practicable preference for gestational surrogacy. The reason for this is cynically clear: the lack of a genetic tie between surrogate and child introduces fewer challenges to lineage, citizenship, motherhood and marital fidelity, and therefore fewer challenges to the health and growth of the industry itself. From a more positivist perspective, a demonstrable genetic link between the client(s) and the child serves to simplify the adoption process (if one is required) and supports a family’s desire to resemble as much

as possible a traditional fidelitous biological family, thus providing a minimum set of challenges to religious or conservative dogma.

Inasmuch as gestational surrogacy, with or without donor gametes, is tolerated in a variety of ethical contexts; the basis of its acceptance is the Western liberal celebration of contractual agreement. With emerging work on the limits of contractual inviolability in the face of natural parental rights, various social power imbalances, and moral justice, the disposition of gestational surrogacy within the milieu of liberalism may need to be reconsidered. While ultimately tangential to the thrust of the present paper, further contemplation of the ethics of gestational vs traditional surrogacy would do well to include the roles of regulatory frameworks, in particular contract law and its centrality to liberalism.

Compliance with ethical standards

Conflicts of interest The author declares that he has no conflicts of interest.

References

1. Cottingham J. Babies, Borders and big business. *Reproduct Health Matters*. 2017;25(49):17–20.
2. Smerdon UR. Crossing bodies, crossing borders: international surrogacy between the United States and India. *Cumberland Law Rev*. 2008;39(1):15–85.
3. PBS, Bloodlines. Last accessed Oct 22, 2018. https://www.pbs.org/bloodlines/timeline/text_timeline.html
4. Parker Herring Law Group, The history of surrogacy: 4 important eras to know. Last accessed Oct 22, 2018. <https://parkerherringlawgroup.com/surrogacy-lawyer-attorney-raleigh-nc/surrogacy-information/history-of-surrogacy/>
5. *Surrogacy.com*, About surrogacy. From the Bible to today: the history of surrogacy. Last accessed Oct 22, 2018. <https://surrogate.com/about-surrogacy/surrogacy-101/history-of-surrogacy/>
6. Chang CL. Surrogate motherhood. *Taiwan Yi Xue Ren Wen Xue Kan*. 2004;5(12):48–62.
7. Deonandan R, Bente A. Assisted reproduction and cross-border maternal surrogacy regulations in selected nations. *Br J Med Med Res*. 2012;4(1):1–10.
8. Wilkinson S. The exploitation argument against commercial surrogacy. *Bioethics*. 2003;17(2):169–87.
9. Kornegay RJ. Is Commercial surrogacy baby-selling? *J Appl Philos*. 1990;7(1):45–50.

10. Parks JA, Murphy TF. So not mothers: responsibility for surrogate orphans. *J Med Ethics*. 2018;44(8):551–4.
11. Goswami GK. The genetic truth of surrogate parentage. *Med Leg J*. 2015;83(4):188–93.
12. Vatican Archive. *Humanae vitae*. 1968. Last accessed Oct 22, 2018. https://w2.vatican.va/content/paul-vi/en/encyclicals/documents/hf_p-vi_enc_25071968_humanae-vitae.html
13. Vatican Archive. Catechism of the Catholic Church. 1992. Last accessed Oct 22, 2018. http://www.vatican.va/archive/ccc_css/archive/catechism/p3s2c2a6.htm
14. Haas JM. Begotten not made: a Catholic view of reproductive technology. United States Conference of Catholic Bishops. 1998. Last accessed Jan 20, 2019. <http://www.usccb.org/issues-and-action/human-life-and-dignity/reproductive-technology/begotten-not-made-a-catholic-view-of-reproductive-technology.cfm>
15. Berkman J. Ethical and religious directives for a Catholic embryo adoption agency: a thought experiment. From *The Ethics of Embryo Adoption and the Catholic Tradition: Moral Arguments, Economic Reality and Social Analysis*, edited by Brakman, S-V, and Weaver DF. 2007. (pp.251–273)
16. Gilbert K. Top Catholic ethicists duel over frozen embryo adoption. *Lifefite*. 2011. <https://www.lifesitenews.com/news/top-catholic-ethicists-duel-over-frozen-embryo-adoption>
17. Brakman S-V, Weaver DF. Introductory chapter. From *The Ethics of Embryo Adoption and the Catholic Tradition Moral Arguments, Economic Reality and Social Analysis*, edited by Brakman, S-V, and Weaver DF. 2007 (pp1–2)
18. Vatican Archive. Instruction on respect for human life in its origin and on the dignity of procreation: replies to certain questions of the day. Feb 22, 1987. Last accessed Oct 22, 2018. http://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_con_cfaith_doc_19870222_respect-for-human-life_en.html
19. Vatican Archive. Instruction *Dignitas Personae* on certain bioethical questions. 2008. Last accessed Oct 22, 2018. http://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_con_cfaith_doc_20081208_dignitas-personae_en.html
20. Schenker JG. Assisted reproductive practice: religious perspectives. *Reprod Biomed Online*. 2005;10(3):310–9.
21. Shellnutt K. America’s surrogacy bump: is fertility a blessing to be shared? *Christianity Today*. 2018; <https://www.christianitytoday.com/ct/2018/march/surrogacy-surge-us-christians-bioethics-ivf-reproduction.html>. Accessed 3 Dec 2019.
22. Lones ME. A Christian ethical perspective on surrogacy. *Bioethics Faith Pract*. 2016;2(1):5.
23. Schenker JG. Jewish and Moslem aspects of *in vitro* fertilization and embryo transfer. *Ann N Y Acad Sci*. 1985;442(1):601–8.
24. Serour GI. Ethical issues in human reproduction: Islamic perspectives. *Gynecol Endocrinol*. 2013;29(11):949–52.
25. Muaygil RA. Reexamining the prohibition of gestational surrogacy in Sunni Islam. *Dev World Bioeth*. 2017;17(2):112–20.
26. Kholwadia MA. The Islamic ruling on surrogate motherhood. *IlmGate: A Digital Archive of Islamic Knowledge*. Last accessed Oct 25, 2018. <https://www.ilmgate.org/the-islamic-ruling-on-surrogate-motherhood>
27. Schenker JG. Human reproduction: Jewish perspectives. *Gynecol Endocrinol*. 2013;29(11):945–8.
28. Besser M. Jewish ethics and surrogacy. *Jewish Independent*. 2017. <http://www.jewishindependent.ca/jewish-ethics-and-surrogacy/>. Accessed 3 Dec 2019.
29. Broyde MJ. The establishment of maternity and paternity in Jewish and American law: III. The establishment of maternity and surrogate motherhood. *Jewish Law Articles*. 2010. Last accessed Oct 22, 2018. <https://www.jlaw.com/Articles/maternity3.html>
30. McQuisition HL. Clarifying “biological,” “natural,” and “adoptive” parents. *Am J Public Health*. 1996;86(11):1649.
31. Dorff EN. Artificial insemination, egg donation and adoption. Rabbinical Assembly. Last accessed Oct 22, 2018. https://www.rabbinicalassembly.org/sites/default/files/public/halakhah/teshuvot/19912000/dorff_artificial.pdf
32. Schenker JG. Religious views regarding gamete donation. In: Seibel MM, Crockin SL, editors. *Family Building Through Egg and Sperm Donation*. Boston: Jones and Bartlett; 1996. p. 238–50.
33. TheJC. Is it permissible to have a child through egg donation? 2013. Last accessed Oct 22, 2018. <https://www.thejc.com/judaism/rabbi-i-have-a-problem/is-it-permissible-to-have-a-child-through-egg-donation-1.42463>
34. Rutzick J. The egg donor might not have been Jewish, but my baby is. *Haaretz*. 2014. <https://www.haaretz.com/opinion/premium-egg-wasn-t-jewish-but-my-baby-is-1.5252404>
35. Jacobovitz I. *Jewish medical ethics: a comparative and historical study of the Jewish religious attitude to medicine and its practice*. New York: Bloch Publishers; 1975.
36. Tendler M. Infertility management: cure or Ill. *Sh’m’a*. 1987;17(334):109–10.
37. Golinkin D. What does Jewish law have to say about surrogacy? *The Schechter Institutes*. 2012;7(3). Last accessed Oct 22, 2018. <http://www.schechter.edu/what-does-jewish-law-have-to-say-about-surrogacy/>
38. Pew Research Centre. The global religious landscape: Hinduism. 2012. Last accessed April 26, 2019. <https://www.pewforum.org/2012/12/18/global-religious-landscape-hindu/>
39. Ray S. India bans commercial surrogacy to stop ‘rent a womb’ exploitation of vulnerable women. *The Telegraph*. 2018. <https://www.telegraph.co.uk/news/2018/12/20/india-bans-commercial-surrogacy-stop-rent-womb-exploitation/>. Accessed 3 Dec 2019.
40. Deonandan R. Recent trends in reproductive tourism and international surrogacy: ethical considerations and challenges for policy. *Risk Manag Healthc Policy*. 2015;8:111–9.
41. Kumar TCA. Ethical aspects of assisted reproduction – an Indian viewpoint. *Reprod BioMed Online*. 2007;14(1):140–2.
42. Agarwal A. Celebs who opted for surrogacy. *Times of India*. 2017. <https://timesofindia.indiatimes.com/entertainment/hindi/bollywood/news/Celebs-who-opted-for-surrogacy/articleshow/52971925.cms>. Accessed 3 Dec 2019.
43. Sallam HN, Sallam NH. Religious aspects of assisted reproduction. *Facts Views Vis Obgyn*. 2016;8(1):33–48.
44. Kalra B, Baruah MP, Kalra S. The Mahabharata and reproductive endocrinology. *Indian J Endocrinol Metab*. 2016;20(3):404–7.
45. Nelson D. Fair-skinned Indian women paid £1,000 extra to be surrogates. *The Telegraph*. 2015. <https://www.telegraph.co.uk/news/worldnews/asia/india/9633142/Fair-skinned-Indian-women-paid-1000-extra-to-be-surrogates.html>
46. Zoloth L, Henning AA. Bioethics and oncofertility: arguments and insights from religious traditions. *Cancer Treat Res*. 2010;156:261–78.
47. Numrich PD. The problem with sex according to Buddhism. *Dialog J Theol*. 2009;48(1):62–73.
48. Taniguchi S. Biomedical ethics from a Buddhist perspective. *Pac World New Ser*. 1987;3:75–83 <http://enlight.lib.ntu.edu.tw/FULLTEXT/JR-MAG/mag133029.pdf>. Accessed 3 Dec 2019.
49. Ying LY, Wu LH, Loke AY. The experience of Chinese couples undergoing *in vitro* fertilization treatment: perception of the treatment process and partner support. *PLoS One*. 2015;10(10):e0139691.
50. Keown D. *Buddhism and medical ethics: principles and practice*: University of London; 1995. Last accessed April 26, 2019. <https://www.buddhismuskunde.uni-hamburg.de/pdf/4-publikationen/buddhismus-in-geschichte-und-gegenwart/bd7-k03keown.pdf>
51. Mori S. Bioethics from the viewpoint of Buddhism. 2006. <http://www.iop.or.jp/Documents/0717/mori.pdf>. Accessed 3 Dec 2019.

52. Damnoen S. Buddhist ethics and surrogacy problem of thai society. *Social Science Research Network*. 2017. <https://ssrn.com/abstract=3013964>
53. Rochman B. Is it selfish to pursue fertility treatments instead of adoption? *Time*. 2012. <http://healthland.time.com/2012/02/01/is-it-selfish-to-pursue-fertility-treatments-instead-of-adoption/>. Accessed 3 Dec 2019.
54. Saxena P, Mishra A, Malik S. Surrogacy: ethical and legal issues. *Indian J Community Med*. 2012;37(4):211–3.
55. Kozicka P. Surrogacy in Canada: what you need to know. *Global News*. 2016. <https://globalnews.ca/news/2879259/surrogacy-in-canada-what-you-need-to-know/>. Accessed 3 Dec 2019.
56. Byrne MP, Snyder SH. The use of prebirth parentage orders in surrogacy proceedings. *Mitchell Hamline School of Law. Faculty Scholarship*, paper 231. 2005. Last accessed Oct 22, 2018. <http://open.mitchellhamline.edu/facsch/231>
57. Atwell BL. Surrogacy and adoption: a case of incompatibility. 20 *Colum. Hum. Rts. L. Rev.* 1988(1). Last accessed Oct 22, 2018. <https://core.ac.uk/download/pdf/46714119.pdf>. Accessed 3 Dec 2019.
58. United Kingdom High Court. *Re an adoption application (surrogacy)*, 11 March 1987. *Annu Rev Popul Law*. 1987;14:–57.
59. Government of the United Kingdom. *Surrogacy: legal rights of parents and surrogates*. Last accessed Jan 20, 2019. <https://www.gov.uk/legal-rights-when-using-surrogates-and-donors>
60. Government of Canada. *Assisted Reproduction Act of 2004*. Last accessed Jan 20, 2019. <https://laws-lois.justice.gc.ca/eng/acts/A-13.4/index.html>
61. Leighton KL. Accepting adoption's uncertainty: the limited ethics of pre-adoption genetic testing. *Bioeth Inq*. 2014;11:245–60.
62. Harris-Short S. Making and breaking family life: adoption, the state, and human rights. *J Law Soc*. 2008;35(1):28–51.
63. Fronek P. Current perspectives on the ethics of selling international surrogacy support services. *Medicolegal Bioethics*. 2018;8:11–20.
64. Library of Congress. *Adoption law: United States*. 2015. <https://www.loc.gov/law/help/adoption-law/unitedstates.php#f13>. Accessed 3 Dec 2019.
65. Watson JL. Agnates and outsiders: adoption in a Chinese lineage. *Royal Anthropological Institute of Great Britain and Ireland*. 10(2): 293–306
66. Deonandan R, Green S, van Beinum A. Ethical concerns for maternal surrogacy and reproductive tourism. *J Med Ethics*. 2012;38: 742–5.
67. Radoilska L. Public health ethics and liberalism. *Public Health Ethics*. 2009;2(2):135–45.
68. Locke J. *Second Treatise of Government* 1689. Last accessed April 26, 2019. <https://www.earlymoderntexts.com/assets/pdfs/locke1689a.pdf>
69. Gould A. *Origins of liberal dominance*. Ann Arbor: University of Michigan Press; 1999.
70. Kinley M. The requirements for a valid surrogacy parentage contract in California. *California Healthcare Law*. 2017. <http://californiahealthcarelaw.com/?p=526>. Accessed 3 Dec 2019.
71. Mitra S, Schick Tanz S. Failed surrogate conceptions: social and ethical aspects of preconception disruptions during commercial surrogacy in India. *Philos Ethics Hum Med*. 2016;11:9.
72. Sawyer M. The ethical state: social liberalism and the critique of contract. *Aust Hist Stud*. 2000;31(114):67–90.
73. Bix BH. Theories of contract law and enforcing promissory morality: comments on Charles Fried. 45 *Suffolk U. L. Rev.* 2012;719 http://scholarship.law.umn.edu/faculty_articles/204. Accessed 3 Dec 2019.
74. Atiyah PS. The liberal theory of contracts. In *Essays on Contracts*, by P.S. Atiyah. Oxford Scholarship, 1990.
75. Rawls J. *A Theory of Justice*. Bellknapp, 1971.
76. Schaeffer D. Feminism and liberalism reconsidered: the case of Catharine MacKinnon. *Am Polit Sci Rev*. 2001;95(3):699–708.
77. Okin SM. Feminism, the individual, and contract theory. *Ethics*. 1990;100(3):658–69.
78. Imrie S, Jadva V. The long-term experiences of surrogates: relationships and contact with surrogacy families in genetic and gestational surrogacy arrangements. *Reprod BioMed Online*. 2014;29(4):424–35.
79. Bell D. Defining marriage and legitimacy. *Curr Anthropol*. 38(2): 237–53.
80. Fellows ML. The law of legitimacy: an instrument of procreative power. *Columbia J Gend Law*. 1993;3(2):495–534.
81. Van den Akker O. The importance of a genetic link in mothers commissioning a surrogate baby in the UK. *Hum Reprod*. 2000;15(8):1849–55.

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.