Globalization and Gametes
Islam, Assisted Reproductive Technologies, and the Middle Eastern State

In the new millennium, the Middle Eastern assisted reproductive technology (ART) industry is flourishing, with hundreds of in vitro fertilization (IVF) clinics in countries ranging from the small Arab Gulf states to the larger but less prosperous nations of North Africa (Inhorn 2007; Senou and Dickens 2001). This development of a mostly private Middle Eastern ART industry is not surprising: Islam encourages the use of science and medicine as solutions to human suffering and is a religion that can be described as “protean” in encouraging the growth of an Islamic “multitude” (Inhorn 1994; Musallam 1986).

Yet relatively little is known about Islam and technoscience, if technoscience is defined broadly as the interconnectedness between science and technology through “epistemological, institutional, and cultural discursive practices” (Lotfalian 2004, 1). As Lotfalian notes in his recent monograph Islam, Technoscientific Identities, and the Culture of Curiosity, a glaring lacuna exists in the literature on science and technology in cross-cultural perspective, particularly from the Islamic world (6). This dearth of relevant scholarship clearly applies to the cross-cultural study of ARTs and third-party donation. For example, in the seminal volume Third Party Assisted Conception across Cultures: Social, Legal, and Ethical Perspectives (Blyth and Landau 2004), not a single Muslim society is represented among the thirteen country case studies.

Clearly the time has come to examine the globalization of ARTs to diverse contexts in the Muslim world, particularly given the rapid development and evolution of these technologies over time. As I argue in this chapter, assisted reproduction in the Muslim Middle East bespeaks a complex global assemblage (Ong and Collier 2005) of technologies, gametes, legislation, religion, money, and ideas involving the pursuit of conception. That infertile Muslim couples are willing to participate in this world bespeaks the love, commitment, and ardent desire for children that characterize most ART-seeking couples in the Middle East, qualities that are rarely emphasized in the Western media discourses about purported Middle Eastern violence, religious fanaticism, and the cruelty of Muslim men to women. As I have argued elsewhere (Inhorn 2007), the love between infertile couples is fueling the ART industry in the Middle East. It is also causing some Muslim couples to venture across deepening Sunni-Shia religious and political divides in search of human gametes (i.e., donor sperm, oocytes, and embryos), even at a historical moment when tensions between these two Muslim communities are at an all-time high (Nasr 2006).

As we will see, practices of assisted conception are now tied to varying Sunni and Shia religious attitudes toward gamete donation, codified in authoritative Islamic fatwa declarations and sanctioned by Middle Eastern states to varying degrees. In general, Middle Eastern states have imposed little governmental oversight on the IVF industry. This relaxed regulatory environment stands in stark opposition to many highly regulated Western European nations (Franklin 1997; Jones 2005; Storrow 2006) but is similar to the United States, where there is little if any explicit governmental regulation and an IVF industry that is largely free market regulated and profit driven (Spar 2006). However, this is where a U.S.-Middle East comparison ends; namely, despite minimum government standards and intervention, the Middle East is characterized by a strong and effective religious regulatory environment, in which various practices of assisted conception are allowed or disallowed in the absence of explicit state mandates, laws, or professional codes. Indeed, the very strength of the religious regulatory environment—and the internalization of these regulatory guidelines by IVF practitioners and patients—has effectively allowed the Middle Eastern nation-state to turn its regulatory attention elsewhere (for better or for worse, as we shall see). Furthermore, religious regulation of ART has led in recent years to two clear patterns of ART practice, which follow the growing Sunni-Shia sectarian divide in this part of the world. Namely, all Sunni-dominant countries in the Middle East ban third-party gamete donation, while at least two Shia-majority nations now practice gamete donation.

This chapter focuses on two nations of each type—Egypt and the United Arab Emirates, both Sunni-dominant countries, and Iran and Lebanon,
both Shia-dominant countries—where I have conducted extensive field re-
search on ARTS with hundreds of Muslim couples. The interaction between
religion and the state will be highlighted for each country. To do so requires
examining fatwas, or non-legally binding but authoritative Islamic religious
decrees, as well as the subsequent ethical and legal rulings that are being
issued by some Middle Eastern states to enforce or, in some cases, overturn
these fatwa rulings (Moosa 2003; Tremayne 2006, 2009). Understanding the
rapidly evolving religion-state nexus surrounding ARTS in the Muslim world
is imperative. Perhaps unlike any other major region of the world, Islam-
ically imposed religious restrictions guide clinical practice throughout the
Middle Eastern region, with relatively little state legislation or intervention.
Religious mandates affect not only what clinics are able to offer to patients
but also what patients are able to accept as morally permissible in their
personal treatment quests.

Indeed, a key question is how the religion-state nexus actually plays out in
everyday practice—in the actual "making of Muslim babies" within Middle
Eastern ivf centers (Inhorn 2006a). The Harvard medical anthropologist
Arthur Kleinman (1995, 45) has coined the term "local moral worlds" to
describe "the commitments of social participants in a local world about
what is at stake in everyday experience." In the Middle East, understanding
local moral worlds involves asking what Muslimaret seekers think about ivf
and specifically donor technologies. How do disparate Sunni-Shia stances
toward gamete donation influence the local moral worlds of infertile Muslim
couples desperate to produce a child? When faced with the need for donor
gametes to overcome infertility, what do Muslim ivf patients, whether Sunni
or Shia, actually do? Understanding local moral attitudes toward science,
technology, medicine, and religion in the Middle East requires ethnographic
engagement with reproductive actors themselves, including those who seek
human gametes across national and sectarian divides.

ARTS in Sunni Islam

It is important to begin in the Sunni Muslim world, where the earliest fatwas
on ART practice emerged and the first clinics opened in the Sunni strong-
holds of Egypt, Saudi Arabia, and Jordan. The Grand Sheikh of Egypt's
famed religious university, Al-Azhar, issued the first fatwa on medically
assisted reproduction on March 23, 1980. This initial fatwa—issued only two
years after Louise Brown's birth in England, but a full six years before the
opening of Egypt's first ivf center—has proved to be truly authoritative and
enduring in all its main points. In fact, the basic tenets of the original Al-
Azhar fatwa on ivf have been upheld by other fatwas issued since 1980 and
have achieved wide acceptance throughout the Sunni Muslim world.

The Sunni Islamic position on assisted reproduction clearly permits ivf,
using eggs from the wife with the sperm of her husband and the transfer of
the fertilized embryos back to the uterus of the same wife. However, since
marriage is a contract between the wife and husband during the span of their
marriage, no third party should intrude into the marital functions of sex and
procreation. This means that a third-party donor is not acceptable, whether
he or she is providing sperm, eggs, embryos, or a uterus (as in surrogacy). As
noted by the Islamic legal scholar Ebrahim Moosa (2003, 23):

In terms of ethics, Muslim authorities consider the transmission of re-
productive material between persons who are not legally married to be a
major violation of Islamic law. This sensitivity stems from the fact that
Islamic law has a strict taboo on sexual relations outside wedlock (zina).
The taboo is designed to protect fertility (i.e., family), which is design-
ated as one of the five goals of Islamic law, the others being the protec-
tion of religion, life, property, and reason.

As a result, at the ninth Islamic law and medicine conference, held under
the auspices of the Kuwait-based Islamic Organization for Medical Sciences
(inos) in Casablanca, Morocco, in 1997, a landmark five-point declaration
included recommendations to prevent human cloning and to prohibit all
situations in which a third party invades a marital relationship through
donation of reproductive material (Moosa 2003). Such a ban on third-party
gamete donation is effectively in place in the Sunni world, which represents
approximately 90 percent of the world's 1.4 billion Muslims (Inhorn 2003,
But to what degree are these Sunni fatwa declarations actually followed
by physicians in the Muslim world? A 1997 global survey of sperm dona-
tion among assisted reproductive technology centers in sixty-two countries
provides some indication of the degree of convergence between official dis-
course and actual practice (Metrow and Schenker 1997). In all of the Sunni-
dominant Muslim countries surveyed—including the Middle Eastern coun-
tries of Egypt, Kuwait, Jordan, Morocco, Qatar, and Turkey, as well as a
number of non–Middle Eastern Muslim countries including Indonesia, Ma-
aysia, and Pakistan—sperm donation in IVF and all other forms of gamete donation were strictly prohibited. As the authors of this global survey note, "In many Islamic countries, where the laws of Islam are the laws of the state, donation of sperm was not practiced. [Artificial insemination, donor] is considered adultery and leads to confusion regarding the lines of genealogy, whose purity is of prime importance in Islam" (Mofiz and Schenker 1997).

The statement "the laws of Islam are the laws of the state" warrants further investigation, for it is not accurate, technically speaking. Islamic law, called sharia, governs family law (i.e., personal status law) in most Middle Eastern societies. However, separate civil legal codes, often imposed during periods of French and British colonial rule, govern most other areas of law throughout the region. These codes are under the aegis of Islamic family law, given that they are used to produce offspring for infertile couples. The association of ARTS with Islamic sharia has given religion outstanding power to dictate the scope and contours of clinical practice in the Muslim world, effectively weakening state intervention or civil law in this area.

Egypt is a case in point. Over the past twenty years, Egypt has supported a thriving IVF sector with approximately fifty IVF clinics. Few of these clinics are located in government hospitals and receive some state funding to offset expenses for the infertile poor (Prof. Mohamed Yehia, personal communication, July 29, 2007). However, as in most Middle Eastern countries, Egypt's IVF sector is highly privatized and exists beyond the official gaze of the state. Opening an IVF clinic requires licensure by the Egyptian Ministry of Health, based on guidelines set forth by the Egyptian Medical Syndicate. However, the Egyptian Medical Syndicate has based its bioethical guidelines for clinic operation on the early fatwa issued by Al-Azhar, as well as the subsequent recommendations of the 1991, 1997, and 2000 conferences on ARTS organized by Al-Azhar's International Islamic Center for Population Studies and Research and endorsed by the Al-Azhar clergy (Prof. Gamal I. Serour, personal communication, July 30, 2007).

Professor Gamal Serour, director of the center at Al-Azhar, laments the comparable lack of Egyptian state involvement in this process. "Unfortunately, there have not been any attempts to legislate IVF in Egypt," he writes. "The state controls the practice of IVF through licensing these centers. Centers have to abide by the guidelines laid [out] by the medical syndicate concerning premises, personnel, equipment, facilities, sterilization, etc. Every center must obtain approval of the medical syndicate followed by a license from Ministry of Health (MOH) before they start their programs." However, he adds, the "regulations environment in Egypt is poor. It stops at the phase of issuing a license. There is no regulatory body that supervises or inspects the work done; neither is there an obligatory registry for compiling data. Of course, inspection occurs whenever a catastrophe occurs" (personal communication, July 30, 2007). Concurring completely with this assessment, Mohamed Yehia, one of Serour's IVF colleagues at neighboring Ain Shams University in Cairo, describes the regulatory environment in Egypt as "very loose and mainly governed by the doctor-patient relationship" (personal communication, July 29, 2007).

The fact that, in practice, doctors and clinics operate with little government interference does not mean that "anything goes" in either Egypt or other Sunni Muslim countries. Indeed, what is quite remarkable is the degree to which the fatwa banning third-party donation is morally internalized and hence followed by both practitioners and patients in the Sunni Muslim world. Sunni Muslim physicians in the Middle East appear loath to offer gamete donation to their patients. According to them, clinics in the Sunni dominant countries simply do not use donor technologies, which violate the sharia guidelines. Instead, if couples with recurrent infertility ask about gamete donation, they are either discouraged by their physicians from pursuing it further or are referred out of the country, primarily to Europe.

Indeed, most Sunni Muslim IVF patients would never dream of "doing donor" and desire their clinical care from a Sunni Muslim IVF physician who shares this conviction. In the hundreds of interviews that I have conducted with Sunni IVF patients in disparate Middle Eastern settings, the vast majority agree completely with the religious prohibitions on gamete donation, arguing that gamete donation (1) is tantamount to adultery, by virtue of introducing a third party into the sacred duad of husband and wife; (2) creates the potential for future half-sibling incest, if the offspring of the same anonymous donor meet and marry; and (3) confuses kinship, paternity, descent, and inheritance in the emphatically patrilineal societies of the Muslim Middle East. According to them, preserving the "origins" of each child—meaning its relationship to a known biological mother and father—is considered not only an ideal in Islam but a moral imperative. The problem with third-party donation, therefore, is that it destroys a child's nafs, or lineage, an act that is considered immoral in addition to being psychologically devastating.
Sunni Muslim ivf patients use the term "mixture of relations" to describe this unintended outcome. Such a mixture of relations, or the literal confusion of lines of descent introduced by third-party donation, is described as being very "dangerous," "forbidden," "against nature," "against God"—in a word, haram, or morally unacceptable. It is argued that this practice, by allowing a "stranger to enter the family," confuses lines of descent in the patrilineal societies of the Muslim Middle East. For Muslim men in particular, ensuring paternity and the purity of lineage through known fathers is of paramount concern. Thus a donor child could only be viewed as an ibn haram, literally "son of sin." The child will be deemed illegitimate and stigmatized even in the eyes of its own parents, who will therefore lack the appropriate parental sentiments (Inhorn 2009b).

This firm conviction that parenthood of a "donor child" is an impossibility is clearly linked to the legal and cultural prohibitions against adoption throughout the Sunni Muslim world (Inhorn 1996; Sonbol 1995; Zoubir 1992). The original Al-Ahzar fatwa prohibiting third-party gamete donation also prohibits adoption of orphans, considering both acts unallowable. As a result, few Sunni Muslim ivf patients will contemplate adopting a child, even if they find it "against the religion." According to Arab men, an adopted child, like a donor child, "wouldn't be my son" (Inhorn 2009b).

Given this local moral world, most Sunni ivf patients are extremely concerned about making their test-tube babies in a morally correct fashion. To that end, seeking out a trustworthy Sunni Muslim ivf practitioner is a concern for many patients. In the United Arab Emirates (Uae), the global hub of Middle Eastern transnationalism (i.e., less than one-quarter of the total population of four million are Emiri nationals), a controversial draft law to govern Emirati ivf centers included a clause stating that to be licensed by the Ministry of Health, every ivf center must have at least two Muslim practitioners, one an ivf specialist and one a laboratory technician. Attempting to reflect the Uae's multicultural population, two government ministers present at the legislative hearing argued that "science and medicine have no religion" and that "the uae constitution does not discriminate against any citizen on religious grounds." Nonetheless the majority of those present at the hearing on July 3, 2007, voted to include the controversial Muslim practitioner clause in the draft law (Salama 2007). Ultimately, however, the requirement of a Muslim ivf practitioner did not pass into uae law, when it was implemented in January 2010.

GLOBALIZATION AND GAMETES
whether she should temporarily divorce her infertile husband and remarry him after accepting sperm from a donor.

In theory, only widowed or otherwise single women—who are not currently married—should be able to accept donor sperm, to avoid the implications of zina, or adultery. However, in all the Muslim countries, single motherhood of a donor child is unlikely to be socially acceptable.

Indeed, in a most interesting legislative turn of events, the Iranian state has issued a law making sperm donation officially illegal—thereby effectively overruling Ayatollah Khamanei’s fatwa-based permission of sperm donation. Namely, a law on embryo donation passed in 2003 in the Iranian parliament (majlis) and approved by the Guardian Council (a religious watchdog body that endorses every bill before it becomes law) has restricted gamete donation to married persons. Although the law is brief (less than one page), it states clearly and succinctly who can and cannot donate and receive gametes. Egg donation is allowed, as long as the husband marries the egg donor temporarily—ensuring that all three parties are married. Sperm donation, on the other hand, is legally forbidden, because a sperm donor cannot temporarily marry an already married woman whose husband is infertile. Quite interestingly, however, embryo donation—which involves both sperm and egg from another couple—is allowed to overcome both male and female infertility. Because an embryo comes from a married couple and is given to another married couple, it is considered halal, or religiously permissible (Tremayne 2006, 2009).

The social and biological implications of embryo donation are quite interesting. For Iranian couples unable to produce a child because of male infertility, embryo donation allows them to bypass the problem of the husband’s weak (or absent) sperm. However, embryo donation does not allow a presumably fertile wife of an infertile husband to contribute her own ova, in effect severing her biological ties to the donor child. Furthermore, and most strikingly, embryos donated from another married couple involve both egg and sperm donation. Although direct sperm donation via the injection of another man’s sperm in the wife’s womb is bypassed, embryo donation still disrupts male paternity and involves the acceptance by an already married woman of another man’s (and woman’s) gametes. Moreover, a woman’s acceptance of another couple’s embryos is effectively like gestational surrogacy, which is strictly prohibited in Sunni Islam. Nonetheless, cases of surrogate motherhood are occurring in Iran, despite the lack of firm legislation regarding this practice (Garmaroudi, n.d.; Tremayne 2009). Some Iranian clergy and physicians are presently advocating for future laws permitting all forms of donation as well as surrogacy. Once passed into law, gamete donation and surrogacy will be difficult to stop. Meanwhile, some IVF physicians in Tehran—as well as in the Shia-dominant country of Lebanon, which is closely following the Iranian lead—are using the legal and regulatory vacuum and original “permissive” fatwa of Ayatollah Khamanei to practice all forms of gamete donation among their desperate infertile patients.

Lebanon, the Middle East’s most religiously diverse country, has attempted to legislate against third-party gamete donation and to limit ART access to married couples. However, (1) because of the strong Shia Muslim presence in that country, (2) the inability to achieve consensus among Lebanon’s seventeen other confessionial communities, and (3) the effective breakdown of the Lebanese state in recent years, the legislative process has been suspended indefinitely. Indeed, with its long history of sectarianism and religious infighting, Lebanon represents a case par excellence of religious rule at a time when the state—and its corresponding legislative and regulatory structures—is in chaos.

In the midst of this governmental vacuum, ART decisions are left largely to the better judgment of rve doctors and their patients, based on their own understandings of the religious rulings, as well as personal moral convictions, which are often deeply internalized. Those married infertile Shia couples who are truly concerned about carrying out third-party donation according to either religious or legal guidelines may find it difficult to move forward, particularly when it comes to sperm donation. Yet, having said that, in Lebanon as in Iran, at least some Shia couples are beginning to receive donor gametes, as well as donating their gametes to other infertile couples. Since the new millennium, donor gametes and embryos are now being donated and procured by infertile couples in rve clinics in Shia-majority Iran and Lebanon, the only two countries in the Muslim world where third-party donation is being practiced today. For infertile Shia couples who accept the idea of donation, the introduction of donor technologies has been described as a “marriage saver,” helping to avoid the “marital and psychological disputes” that may arise if the couple’s case is otherwise untenable.

Who are the sources of these donor gametes? In the Lebanese rve clinics in...
which I worked, some of the donors were other iVR patients (mostly Shia Muslims who accept the idea of donation), some were friends or relatives (including egg-donor sisters), and some were anonymous donors who provided their ova for a fee. In at least one clinic catering to a largely conservative Shia clientele, some of these donors were young, non-Muslim, American women, who traveled from the Midwest to Lebanon for extra payment to anonymously donate their eggs to infertile Lebanese couples. Ironically, those most likely to receive these “American eggs” are conservative Shia couples, who accept the idea of donation because they follow the teachings of Ayatollah Khamenei in Iran. In Lebanon, such couples are generally members of, or sympathizers with, Lebanon’s Hizbullah political party, which is officially described by the U.S. administration as a terrorist organization.

Furthermore, in multicentric Lebanon, the recipients of these donor eggs are not necessarily only Shia Muslim couples. Some Sunni Muslim patients from Lebanon and from other Middle Eastern Muslim countries such as Egypt and Syria are quietly slipping across transnational borders to “save their marriages” through the use of donor gametes, thereby secretly going against the dictates of Sunni Muslim orthodoxy. That such reproductive tourism is done in secrecy—usually under the guise of a “holiday in Beirut”—is quite important, given the moral condemnation of gamete donation in the Sunni Muslim countries. Although such Sunni Muslim gamete seekers may have made peace with their own moral decisions to use donor technologies, they often remain extremely concerned about maintaining anonymity and confidentiality to avoid moral censure of themselves and their future donor offspring.

Not surprisingly, several of the Arab patients I met who were pursuing donor gametes in Lebanon were extremely concerned about achieving phenotypic similarity with their donor offspring. They did not want “black” children, nor did they necessarily want “white,” Euro-American-looking children. They wanted children who looked “Middle Eastern” like themselves—hence their journeys to Lebanon for that purpose. As I learned on a visit to Iran in 2006, scores of Sunni Muslim Gulf Arabs from countries such as Saudi Arabia and Kuwait are traveling to Tehran in pursuit of gametes that have been donated by Shia Muslim Iranians in clinics there. Given that most Gulf Arabs could afford to travel outside the Middle East, Persian-Arab phenotypic similarity may be an important factor in the pursuit of Iranian gametes, a fascinating topic for future research.

Conclusion

In short, the arrival of donor technologies in both Lebanon and Iran—the only two Middle Eastern countries where these services are offered today—has led to a brave new world of reproductive possibility never imagined when these technologies were first introduced there more than twenty years ago. These technologies have engendered significant medical transnationalism and reproductive tourism: mixing of gametes across national, ethnic, racial, and religious lines; and the birth of thousands of iVR and now donor babies to devout infertile Muslim couples. For their part, at least some infertile Muslim couples, both Shia and Sunni, have begun to reconsider traditional notions of biological kinship, even if “social parenthood” of a donor child is still not widely embraced in the Middle Eastern region (Inhorn 2006). Nonetheless, because donor technologies are now available in the Shia world, the power of the Sunni Muslim ban on third-party donation is being weakened across the region, with some infertile Sunni Muslim couples reconsidering their own anti-donation moral stances. As a result of these social processes, Shia gametes are finding their way into Sunni bodies despite the regional antagonists between these two religious sects. Indeed, in the new millennium, the case of assisted conception and gamete donation provides compelling material for the study of Islamic technoscience in practice—a study that is ripe for anthropological investigation as these technologies make their way to diverse Muslim societies around the globe.

Notes

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2. The notable exceptions are Iran, Sudan, and Somalia, where Islamic law has been imposed on all citizens (including non-Muslims) in matters other than family law.

GLOBALIZATION AND GAMETES

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