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# **Journal**

Medical Anthropology, 35(3)

### **ISSN**

0145-9740

# **Author**

Hamdy, Sherine

### **Publication Date**

2016-05-03

### DOI

10.1080/01459740.2015.1040879

Peer reviewed



# **Medical Anthropology**



Cross-Cultural Studies in Health and Illness

ISSN: 0145-9740 (Print) 1545-5882 (Online) Journal homepage: http://www.tandfonline.com/loi/gmea20

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**To cite this article:** Sherine Hamdy (2015): All Eyes on Egypt: Islam and the Medical Use of Dead Bodies Amidst Cairo's Political Unrest, Medical Anthropology, DOI: 10.1080/01459740.2015.1040879

To link to this article: <a href="http://dx.doi.org/10.1080/01459740.2015.1040879">http://dx.doi.org/10.1080/01459740.2015.1040879</a>

Accepted online: 01 Jul 2015.Published online: 01 Jul 2015.
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Medical Anthropology, 00: 1–19, 2015 Copyright © 2015 Taylor & Francis Group, LLC ISSN: 0145-9740 print/1545-5882 online DOI: 10.1080/01459740.2015.1040879



# All Eyes on Egypt: Islam and the Medical Use of Dead Bodies Amidst Cairo's Political Unrest

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Using dead bodies for medical purposes has long been considered taboo in Egypt. Public health campaigns, physicians' pleas, and the urgings of religious scholars all failed to alter public opinion regarding the donation of dead bodies either for instructional material or for therapeutic treatments. Yet in 2011, amid revolutionary turmoil in Egypt, a campaign was launched for people to donate their eyes upon death; this time, people readily signed up to be donors. Focusing on mass eye trauma that occurred in Egypt amid the political uprisings of 2011, I raise questions about when and why Islam can explain people's attitudes and behaviors, particularly toward death and medicine. The case of mass eye trauma in Egypt and citizens' reformulations of questions once jealously controlled by state-aligned doctors, politicians, and religious scholars unsettles the boundaries between 'religion' and 'secularism' in medical practice.

يعد التبرع بالجسد بعد الوفاة واحدا من الموضوعات الشائكة وسط المرضى والأطباء في مصر، وكثيرا ما فشلت حملات الصحة العامة ومطالبات الأطباء و علماء الدين في تغيير الرأي العام فيما يتعلق بالتبرع بالجثث سواء لأغراض البحث العلمي أو للأغراض العلاجية. ولكن في عام ٢٠١١، ووسط الزخم الثوري في مصر، أطلق عدد من الثوار حملة للتبرع بالعيون بعد الوفاة، وسرعان ما استجاب الكثيرون بتسجيل أسمائهم كمتبرعين تطرح هذه المقالة، بالتركيز على الإصابات الكثيفة للعيون في خضم الثورة المصرية في ١٠١١ عددا من التساؤلات حول دور الإسلام في تفسير بعض التوجهات تجاه بعض القضايا الطبية الهامة، وتخلص إلى وجود اشتباك شديد التعقيد بين الأسباب الإجتماعية والسياسية والدينية التي تشكل قرارات كثير من المسلمين فيما يخص قضايا هامة كالموت والروح ودور الطب، وكيف أن هذه القضايا لم تعد حكرا على الأطباء والساسة ورجال الدين الموالين للدولة.

Keywords blindness, cadavers, cornea donation, Egypt, Islam

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Mass eye trauma and injuries to the eye became a regular feature of the Egyptian popular uprisings that began in January 2011. When revolutionaries boldly defied state authority, riot police fought back, aiming tear gas, rubber bullets, pellets (birdshot) and water cannons at protesters, and causing devastating bodily injuries, including mass eye trauma. Ahmed Harara, a young dentist living in Cairo, Egypt, sustained a serious injury in his right eye on January 28, 2011 when riot police violently attacked protestors in and around Tahrir Square (Figure 1). Like many protesters, Dr. Harara later explained that he never had any interest in politics before his conscience moved him to join the demonstrations. After Mubarak resigned following the demonstrators' 18-day occupation of public spaces, Dr. Harara was celebrated in state media and through official award ceremonies; he often deflected the attention aimed at him to recall the slain protesters and their families who had suffered much greater losses than he had. In doing so, Dr. Harara voiced the revolutionary cry that the lives lost would not be in vain; he even vowed that he would sacrifice his second eye if it meant securing freedom and justice for Egypt.

During the interim military rule in November 2011, a fresh wave of protests broke out, and Dr. Harara again took to the streets. In a perverse act of spite, a police sniper shot a rubber bullet at his remaining seeing eye, leaving Dr. Harara completely blind.<sup>4</sup> This time, Dr. Harara's image circulated even more widely on social media, photoshopped, such that a second eye patch covering his left eye was superimposed onto the original photograph, engraved with a new date: November 19 (see Figure 2). He became known as "the living martyr."

Aiming at the eyes using mere 'riot control' weapons is a quick and dirty way to permanently maim people. This strategy is well documented in medical reports on the ocular trauma suffered by civilians and children at the hands of Israeli Defense Forces in the Occupied Palestinian Territories, <sup>5</sup> conflicts in South Africa (Cohen 1985), Northern Ireland (Rocke 1983), and, more recently, the Gezi Park protests in Turkey. <sup>6</sup> Egyptian physicians bravely documented mass critical injuries to the eye due to riot police and military snipers' use of rubber bullets (Eldaly et al. 2013). Other injuries resulted from tear gas, shrapnel, and direct trauma via blunt instruments such as batons and rocks. The protestors' willingness to return to the streets, even after major eye injury, made the eye-patched revolutionary a potent symbol of the human sacrifices entailed in the political uprising (Tomlin 2011; Wright 2012).

In January 2012, the April 6 Youth Movement galvanized an online response to the mass eye trauma incurred by political protestors: they called for a cornea donation campaign. Galal Amer,



FIGURE 1 Dr. Ahmed Harara.



FIGURE 2 Photo-shopped image after the injury to Dr. Harara's second eye.

a satirist in Cairo, along with a group of eye doctors, began similar endeavors, asking people to consent to giving up their own eyes upon death so that the organs could be used for cornea transplants for blinded protesters. Of course, not all eye traumas could be addressed with cornea grafts. Major injuries of the eye, due to rubber bullets penetrating the eye globe or severing the optic nerve, for example, have poor prognosis for visual recovery and could not be treated with a cornea graft. But cornea transplants could restore sight to the many people who suffered corneal damage from excessive exposure to tear gas or chemical burns, or from shrapnel or other foreign objects scraping the cornea during the violent conflicts. In such cases, the use of a healthy tissue from a deceased donor could, in theory, be grafted onto a patient with cornea opacity. A group of young physicians allied with the protesters formed an alliance called Eye Doctors of the Revolution,<sup>7</sup> and joined the April 6 Movement's Eyes for Dignity campaign.<sup>8</sup> At a moment when revolutionaries' bodies and bodily abilities were being sacrificed for the good of the nation, these activists called on the rest of the nation to sacrifice in return. Within hours of the commencement of the online campaign, hundreds of people had signed up to donate their body parts after their death, including celebrities and world leaders like Mohamed El Baradei, as well as locally known socialist activists who were central figures in the popular uprisings, such as Alaa Abdel Fattah, Mona Seif, Ayman Nour, and Gameela Isma'il. 9 In hours, the activists had succeeded in what was deemed 'impossible' or 'taboo' in Egypt's recent past: obtaining people's consent to put their dead bodies to medical use.

Since the nineteenth century, Egyptian physicians and religious reformers sought to pave the way for dissection and autopsy in medical schools by 'educating' the Egyptian population about their 'backward' religious ideas about the inviolable sanctity of dead bodies. They argued against widespread popular beliefs of the dead as sentient beings, emphasizing that the soul and spirit are separate from bodily matter, and depicting the cadaver as a mere unfeeling shell. Redefining the cadaver along the views of modern biomedicine, religious reformers such as Rashid Rida regarded the modern view as the 'only one and correct Islamic position,' and popular views of the sentient dead as 'mere superstition.'

Yet on a popular level, the view of dead bodies did not shift on account of such statements. There persists a wide array of traditional beliefs and practices around the dead throughout contemporary Muslim cultures. Although the Qur'an, held by believing Muslims to be the word of God, does not expound on whether and what the dead can feel between the moment of death

and the moment of resurrection, there are well-developed traditions about the torments of the grave, the dead as sentient, hearing beings, and the ability of the devout and pious to enjoy light and comfort even beyond burial (Smith and Haddad 2002). Lamenting the persistence of popular views of the dead as sentient, Egyptian doctors have blamed these beliefs for obstructing the establishment of national organ and tissue procurement programs in Egypt.

In the remainder of this article, I argue how and why the revolutionaries were able to win Egyptians over to the idea of donating their eyes upon their death, without changing their 'wrong religious beliefs'. First, in this situation, young doctors were risking their lives by participating in the protests, whether as first-aid volunteers or as protesters themselves. Hence the solidarity between those launching this donation initiative and ordinary Egyptians was drastically different than earlier top-down donation campaigns. In those, people's reluctance to entrust their dead to health professionals had emerged in a context of widespread medical corruption, mismanagement, and the mistreatment of the poor. Secondly, I show that acceptance of the medical use of human cadavers need not depend upon abandoning the notion that the dead may still be sentient, since this notion might in fact serve to motivate people to donate their bodies upon death. Finally, I suggest that unlike anonymous donation, which precludes reciprocity, the Eyes for Dignity campaign was in part successful because it called upon people to give bodily to the 'living martyrs' who had already sacrificed so much more. In this case, not only did feelings of national solidarity undergird a transplant campaign, but the campaign was launched as a means of forging national solidarity.

### 'RIGHT' AND 'WRONG' IDEAS ABOUT EYE DONATION

Before the 2011–2012 Eyes for Dignity campaign, there were no functioning public eye banks in Egypt, although Egyptian ophthalmologists had experimented with cornea grafting since the early 1960s (Hamdy 2012:83–114). Frustrated eye doctors attributed the lack of functioning eye banks to the difficulty, if not impossibility, of Egyptians volunteering or even tacitly consenting to the use of their own dead bodies or those of their loved ones for medical purposes. According to some of the pioneering ophthalmologists in Egypt who had trained abroad, often in the United Kingdom or France, patients—particularly poor patients who present at public teaching hospitals—were wary of leaving their loved ones to die in the hospital, and family members, particularly of rural areas, are notoriously vigilant about taking the dead bodies of their loved ones home for the ritual washing, shrouding, prayer, and burial. Far before the feasibility of transplants, of course, dead bodies were sought after in medical schools for autopsy for both research and instructional purposes. Here too, the shortage of cadavers and the predicament of how to attain them plagued Egyptian medical schools, adding to the taboo around medical cadavers. Egyptian eye doctors whom I interviewed often spoke of 'cultural attachment' to the dead as a matter of 'backwardness' or 'superstition' in Egypt that held the country back scientifically, as compared to the 'civilized' medical institutions in Europe and North America. For example, in the late 1980s, in response to popular antipathy to medical transplantation following scandals of organ sales and theft, an Egyptian newspaper article (Al Wafd) quoted an ophthalmologist who makes the following typical assertion:

There are advanced countries in Europe and America that have special documents like driver's licenses for donating organs after death, but we unfortunately have not reached this sophisticated

level of thought or culture and that is why we need constant awareness campaigns for citizens to stop their wrong ideas. (July 12, 1989)

Claims about Egyptian antipathy to tissue and organ donation obscure the structural violence, deception, and scandals that have characterized the medical use of dead bodies in Egyptian medical practice (Hamdy 2012). Ophthalmologists practicing in Egypt since the 1960s failed to imagine—let alone deliver—a feasible system in Egypt in which eye tissues from dead patients could be procured with consent. Further, to hold Egypt as a place of 'civilizational backwardness' is to imagine cultures as insular and static, precluding the possibility that changed sociopolitical conditions could elicit different cultural attitudes toward the medical use of dead bodies.

Doctors often referred to what they perceived to be unfavorable beliefs and practices as 'cultural' and not 'religious,' because they believed such attitudes to be 'incorrect religion.' In the previous letter to the newspaper, the ophthalmologist continued to comment on Egyptians' reluctance to donate dead bodies by saying, "This could be the religious obstacle, but Shaykh Tantawi [the Grand Mufti of the Republic] said that God created illnesses and cures, and that as long as the doctors say that this is a cure, then it does not violate the sanctity of the dead (fa la tujid hurma)" (July 12, 1989). It is not uncommon for medical doctors in Egypt to speak with both medical and moral/religious authority on their patients' best course of action, and to cite official stateappointed religious authorities who bolster their views. The institutionalization of biomedicine in Egypt went hand in hand with the centralization of modern state power and the state's simultaneous cooptation of religious authority. In modern Egypt, biomedicine is considered not only the medicine of universal modern science but also God's creation (Hamdy 2005). Nonbiomedical healing practices (including the visiting of saints' tombs or the use of amulets) and resistance to biomedicine are considered not only ignorant but also heretical to Islam from the perspective of the Egyptian state (see Hirschkind 2006; Mittermaier 2010). Doctors, as the educated elite and moral fabric of the nation, are depicted in nationalist discourses, cinema, and mainstream media to carry both a religious and medical duty to impede patients from noncompliance and the use of alternative healing practices.

The Egyptian modern state has long sought to control what counts as 'Islam,' and since its very inception, state leaders have worked toward confining religious practice and belief to realms that can be subject to its management. Thus, the Egyptian state imagines itself to be arbiter of 'true Islam,' in opposition to the supposed corrupted forms espoused by state critics and opponents. The Egyptian government oversees the Azhar University, a center of Islamic learning first founded in the tenth century, and Dar al Ifta', a state institution that regulates the issuing of fatwas, which was established in 1895. The Rector of Al Azhar is one of the most authoritative voices of Sunni Islam, as is the Grand Mufti of Egypt who heads the Dar al Ifta'. In the Egyptian state's vision of 'true Islam,' biomedicine is promulgated as both universal science and as God's power to heal.

### MEDICINE'S CADAVERS

Egyptian doctors often point toward the willingness of Euro-Americans to personally donate their own dead bodies to medical science as though it were a natural accompaniment to the technical advances of medicine. Yet historians of medicine have amply demonstrated that there was

nothing natural, self-evident, or particularly easy about how Euro-Americans arrived to their current reliance on personal cadaveric donation. In both the United Kingdom and the United States, in the eighteenth and early nineteenth centuries, only the bodies of executed criminals were at the time legally obtainable for dissection. As a flagrant negation of traditional death culture, dissection was widely considered in the United Kingdom and United States at the time to be "a fate worse than death" (Richardson 2006:155). The punishment of dissection was reserved for murderers, marking their bodies separately from those of other capital offenders, and tightening the bonds between the Crown, as executioner, and the medical physicians, as dissectors (Richardson 2006).

However, executed criminals did not provide an adequate supply for medical students, who turned to grave robbers to obtain cadavers, usually those of the destitute (Germent et al 2007; Lock 2002; Richardson 2000; Sappol 2002; Shultz 1992;). Further, medical schools most benefited from newly dead bodies. Their mishandling was thus viewed as a double violence—both upon the dead, who were often regarded as potentially sentient beings, able to haunt the living if disturbed—and upon the still-grieving surviving family members (Richardson 2006). Tampering with fresh corpses betrays the fresh pain of loved ones when they are at their most vulnerable and disrupts intimate familial rituals to watch over the dead and prepare the body for burial (Richardson 2006). In the 1800s in both the United States and United Kingdom, there were collective movements against grave robbers, some of which resulted in attacks on doctors' homes and the destruction of anatomy schools (Richardson 2006:156).

In the mid-1800s, responding to public outcry about grave robbing, both the United Kingdom and United States created new laws to make unclaimed bodies available to medical schools. Most were the bodies of the poor whose families could not afford funerary services (Germent et al. 2007; Richardson 2006). The attitudes voiced at the time were that the poor had burdened wider society, and should therefore benefit society in their death, "transfer[ring] the punishment from murder to poverty" (Richardson 2006:163). In the United Kingdom, fearful poor families put money into insurance companies to avoid the fate of 'the pauper funeral,' which had become associated with social failure, and medical schools obtained cadavers from the mortuaries of mental health institutions (Richardson 2000, 2006).

In the United States during and after the Great Depression, there was public demand that everyone be dignified with a burial service, and state governments responded by defraying funerary costs. New social welfare provisions also meant that people lived longer and better lives, and thus, even when the state stopped subsidizing funerary costs, fewer 'unclaimed bodies' (of the poor) were available for medical use (Germent et al. 2007). Thus, after a longer history of relying on the bodies of the destitute, both countries faced a shortage of medical cadavers. Doctors responded by publicly vowing to donate their own bodies to medicine upon death, and by calling on people to follow their lead (Richardson 2006).

By World War II, personal donations were increasingly common in the United States and United Kingdom, and remain today the most common source of cadavers for medical instruction (Richardson 2000; Germent et al. 2007). In describing the complex factors that explain this dramatic shift, Germent and colleagues wrote: "During the twentieth century, the United States underwent a population boom, expansion of government, new legislation, changes in the population demographics, developments in science, and proliferation of mass media, all of which affected body acquisition" (2007:1000). They also suggested that in the United States in the 1960s, a series of journalistic exposés and books revealed the exploitative underside of the

funeral industry that promoted expensive practices like embalming and open casket services; one American journalist discovered that in 122 years, the costs of living increased by 347% and the costs of dying increased by 10,000%. Jessica Mitford and other writers began promoting the idea that one could escape such excesses by simply "donating your body to science" (Germent et al. 2007:1003). At the same time, the ubiquity of blood donation and transfusions normalized the idea of bodily donation to others (Richardson 2006). Religious and cultural changes also accompanied this shift; the increase in cremation—justified by concerns of cost and the decreasing availability of burial land—and donating the body to science suggested that there was "less emphasis placed on the sacredness of the inviolate body" (Germent et al. 2007:1003). Further, there was less stigma associated with the medical donation of dead bodies as it became de-coupled from the mentally ill, suicide victims, paupers, and criminals.

In Egypt, a different constellation of social factors resulted in the persistence of medical schools' dependence on illicit grave robbing and the use of the corpses of criminals and the destitute (Hamdy 2012). The experience of colonialism in Egypt, as in other colonized countries, resulted in much less popular optimism about the potentials of science and technology, as these developments were often deployed to consolidate colonial rule and to mark the cultural inferiority of the Egyptian population (Mitchell 1991). As elsewhere, the benefits of new science and technology were exclusively enjoyed by the elite and denied to the majority of citizens. Muslim modernizers, such as the modern jurist Rashid Rida, echoed modern Christians' de-emphasis of the sanctity of the dead body, separating the notion of human spirit from matter. Yet these juristic pronouncements, generally uttered to pave the way for the use of autopsy and dissection for medical education and legal purposes, did not instigate wider social shifts in religious attitudes toward the dead: older ideas about the dead as sentient beings persist, as recent ethnographies make clear (Hamdy 2012; Hirschkind 2006; Mittermaier 2010).

Further, Muslim mores dictate the simplicity of funeral and burial services, which occur immediately after relatives and/or medical practitioners establish death. Indeed, in the *hajj*, or pilgrimage to Mecca, one of the five pillars of Islam, Muslims enter the pilgrimage site with no possessions other than the shroud-like wrap on their bodies. Both the pilgrimage and the simplicity of burial practices re-instantiate the Qur'anic tenet that no possessions—neither wealth nor lineage—can protect anyone from the fate of death or from accountability to God on the Day of Judgment.

In Egypt, therefore, unlike in North America and Western Europe, the excesses and exploitation of funeral parlors never proliferated such that 'donation to science' would enter as an ascetic or altruistic alternative, or as a way to spare surviving relatives of exorbitant costs. Further, whereas the United States and United Kingdom developed centralized and coordinated health services, with blood donation and transplant programs at least in principle equitably distributed and available to citizens, in Egypt, in the second half of the twentieth century the gap between rich and poor increased, and health care was stratified and privatized; public teaching hospitals' services are socially segregated, so that the poor receiving government-subsidized care receive different treatment in different spaces. In this context, Egypt has yet to develop a system for procuring medically useful cadavers that does not reproduce striking social inequalities. Nor is there any confidence-inspiring national program that would fairly distribute body parts for transplantation. In this context, the unresolved 'shortage' in cadavers in Egypt's medical education negatively affects medical students' encounters with medical corpses, and cadavers in Egyptian medical institutions continue to be negatively associated with criminality and exploitation.

#### CAN THE DEAD FEEL THE KNIFE?

In 1959, an Egyptian charitable organization for the blind asked the Grand Mufti of the Republic, Shaykh Hassan Ma'moun, whether Islam permitted the use of cadavers for therapeutic treatment. The major concerns were: Would the dead body feel the knife? Would religious prohibitions against defiling the bodies of the dead circumvent the use of cadaveric tissues for medical purposes? Is the intention behind the act of cutting into a dead body of foremost importance, or is it the act of cutting itself? If the bodily tissue was being used for a greater social good, would this outweigh the requirement of obtaining the deceased person's prior consent? What if a surviving family member refused?

The Grand Mufti, Shaykh Ma'moun, referred to earlier fatwas about the use of corpses for dissection for medial instruction. In these fatwas, it was stressed that the social benefit of using the dead bodies outweighed the harm involved in desecrating the dead body, but that doctors should first consult with family members and ask their permission. The Mufti also referred to a Prophetic teaching: that the Prophet Muhammad had rebuked a grave-digger for crushing human bones at a burial site to make room for a new grave. Shaykh Ma'moun's fatwa distinguished between such acts of desecrating the dead and that of procuring eyes from the dead. Procuring eyes for medical use, the Mufti wrote, was not an act based on ill-intent or neglect, but on the hope of helping another person and wider society. Thus doctors were permitted to procure the eyes upon the consent of the surviving family members.

Ophthalmologists at the time disagreed with Mufti Hasan Ma'mun—although never explicitly or publicly—over the issue of consent. For the Egyptian ophthalmologists, the attitudes, customs, traditionalism, and ignorance of their patients was the biggest impediment to treatment. It was unthinkable for many of them to ask surviving family members to allow the bodies of their loved ones to be tampered with. They did not entertain hopes in dialogue or raising awareness; the cultural gap, they assumed, was simply too wide. Further, the eyes had to be fresh, taken within a six-hour framework from death, and the practicalities of establishing consent were rendered simply impractical and unnecessary within a strongly paternalistic medical context that systematically ignored poor patients' wishes and beliefs about their own bodies and medical treatment (Hamdy 2012).

From the early 1960s, therefore, Egyptian ophthalmologists secretly practiced cornea grafting—informally using tissues obtained surreptitiously from hospital morgues. In the mid-1980s, donations from Saudi Arabia and the United States made possible the establishment of eye banks in Cairo's public teaching hospitals, with a refrigeration system enabling corneas to be preserved and available for grafting rather than relying on fresh corpses from the hospital morgue. With the establishment of the eye banks, there was supposed to be a framework under which corneas were procured with consent, either of the donor before death or of the surviving family members. Egyptian ophthalmologists again decided that this was culturally impractical and continued to carry out cornea transplants, up to 1000 per year in the Cairo teaching hospital of Ain Shams University, without the family members' knowledge. The procurement of corneas from the public hospital morgues went largely unnoticed, and former hospital staff members told me of cases in which samples were also shipped to private practices domestically and abroad to Gulf countries.

In the 1980s, along with Sadat's and Mubarak's loosening of economic trade restrictions and alignment with US foreign policy, restrictions on the press loosened as well. In the 1980s and

1990s, opposition party papers started exposing the black market in kidneys in Cairo and the theft of eyes from the public hospital morgues. These reports reached their height in the mid-1990s and the Cairo district attorney ordered the eye banks to be shut down. With no public hospital operations, private clinics working with imported cornea grafts could now monopolize the space of operation, giving physicians and Egyptian state officials little incentive to change the status quo.

Rather than acknowledging errors in cornea procurement practices, ophthalmologists turned their blame onto the Egyptian population for refusing to consent to cornea procurement. But there was never a time when the Egyptian population was offered a well-functioning, fair, and noncorrupt public health system into which patients would consent to donate body tissues or organs after death. There is little or no accountability in Egypt's elitist profit-oriented medical system, in which wealthy private-paying patients may be the recipients, but not the likely sources of organs or tissue grafts. With a thriving black market in human kidneys and liver lobes that was detailed in the opposition party press since the mid-1980s to further expose the corruption of the Egyptian state, it was a tough sell on the public to donate the bodies of their dead in 'good will.' There was no evidence of a functioning medical system that treated patients fairly, let alone one that would harvest and distribute their organs equitably.

After the eye banks were ordered to be closed by the district attorney, physicians expressed their frustration with low supplies, knowing that they could help more patients if more corneas were available. They solicited support from Shaykh Tantawi, then the Grand Mufti, blaming what they called the 'religious obstacle' as standing in the way of restoring sight to blind patients, many of whom were poor. Tantawi eagerly took on this role. In addition to repeated performances on state television, he also publically donated his own body and organs. In a national public health campaign started in the late 1990s to promote cornea donation, Tantawi's donor card—with the '#1' on it to show that he was the very first Egyptian citizen to sign up—was reproduced and published in the state newspapers. Tantawi had only to repeat what he had been saying for the past 20 years: that the body would soon be eaten by worms, whereas the noble soul would be indefinitely rewarded by God with the generous gift of donation. Both Tantawi and Egyptian ophthalmologists drew on the language of scientific and civilizational progress as markers of 'correct' Islamic belief.

Neither these earlier ophthalmologists nor Shaykh Tantawi acknowledged or addressed the rampant corruption in the Egyptian public health system in which the bodies of the poor in public hospital morgues were the disproportionate sources for medical use. When asked directly about this, Shaykh Tantawi replied simply: "If there is a wrongdoer or criminal at fault, take him to jail!" Such an easy answer that presumed the fairness and efficiency of the legal and criminal justice system in Egypt, or the accountability to which Egyptian health care practitioners could be held, simply defied people's everyday experiences with Egypt's deeply flawed medical system.

When Shaykh Tantawi was solicited to present the official view of 'Islam' and to promote organ and tissue donation among the Egyptian population, he spoke of how the body was insignificant as compared to the value of the inner human soul. In doing so, he elided the social relations and obligations that many Muslims feel toward the dead. By refusing to engage with the dead in material terms, this stance effectively promoted a complete divorce between matter and spirit, such that the 'spirit' of the person is connected not to the body but to the intangible accrual of the rewards of her charity. The dead body, Tantawi stated, will "turn to dust in a matter of days"; this statement not only diminished its materiality—it generally takes longer than a few days for

a human corpse to disintegrate—but also dismissed its social and religious significance. The limitation of Tantawi's stance is not the rendering of bodily donation as charity; it is the elision of the bodily sacrifice that is necessary to materialize this charity. By refusing to acknowledge the value of the material body in death, Tantawi further alienated many Egyptians for whom bodily donation is not easy, despite the potential for spiritual rewards. Shaykh Tantawi argued that to focus on minutia such as the holism of the body, or mortuary rituals, was a narrow-minded and ignorant interpretation of the shari'a, which holds that God, the omnipotent, can will anything. Surely, he argued, God can transition the soul to the afterlife with or without the corneas! And surely, he insists, God can resurrect the body intact.

Yet as Charles Hirschkind has shown, many Egyptians, some more or less self-consciously enlisted in a larger project of Islamic revivalism, believe that "an experiential knowledge of death is a condition of moral agency" (2006:174). Further, as Hirschkind put it, "The task of acquiring this agency has been rendered increasingly difficult by the gradual effacement of death—in all its sensory dimensions—from public life within the modern metropolis and by the assumption of ever more responsibility for the dying by secular bureaucracies of medical expertise" (2006:174). People feel a moral responsibility to carefully wash the body—right side and then left, as in washing for ablutions before prayer—and to perfume, wrap, shroud, bury, and ritually pray for the dead. Performing these duties, family and community members are supposed to both respect the dead and experience moral edification for their own lives. The Muslim traditions—including the Prophetic example—teach that remaining attentive socially and bodily to the dead can bring people closer to an embodied recognition of their own mortality and to God's final accounting. This recognition is understood among many Muslims to be essential to leading a virtuous life.

Many health practitioners also described the dead as yet another segment of society vulnerable to exploitation and mistreatment. As one nurse in Tanta University's Eye Department put it to me:

It's not right for someone to take the body and just go in and take his cornea. It's not right to say that just because he is dead, now he does not feel. You know, when we wash the body, even if a single hair comes off we take it and gently put it back with the body to be buried. . . . If I am alive and I want to give my kidney to someone so he can get better, then this is fine. But it is not right for them to take it from us just because I'm now dead. This is wrong. To take the body and cut it up and to take from it what they want is wrong.

This nurse articulates a sentiment that many others expressed as well. God will reward them, they believe, for their intentions to enact their duties toward the dead, so how can others deem their beliefs 'ignorant'?

One hospital administrator, Hala, who worked in a public eye hospital, told me:

The family is not going to let the eye be taken. While they stand by the dead person, they won't let a tiny piece of the pinky finger be touched. You should see someone from the morgue. Egyptians are always like that. They are always afraid that they [hospital workers] are going to steal their bodies.

And they did! They used to steal the corneas. . . . They were stealing part of the body, all the while the most important thing for the family members is for him to be buried properly.

Hala points out that if anyone touched or mistreated the dead body, this form of personal injury would not only hurt but enrage the surviving family members. The dead, many of whom suffered illnesses, devastation, or accidents, could now finally rest in peace—but only when properly cared

for. Family members describe their duty to remain vigilant, to care for the body, to prevent any more unnecessary suffering.

In this understanding, mishandling of the dead by hospital staff represents an egregious attack on the most vulnerable members of society. Yet in their all-out disapproval of the concept of organ donation, they left unclear whether there was something intrinsically unethical about donation after death, or whether it was conditional, given the present medical system. One overworked laborer, raising four young girls, answered my questions about cornea donation with a look of utter weariness, "When I die? Even after I die, they still want to take from me?!" There was an underlying exhaustion in his remarks, hoping for a more restful and peaceful afterlife, but apprehensive that this aim could be disrupted, presumably by the same forces rendering his life on this earth so arduous. These remarks recall anthropologists Julie Chu's and Jean Langford's suggestions of a bare *after* life, the stripping of political and material rights for the dead, denying them the social and material debts of the living (Chu 2010; Langford 2009).

### A NEW WAY FORWARD: THE 2011-2012 CORNEA DONATION CAMPAIGN

The revolutionaries, calling for a cornea donation campaign seemed largely unconcerned by past failed attempts to do that same thing. When some of the initiators of the Eyes for Dignity campaign appeared on television, they responded to the reporters' questions about their 'Islamic jurisprudential credentials' by simply stating that it was commonsensical that a personal sacrifice for the betterment of someone else was praise-worthy. For example, on the television show Nass-Book, on January 2, 2012, the host Hala Sarhan asked Gameela Isma'il, another talk show-host and prominent revolutionary, her opinion: "Is it not the case that we will have to ask the Islamic legal authorities for their blessing?" Gameela Isma'il responded, "With all my respect and admiration for the Islamic scholars and their field of expertise, I think it is clear that God would be pleased by the action of someone who gives generously with the intention to help another person." To this Ms. Sarhan and her other guests, including physicians, nodded enthusiastically. 12 As they spoke, the camera focused on images of Dr. Ahmed Harara before and after the loss of his second eye. In January 2012, there was still a sense of revolutionary change in the air, and those who had aligned themselves with the revolutionaries' aims no longer saw the need to even perform their deference to state-appointed religious authorities. In another segment on the channel Al-Tahrir, initiators of the campaign from the April 6 Youth Movement alluded to having found a fatwa from Dr. Yusuf Qaradawi, a long-exiled Islamic legal scholar based in Doha, Qatar, that approved cornea donation. They made no mention of the fatwas issued by the state institution Dar al Ifta' that had long permitted cornea and organ donation.

Had the revolutionaries turned to the state records of fatwas, they would have found that the first fatwa on the donation of eye tissue, issued in 1959, also judged cornea donation to be a praiseworthy *and voluntary* act, even if Egyptian ophthalmologists did not institute a process of ensuring patients' and family members' consent. The revolutionaries involved in the 2011-2 cornea donation campaign were aware of the shortcomings of the Egyptian medical system and had visions of revamping it. They thought it feasible, with the right intentions and work, to create a medical system that could procure and distribute tissues and organs fairly, and these types of concrete ambitions drove their political actions. Activists narrated the risks they took and sacrifices they made in terms of their faith in God, although they did not mark their movement as

explicitly 'Islamic', nor did they regard the realm of Islamic law as a possible stumbling block. The Eyes for Dignity campaign was launched, simply, as an inclusive call for a better tomorrow.

In the violence on the streets of Muhammad Mahmoud, adjacent to Tahrir Square, in November 2011, hundreds of unarmed protesters facing militarized police were killed or permanently disabled. The language of martyrdom and sacrifice helped solidify people's convictions that they would be rewarded by God by donating their bodies after death. The sacrifice of the body, in all its material fleshiness, could not be denied or deemed insignificant in a call that was aimed to address this very sacrifice: protesters had lost eyes for the cause; their lives were forever changed. The cornea donation campaign not only acknowledged the bodily sacrifices of the revolutionaries: it sought to *continue* from where they left off. Supporters of the campaign spoke of the capacity of the dead body to continue to fight for the cause of justice as a metaphor for the revolution itself. Thus, while the revolutionary uprising was dealt a serious blow in November 2011 at the hands of security forces, proponents of the campaign willed for hope to live on through the spirit of the martyrs.

On January 4, 2012 the television host Dina Abdel-Rahman, on a news program on the newly-formed revolutionary satellite channel Al-Tahrir, featured two members of the April 6 Youth Movement, Sara Falaky and Kareem Fareed, who spoke in precisely this way about the cornea donation initiative. When Ms. Abdel-Rahman asked Kareem about the idea of the cornea campaign, he stated:

In the battle of the streets of Muhammad Mahmoud in particular, it felt like we were being annihilated. It was very intentional on their part – there were many eye injuries particularly during the Muhammad Mahmoud street events. So it was like: our numbers are decreasing. The injured aren't getting treated. The government and the military treat the injured as though they are just a list of numbers. No one tries to treat the injured; and for the poor who don't have the means to pay, they are forgotten. Nobody remembers them . . .

I know that I could die at any moment. I know that I could be on this list of martyrs at any moment. But when I'm a number, I don't want to be a nameless number that is forgotten. I want to be a number that allows someone else in my place to continue from where I left off. Someone else – who lost the ability to see – will now be able to see because of me, and will then be able to take my place in the struggle.<sup>13</sup>

In another example from a protester, a young man named Abdel Aziz, who lost one of his eyes in the street violence, explained: "I gave all the life from my eyes to my country, but I was doing the best I could for Egypt. Even if all the military tanks ran over my body, even if I died, I would still continue the revolution" (cited in McTighe 2012).<sup>14</sup>

The notion that beyond death, one can still give and struggle on the side of good, demonstrates that support for the Eyes for Dignity campaign launched by the activists did *not* hinge on a reconceptualization of the dead as immaterial or insignificant. On the contrary, a notion of purpose and sacrifice *even beyond death* can re-instantiate the call for bodily donation. On television and throughout the internet, activists launching the campaign called on others to sacrifice something meaningful to those who had sacrificed for them.<sup>15</sup>

Unlike in 1959, when the Mufti stated that consent to use the dead body should have been given by the person in his lifetime, or by his surviving family members, by 2011-2 there was widespread support for a 'donor list' or 'registry' to which one could sign up during life. People were also willing to donate during the protests because the potential recipients were not abstract

or anonymous – a situation which could elicit mistrust as to what the hospital workers would *really* do with the body parts. The bodily donation, in this case, need not carry the 'unbearable burden' of a fundamentally un-repayable gift (Fox and Swazey 1992, Lock 2002, Sharp 2006). Rather, to donate the eyes was already a repayment of the sacrifice made by the blinded protesters, made famous by the symbolism of the revolutionary eye-patch (Tomlin 2011).

As the eye patch became associated with the figure of the revolutionary, solidarity with the blind was itself a revolutionary act. <sup>16</sup> For example, on December 1, 2011, a young group of activists gathered in front of Kasr el Aini Teaching Hospital, the oldest and largest hospital affiliate of Cairo University Medical School, which had initially received the largest number of wounded protesters due to its proximity to Tahrir Square. <sup>17</sup> Their aim was to raise awareness of the eighty protesters who had lost their eyes during the recent protests. The activists marched to the Kasr el Nil bridge wearing eye patches in solidarity with the injured protesters, chanting: "Down, down with military rule" and "The military took my eye!" <sup>18</sup> (See Figure 3)

In their call for a new cornea donation campaign, the revolutionaries drew on the inclusionary rhetoric of human dignity, rather than the potentially exclusionary language that narrowed only one specific 'correct' religious interpretation. In earlier state-orchestrated campaigns for cornea donation, the language of the state-appointed muftis and the elite Egyptian doctors had dismissed those unwilling to donate their bodies upon death as 'ignorant' in their religious views. Their opponents in turn attacked this position as 'sinful' in its tampering of the dead. In contrast, the 2011-2 revolutionaries' cornea donation campaign left open the questions of what specifically the dead body can feel, experience, or of what meaning the dead body serves to its surviving relations. This allowed for a wide range of possible interpretations about the experiences of the dead that are possible within the Islamic tradition. I have listed these in the following table (Table 1).

In the end, the movement for cornea grafting fell apart and never realized its goal of providing restorative operations to those blinded during the uprisings. The youth were able to mobilize



FIGURE 3 Photograph by Amira Ismail, Egypt Independent; the white writing on the woman's black blindfold spells the name "Ahmed Harara."

TABLE 1

Muslim Positions on the Use of Dead Bodies	Opposition to Donation (1800s to Present)	Shaykh Hassan Ma'moun 1959 Fatwa	Shaykh Tantawi Fatwas (1990s to Early 2000s)	Revolutionaries 2011–2012
Can dead bodies be used medically?	No	Yes	Yes	Yes
What about consent?	Consent is impossible	Consent is required	Consent is impractical and unimportant	Consent is required, possible, an act of solidarity
Main concern	Hurma (dignity, inviolability of the dead)	Hurma	Well-being of the living	Justice for the "living martyrs"
Goal	Protect rights of the dead	Well-being of the living	Advance science, well-being of the living	Social equality, justice, dignity
Can the dead feel?	Yes	Ambiguous	No	Ambiguous

people to agree to the idea, but they were not able to establish, with their list of willing donors, a functioning public eye bank. Galal Amer, the satirical writer who was one of the initiators of the online movement, died shortly after of cardiac failure. The uprisings initiated a euphoric optimism among the revolutionaries – hope that they could usurp state institutions and reform them from within. In this, there were some successes. For example, they were able to pressure and reform the Emergency Medical Transit System. During the 18-day occupation of Tahrir Square, having experienced how ambulances had not taken the injured to hospitals, but rather delivered them to police stations for punishment, revolutionaries insisted on their reform; this was accomplished during the brief interim of Health Minister Amr Helmy. In another successful example, revolutionaries caught on video images of Central Security Force officers shooting at unarmed street protesters. <sup>19</sup> In one such video, a comrade slaps his higher ranking officer on the back and congratulates him for "getting it right in the eye!" (Spencer 2011). From a freeze-frame of the footage, they stenciled the officer's image on Cairo graffiti, dubbed him the 'Eye Sniper', and offered a 500 LE reward to whoever could identify him. He was identified within days, and the delivered to court, where he was prosecuted and committed to serve three years in jail (Spencer 2013, Kingsley 2013).

Yet the euphoric movement to capture and reform state institutions proved more difficult for public *medical* institutions, and this would require longer-term sustained reform and resources. It takes much more than a list of willing donors and cries of solidarity to instantiate a national functioning eye bank within Egypt's existing public medical institutions. For decades, medical physicians had rhetorically blamed the lack of functioning public eye banks on Egyptian 'ignorance' and 'reluctance' to donate the bodies of the dead. An unintentional success of the revolutionaries' efforts – one that should not be overlooked – was in refuting this narrative.

### CONCLUSIONS

So what is the Islamic position on using body parts of the dead for medical treatment? This question took on urgency in Egypt's period of state violence, particularly against the scores of protesters who sustained eye trauma and injuries at the hands of the riot police. Might their eyesight be restored via cornea transplant if enough people agreed to donate? Many in Egypt were moved by the blinded protesters who had sacrificed their vision in their political opposition. With newfound political convictions, many responded to the new cornea donation campaign. In so doing, they formulated answers to previously unresolved questions about the medical use of human body parts (Hamdy 2012). The revolutionaries' call for cornea donation marked a change from earlier public antipathy toward state-orchestrated campaigns. This time, the call for donating corneas captured people's feelings of debt and solidarity toward those who had risked their lives and sacrificed their sight for the revolutionaries' demands for social justice, freedom, and human dignity.

Although the Egyptian official news media often depicted the debate over cornea and organ donation in terms of 'religion' vs. 'medicine', there was no space outside of either religious convictions or the materiality of medical practice for people to grapple with questions about cornea donation. Those who argued about the spiritual irrelevance of the dead body did so out of religious conviction *and* their understanding that it had medical value. People who vigilantly guarded the dying or recently dead bodies did so out of their religious beliefs that it was wrong to tamper with the dead *and* out of their deep mistrust of hospitals. When people disagreed about the correct Islamic position on the medical use of the dead for cornea grafts in Egypt, it was not because some were more or less religious, or because some were 'liberal' and others 'conservative'. And it was not because some were 'authentically' religious, and others were only manipulating religion to suit their given social situation. People's ideas about the dead are informed by religion *and* by the realities of medical practice. Religious belief and practice are contingent and dynamic; they are informed and shaped by the social political and economic contexts in which they emerge.

To complicate the secularist presumption that religion necessarily lies outside of the sphere of political economy and medical knowledge, I outlined three distinct perspectives in Egypt on the call to donate eyes of the dead for the purpose of medical treatment. The first position, espoused by the revolutionaries and echoing the earliest (1959) fatwa, is that the donation of a body part upon death should be a choice, and that ethical procurement necessitates securing consent from the surviving family members or from a living will of the deceased. The second position, espoused by the state-appointed religious scholars, is that it is a religious *imperative* to donate from the dead body if it will benefit others. The third position is that the dead must not be tampered with medically.

In interrogating the specific moral, spiritual, political, material, and medical understandings operationalized in each position, we can raise important questions about what it means to locate 'religion' as an explanatory mechanism for people's behavior and attitudes. Contemporary notions of 'the Islamic' are questioned, reified, circulated, and disputed. Each of these positions takes on radically different meanings and practices depending on the given political, economic, and medical conditions of the tissue procurement and distribution. The struggle for sight in Egypt's popular uprisings demonstrates the benefit of asking how 'religion' is operationalized, deployed and experienced, whether or not people themselves explicitly appeal to religion to explain or justify what they believe and do.

### **ACKNOWLEDGMENTS**

Soha Bayoumi first told me about the revolutionaries' campaign for cornea donation in 2012. Since that time, Soha provided me with numerous sources, interpretive insight, and encouragement as I developed my argument. Thanks also to A. Coleman Nye for helping me with sources. I am grateful to Liz Roberts and Ian Whitmarsh for their convening of an important AAA panel that prompted this special volume, and for their patience as I labored through the writing. I presented versions of this article at the Watson Institute at Brown University, the American University of Beirut, the University of California at Irvine, Stanford University, and the University of Connecticut. I am grateful for all the feedback I received from interlocutors there. I dedicate this article to Dr. Ahmed Harara, Dr. Talal Asad, and Dr. Soha Bayoumi, all of whom taught me to see Islam and Egypt in new ways.

#### **FUNDING**

I would like to express gratitude to the Greenwall Faculty Scholars Program in Bioethics for enabling the research and writing of this article.

#### NOTES

- That protestors' eyes were intentionally targeted is undisputed by the doctors who participated in the field hospitals, such as Tahrir Doctors. See also Eldaly et al. 2013.
- Harara said that he was hit by birdshot in the head, neck and right eye, and that shrapnel damaged his retina.
   See "Ahmed Harara, the blind hero of Egypt's revolution" by Agence France-Presse, November 28, 2011. http://www.thenational.ae/news/world/middle-east/ahmed-harara-the-blind-hero-of-egypts-revolution.
- 3. *Time* magazine named "The Protester" as the 2011 "Person of the Year." For *Time* Magazine's profile of Harara, see Hauslohner 2011.
- 4. See "Ahmed Harara, the blind hero of Egypt's revolution" by Agence France-Presse, November 28, 2011. http://www.thenational.ae/news/world/middle-east/ahmed-harara-the-blind-hero-of-egypts-revolution.
- 5. For ophthalmological reports about eye injuries sustained during the first intifada, see Balouris 1990, Jaouni and O'Shea 1996, and Jaouni and O'Shea 1997. Ophthalmological reports about eye injuries of the second intifada can be found in Lavy and Abu Asleh 2003 and Mahajna et al 2002. In 2006, a Jewish Israeli teenager who protested in solidarity with Palestinians against the apartheid wall was shot in the eye (Lis 2006), and in 2010, an American college student was shot in the eye for protesting in solidarity with Palestinians against Israeli attacks of the Gaza humanitarian flotilla (Klein 2010).
- The Turkish Medical Association reported that 11 people lost their eyes in the Gezi park protests, cited in Aciksoz 2014.
- Atibaa' 'uyun al-thawra: in Arabic, the wordplay yields a double entendre: that they are both eye doctors who are
  part of the revolution, as well as doctors whose eyes are on the revolution.
- There were different Facebook pages dedicated to this campaign; the main one was "uyun lil-karama: al-hamla al-qawmiyya lil-tabar` bil-qaraniyya ba`d al-wafaa li-salih musabiyy al-thawra"
- 9. Alaa Abdel-Fattah is a well-known pro-democracy activist, blogger, and software engineer who was a key figure in launching campaigns that led to the January 25, 2011 uprisings and occupation of Tahrir Square. He has been imprisoned and released from prison numerous times since 2006. Mona Seif, his sister, is a cancer genetics researcher and pro-democracy activist. Ayman Nour was a well-known political dissident and opponent of the Mubarak era and co-founder of the political party Al Ghad that challenged Mubarak in presidential elections in 2005. Gameela Isma'il, formerly married to Ayman Nour, is a former television news caster and also politician who co-founded the

- Al Ghad party, and after the uprisings helped found the political al-Dustour party. At the time of this cornea donation campaign, Gameela Isma'il was the host of a popular talk show host on the satellite channel Al-Nahar.
- Egyptian medicine generally follows the British model and, increasingly, also looks to U.S. medicine; since the time
  of British colonialism, the primary language of instruction has been English.
- 11. Performing these rites for the dead in fiqh is an example of al-fard al-kifaya meaning that an individual is not required to perform it as long as there are sufficient members of the community who can take it up (like with medicine, or Qur'anic edification). This is in contrast to al-fard al-'ayn a duty incumbent on every individual Muslim, such as daily prayer, or performing the pilgrimage to Mecca.
- 12. https://www.youtube.com/watch?v=fMSadTJXEg4
- 13. https://www.youtube.com/watch?v=FcmVg67mHQE
- 14. http://www.nytimes.com/2012/07/05/world/middleast/05iht-m05-egypt-blind.html?\_r=0
- 15. To be clear, I am not arguing that the 2011-2 cornea donation campaign necessarily invoked the idea of a sentient or even active dead being, but rather that it allowed space for it. In the same television segment with Dina Abdel Rahman on January 6, 2012, Nour Ayman Nour said, in contrast, that donating the corneas in death was not really a sacrifice, because the person is already gone.
- 16. Graffiti featuring protestors with single-eyes or eye-patches can be seen here http://www.360cities.net/image/mohamed-mahmoud-graffiti-wall-cairo?utm\_source=facebook.com&utm\_medium=link\_preview\_gadget&utm\_campaign=clickback#-4.69,-7.24,58.0
- 17. This particular group referred to themselves as "Meya Silmiyya," meaning a 100-person strong peaceful [movement]. Like many of these upstart political groups most active during the November-December 2011 violence between activists and riot police, the group's activities soon faded. https://m.facebook.com/meyasilmeya?refsrc=https%3A%2F%2Fwww.facebook.com%2Fmeyasilmeya&\_rdr
- 18. http://www.egyptindependent.com//news/eye-patched-protesters-march-solidarity-those-who-lost-their-eyes
- 19. See Lavey and Abu Asleh 2003 on the use of rubber bullets and ocular trauma in Occupied Palestine.

### REFERENCES

Aciksoz, S. C.

2014 Terrorizing medics: Atmospheric violence and medicalized resistance. Paper presented at the Clinic in Crisis Symposium, Brown University, Providence, RI, May 7–9.

Al Wafd newspaper, July 12,

1989

Balouris, C. A.

1990 Rubber and plastic bullet eye injuries in Palestine. The Lancet 335(8686):415.

Chu, J. Y.

2010 Cosmologies of Credit: Transnational Mobility and the Politics of Destination in China. Durham, NC: Duke University Press.

Cohen, M. A.

1985 Plastic bullet injuries of the face and jaws. South African Medical Journal – Suid-Afrikaanse Tydskrif Vir Geneeskunde 68(12): 849–852.

Eldaly, M. A., M. A. AbdelHakim, R. S. Zaki, and A. F. El-Shiaty

2013 Eye trauma during the 2011 Egyptian revolution. Graefe's Archive for Clinical and Experimental Ophthalmology 251(3): 661–665.

Fox, R.C. and J. P. Swazey

1992 Spare Parts: Organ Replacement in American Society. NY: Oxford University Press.

Germent, A., S. Lederer, N. Rogers, and L. Boult

2007 Let the dead teach the living: The rise of body bequeathal in 20<sup>th</sup>-century America. Academic Medicine 82(10):1000–1005.

Hamdy, S.

2005 Blinding Ignorance: Medical science, diseased eyes, and religious practice in Egypt. Arab Studies Journal. Fall: 26–45. 2012 Our Bodies Belong to God: Organ Transplants, Islam, and the Struggle for Human Dignity in Egypt. Los Angeles: University of California Press.

Hauslohner, A. 2011 Why I Protest: Ahmed Harara. Time Magazine Online. Dec. 14. Accessed from: http://content.time.com/time/specials/packages/article/0,28804,2101745\_2 102138\_2102236,00.html

Hirschkind, C.

2006 The Ethical Soundscape: Cassette Sermons and Islamic Counterpublics. New York: Columbia University Press. Jaouni, Z. M. and J. G. O'Shea

1996 Civilian eye casualties in East Jerusalem and the Occupied Territories. Medicine, Conflict and Survival 12(2): 138–148.

1997 Surgical management of ophthalmic trauma due to the Palestinian Intifada. Eye 11(3): 392–397.

Kingsley, P. 2013 Eye Sniper of Tahrir Square is in Jail, but has anything changed? The Guardian. March 6. Accessed from: http://www.theguardian.com/world/shortcuts/2013/mar/06/eye-sniper-tahrir-egypt-jailed

Klein, N. 2010 Blinding the Witnesses. Huffington Post 4 June. Accessed from: http://www.huffingtonpost.com/naomi-klein/blinding-the-witnesses\_b\_600773.html

Langford, J. M.

2009 Gifts intercepted: Piopolitics and spirit debt. Cultural Anthropology 24(4): 681–711.

Lavy, T. and S. Abu Asleh

2003 Ocular rubber bullet injuries. Eye 17(7): 821–824.

Lis, J. 2006 Youth, 17, says shot in the eye by border police officers. Haaretz, Feb 25. Accessed from: http://www.haaretz.com/news/youth-17-says-shot-in-the-eye-by-border-police-officers-1.181116

Lock, M. M.

2002 Twice Dead: Organ Transplants and the Reinvention of Death. Berkeley, CA: University of California Press.

Mahajna, A., N. Aboud, I. Harbaji, A. Agbaria, Z. Lankovsky, M. Michaelson, M. M. Krausz, and et al

2002 Blunt and penetrating injuries caused by rubber bullets during the Israeli-Arab conflict in October, 2000: A retrospective study. The Lancet 359(9320):1795–1800.

McTighe, K. 2012 Egypt's revolution enters a new phase. New York Times 4 July. Accessed from: http://www.nytimes.com/2012/07/05/world/middleeast/05iht-m05-egypt-blind.html?pagewanted=all&\_r=0

Mitchell, T.

1991 Colonising Egypt. Berkeley, CA: University of California Press.

Mittermaier, A.

2010 Dreams That Matter: Egyptian Landscapes of the Imagination. Berkeley, CA: University of California Press. Richardson, R.

2000 Death, Dissection, and the Destitute. Chicago, IL: University of Chicago Press

2006 Human dissection and organ donation: A historical and social background. Mortality 11(2): 151-165.

Rocke, L.

1983 Injuries caused by plastic bullets compared with those caused by rubber bullets. The Lancet 321(8330): 919–920. Sappol, M.

2002 A Traffic of Dead Bodies: Anatomy and Embodied Social Identity in Nineteenth-Century America Princeton, NJ: Princeton University Press.

Sharp, L. A.

2006 Strange Harvest: Organ Transplants, Denatured Bodies, and the Transformed Self. Berkeley, CA: University of California Press.

Shultz, S. M.

1992 Body Snatching: The Robbing of Graves for the Education of Physicians. Jefferson, NC: MacFarland and Company, Inc.

Smith, J. I. and Y. Y. Haddad

2002 The Islamic Understanding of Death and Resurrection. Oxford, UK: Oxford University Press.

Spencer, R. 2011 Egyptian police officer to be questioned over shooting protesters' eyes The Telegraph November 29.

Accessed from: http://www.telegraph.co.uk/news/worldnews/africaandindianocean/egypt/8923929/Egyptian-police-officer-to-be-questioned-over-shooting-protesters-eyes.html

- Spencer, R. 2013 Police sniper who blinded protesters jailed. The Telegraph. March 5. Accessed from: http://www.telegraph.co.uk/news/worldnews/africaandindianocean/egypt/9910613/Police-sniper-who-blinded-protesters-jailed.html
- Tomlin J. 2011 How eyepatches became a symbol of Egypt's revolution. The Guardian 18 Dec. Accessed from: http://www.theguardian.com/world/shortcuts/2011/dec/18/eyepatches- egypt
- Wright, R. The Eyes of Tahrir. The World Post. January 24, 2014. Accessed from: http://www.huffingtonpost.com/robin-wright/the-eyes-of-tahrir\_b\_1223641.html?