

I DON'T NEED IT, YOU CAN HAVE IT: MOTIVATIONS FOR WHOLE BODY
DONATION

THESIS

Presented to the Graduate Council of
Texas State University–San Marcos
in Partial Fulfillment
of the Requirements

for the Degree

Master of ARTS

by

Hilary M. Martinez, B.S.

San Marcos, Texas
May 2013

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Committee Members Approved:

Emily K. Brunson, Chair

Daniel J. Wescott

M. Katherine Spradley

Approved:

J. Michael Willoughby
Dean of the Graduate College

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ACKNOWLEDGEMENTS

I would like to thank my advisor, Dr. Emily K. Brunson, for providing the opportunity to study medical anthropology. It is not the path I foresaw myself taking, but I am so glad that I did. Medical anthropology completes the gap in my educational experience I did not know was missing. Thank you for picking me. Thank you as well to my thesis committee, Dr. Daniel J. Wescott and Dr. M. Katherine Spradley, for greatly assisting my research. To my family, thank you for your continued support and guidance. I have always had the biggest, and loudest, group of cheerleaders. And to Monica, thank you for willingly putting up with me; I am so thankful I did not have to go through this thing called “grad school” alone.

Most of all, thank you to the participants of this research project. I am incredibly grateful to have worked with the nicest, most helpful group of people I have had the pleasure of meeting. Thank you for your willingness to speak with me. I hope this research informs you and brings the importance of your experience to light.

This manuscript was submitted on April 1, 2013.

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CHAPTER 1

In the United States, there are more commercially available options for the disposition of a body than ever before. Whole body donation is one of these options. However, there is minimal research on the experience of those who intend to donate their own bodies or have donated the bodies of their loved ones and the context in which they make this decision. This research sought to analyze the motivating factors when choosing to participate in whole body donation by conducting semi-structured interviews with donors to the Forensic Anthropology Center at Texas State University-San Marcos (FACTS). This chapter will detail the history of body donation and its current state.

History of Body Donation

Historically, interest in body donation traces its roots to the increased interest in human anatomy in Europe in the beginning of the 19th century, which coincided with medical schools beginning to use cadavers as teaching material to promote “better doctoring” (Richardson 2000:XV). As this interest grew, so did the demand for anatomical material. Because there were more students than available cadavers, some medical schools would waive the tuition if a student supplied their own cadaver to dissect (Richardson 2000:54).

The Anatomy Act of Britain, enacted in 1832, was the first of its kind. Before its passage, those convicted of murder in Britain were not only denied a funeral but could be given a post-mortem punishment of dissection by a surgeon or anatomist (Richardson 2000:35–36). The Anatomy Act allowed the government to coerce those who could not afford funerals, such as impoverished factory workers, to donate their bodies to anatomists for distribution to students. The legality of this coercion promoted frequent instances of forced confiscation of bodies, also known as “body-snatching.” Richardson notes, “What had for generations been a feared and hated punishment for murder became one for poverty” (2000:XV). The Anatomy Act of 1832 remains the basis for similar legislation allowing for the donation of bodies enacted in the majority of the world as well as in many states in the United States (2000).

During this same time, the field of anthropology was also gaining popularity in European society. Those interested in the field joined “societies.” The *Societe d’Autopsie Mutuelle* (Society of Mutual Autopsy), founded in 1876, was one of several anthropological societies based in Paris (Hecht 2003). Members wished to further the field of anthropology by pledging to perform autopsies on each other upon their deaths. Famous members of the society include Paul Broca, Arthur Conan Doyle, Maria Montessori, and Adolphe Bertillon. In describing his allegiance to the society Bertillon stated, “To be useful has always seemed to be the most beautiful goal in life” (Green 2008:40). Although these societies ultimately slipped into obscurity, it is important to note their strong belief in the fact that the human body can be used to provide important information to society.

Similar interests in the utility of donated bodies for medical schools took place in the United States. However, until the 1968 implementation of the Uniform Anatomical Gift Act (UAGA) legislation concerning organ and body donation was nonexistent in the U.S. If individual states did regulate donations, one could not be sure that the same rules applied in another state. Furthermore, prior to the adoption of the UAGAs, medical schools utilized “unclaimed” bodies to meet teaching and research demands (Dalley et al. 1993:248). However, as in 19th century Europe, the demand was larger than the supply. Dalley et al. note that by the middle of the 20th century there was increased recognition of the utility of the body and its parts, especially the newly emerging field of organ donation. Dead bodies and their organs were viewed as educationally and medicinally beneficial as they had the ability to prolong life (1993).

Although the UAGA provides guidelines for organ and body donation and is implemented in some form in each state, there is not a national board regulating willed body donations. In Texas, willed body donations are overseen by The Anatomical Board of the State of Texas. Formed in 1989, the board oversees and regulates the use of donated bodies as well as providing a means for accrediting and regulating facilities using donated bodies to ensure donations are treated in a respectful manner (1989).

It is significant to note that as the demand for anatomical material increased, so did the cost of funerals (Roach 2003). As of June 2010, the Texas Funeral Service Commission (TFSC) estimated that the average cost of a funeral in Texas was \$6,900.00. This does not include the outer burial container or the opening and closing of the grave. The national average cost is higher at \$7,323.00 (Texas Funeral Service Commission 2010:6–7).

Jessica Mitford's controversial 1963 book, *The American Way of Death*, expanded on this concept by detailing systematic instances of fraud prevalent in funeral homes throughout the country. Her landmark research on the topic exposed the financial burden many families faced when deciding what to do with the body of a loved one. *Time Magazine* even noted the coinciding of these events in a 1972 article (60). The article details two benefits whole body donation to medical schools provides for donors: a sense of altruism and the alleviation of a financial burden for loved ones.

The increased prevalence of whole body donations to medical schools and other research facilities in the U.S. reveals a remarkably different view on death than the "punishment for the poor" viewpoint of the Anatomy Act of 1832 in Britain. The study of the change in Western conceptions of death over this time is filled with work from medical anthropologists, sociologists, physicians, and many other scientists. According to Sharon Kaufman, throughout history, dying has been conceptualized in various ways. It has been perceived as a powerful, inevitable event to one that must be controlled, to the current views of death as a dilemma complicated by advances in life-prolonging technology (2004). These events, along with the passing of the two versions of the UAGA in the U.S., provide the context for willed body donation programs today.

Current State of Willed Body Donations

Many states list the various institutions accepting donations in publications by their respective anatomical boards. Most willed body donations in the United States are associated with medical schools and medical research facilities. Forensic anthropological research facilities are few and far between, making this a lesser known option. Besides medical schools, medical research facilities, and forensic

anthropological research facilities, whole body donations can be made to educational exhibitions such as *Body Worlds* or *BODIES*.

The first anthropological research facility to conduct research on human remains was the Anthropology Research Facility at the University of Tennessee, Knoxville. This facility, famously known as “The Body Farm” began conducting research in 1980 under the direction of Dr. William Bass and provided another option for whole body donations besides medical research. Its purpose is to answer basic questions regarding decomposition of the human body. Once skeletonized, donated bodies become part of the William M. Bass Donated Collection where information is collected regarding age, sex, stature, and ancestry (Shirley et al. 2011).

The popularity of the facility increased with the release of the popular bestseller, *The Body Farm*, by Patricia Cornwell in 1994. From this point on, willed body donations to the Tennessee facility increased. Before the book’s popularity, the center relied heavily on unclaimed bodies from Medical Examiner’s offices in Tennessee (Bass and Jefferson 2007).

The Forensic Anthropology Center at Texas State University–San Marcos (FACTS) is an example of another anthropological research facility that receives whole body donations to conduct groundbreaking research on human decomposition processes, the postmortem interval, human skeletal variation, and forensic osteological methods (Shirley et al. 2011; Vass et al. 2002; Ousley and Jantz 1997; Mann et al. 1990). FACTS has been receiving donations since the establishment of the facility in 2008. The purpose of this research was to analyze the motivations of those who intend to donate their body or those who have already donated a loved one to FACTS.

Internship

The research discussed in Chapter 2 was supplemented with an internship at FACTS from May–December 2012. Interning at FACTS was essentially an exercise in participant–observation. In my time at FACTS I gained a better understanding of the donation process, the utilization of donations for research and teaching, and the importance of advancing forensic anthropological research.

I was able to assist in each stage of the donation process as well as perform other daily tasks and was part of a team that picked up donations within a 200 mile radius. Donations were then immediately transported to the Osteological Research and Processing Laboratory (ORPL) in preparation for observation of their decomposition at the Forensic Anthropology Research Facility (FARF). I assisted in documenting the state of the donations transported to ORPL and collected blood, hair, and nail samples. I also helped transport donations to FARF and placed them in a predetermined location.

Furthermore, by interning at FACTS I was able to learn the differences in terminology used to describe the process of becoming a donation. For example, terms like “processing,” “placing,” and even the addressing of the donor as a donation number were terms used by the FACTS staff and students. Living and next–of–kin donors described these terms using words like “cleaning,” “lying out in the field,” and of course, addressing themselves or their loved one by name. Being able to correctly correlate these terms allowed for a better understanding of donors’ perspectives and how they perceived their bodies and/or the bodies of their loved ones would be utilized as a donation.

In addition, the majority of the donors regarded the interview as a follow-up to registering their own body or donating the body of their loved one. Many had questions such as where to locate information on the FACTS website, how to arrange for transportation to FACTS, what types of questions could be answered by FACTS staff, etc. Interning at FACTS provided me with the insider knowledge to answer these questions or direct the participants to someone who could. I also was able to have access to people with the experience, knowledge, and willingness to answer questions of my own.

Interning at FACTS enriched my understanding of the scientific and cultural dimensions of forensic anthropology. I was given complete access to the donation process by FACTS staff and donors who were both eager and excited to facilitate my questioning. Due to their willingness to work with me, I gained a substantial amount of knowledge regarding modern cultural perceptions of death as well as the innovative field of forensic anthropology that continues to seek information benefiting scientific knowledge. I am grateful for the opportunity to have had such a multidimensional learning experience as well as for the opportunity to apply the results of my research to a wider, public setting.

The following chapter will discuss the purpose, findings, and implications of research on the motivations of those who intend to donate their bodies or have donated the bodies of their loved ones. This chapter is written in the style of a research article for the purposes of future publication in a research journal. The third chapter will describe the application of these findings using the results of the research to create surveys and a presentation for FACTS staff.

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CHAPTER 2

I Don't Need It, You Can Have It: Motivations for Whole Body Donation

Death is a biological surety experienced by all people. The decision of how to lay people to rest, however, is entirely based on culture. In the United States, the most common funerary practices are burial and cremation. Much less common is the practice of body donation to research facilities including anthropological research centers. Through semi-structured interviews with living donors (who intend to donate their bodies upon death) and next-of-kin donors (who have already chosen to donate the bodies of loved ones), this research sought to understand what motivates individuals to choose body donation. Analysis of interview texts indicated three primary motivations exist: an interest in the scientific process, a desire to be helpful, and a desire for an alternative to a traditional funeral. In addition, the analysis revealed that living donors were also motivated by the cost effectiveness of body donation, and next-of-kin donors by the desire to honor their loved ones' wishes. All of these motivations reflect current, cultural trends in end of life decision-making and also suggest a dichotomy between donors: those who can choose their method of disposition and those who must select the cheapest option.

Death is a biological surety. Everyone will encounter it. When and how dead bodies are disposed of, however, is based entirely on culture. In Madagascar, for example, the Malagasy wrap deceased loved ones in cloth and place them in familial tombs. During *famadihana*, a ritual honoring the loved ones, bodies are taken out of these tombs to attend feasts, be updated on recent events, and be embraced by family and friends (Larson 2001). In Tibet and parts of India, sky burial is practiced. In this method of disposition, the deceased are laid out for consumption by carrion birds including vultures. After removal of the flesh, the skeletal remains are pulverized in order to provide the birds easier access the bone marrow (Martin 1996).

In contrast, when death occurs in the United States, funerals are often promptly arranged. This requires family members, friends, or others involved to make almost immediate decisions as to how the bodies of their loved ones will be disposed of. In the U.S. today, several options exist for body disposition. The most common of these is embalming followed by burial (National Funeral Directors Association 2013). This method involves injecting the deceased with chemicals to stave off the decomposition process until, in traditional ceremonial fashion, the decedent is placed in a casket for burial in a cemetery. Cremation is the second most prevalent disposition method, it involves incinerating the body to ash which is then buried, kept in an urn, or scattered. There are also a variety of lesser utilized options including promession (where bodies are frozen in liquid nitrogen and then pulverized for utilization as compost), cryonics (where bodies are frozen in preparation for future revival), and memorial diamonds (the creation of synthetic diamonds from cremated remains), but these account for less than 1 percent of funeral practices in the U.S. (Texas Funeral Service Commission 2010:21).as

Another option is willed body donation, including willed body donation to medical schools, medical research facilities, educational exhibits, and forensic anthropological research facilities. Willed body donation is another example of a less common disposition practice, occurring in only 1.1 percent of all deaths in the U.S. (Texas Funeral Service Commission 2010:21). Donated bodies are utilized in medical schools to teach medical students gross anatomy; in medical research facilities to provide continuing education for medical professionals; and in educational exhibits, such as the *BODIES* exhibit, to teach the general public about human anatomy.

Body donation to such organizations is crucial. In terms of forensic anthropological research facilities in particular, donations offer important opportunities for research on topics including: human decomposition processes, the postmortem interval, human skeletal variation, and forensic osteological methods (Shirley et al. 2011; Vass et al. 2002; Ousley and Jantz 1997; Mann et al. 1990). This information is crucial for homicide, crime scene, and medicolegal death investigators responsible for identifying remains as well estimating how much time has elapsed since the death of an individual. Research conducted in these facilities contributes to building a more detailed biological profile (the estimating of ancestry, sex, height, weight, and other individual factors), the determination of time since death, and the identification of variables affecting the rate of decomposition (Shirley et al. 2011). Knowing why people donate their bodies or the bodies of their loved ones to these facilities and thus contributing to the research is an important topic. The purpose of this research was to analyze peoples' motivations for body donation.

The Process of Body Donation to FACTS

This research was conducted among donors to the Forensic Anthropology Center at Texas State University–San Marcos (FACTS). FACTS is a multifaceted forensic anthropological research, teaching, and outreach center associated with the Department of Anthropology at Texas State University. FACTS encompasses a body donation program, the Osteological Research and Processing Laboratory, the Grady Early Forensic Anthropology Research Laboratory, and the Forensic Anthropology Research Facility. The Forensic Anthropology Research Facility (FARF) is located in the Texas

Hill Country and is the largest outdoor human decomposition research facility of its kind.

FACTS has been receiving donations since the establishment of the facility in 2008. Body donations to FACTS are accepted provided the donations do not have an infectious disease (such as hepatitis, HIV, or tuberculosis) or an antibiotic-resistant infection (such as MRSA), and weigh less than 500 pounds. Although forensic anthropological research facilities allow a person to donate their body if they have donated organs upon their death, they do not facilitate the donation of organs. Donations to FACTS are picked up free of charge within a 200 mile radius of the center. For donations more than 200 miles away, funeral homes arrange for transport to the center by ground, or by air to Austin–Bergstrom International Airport where they are then picked up by FACTS staff (FACTS 2013).

Once donations are received by FACTS, they are transported to the Osteological Research and Processing Laboratory. It is here that donations are stripped of all clothing and personal items, assigned identification numbers, and photographed. Using a standard body diagram chart, FACTS staff document the placement of medical interventions, such as autopsy sutures, pacemakers and catheters, and record identifying features such as scars and tattoos. Blood, hair, and nail samples from the donations are also taken at this time.

Following this process, donations are transported to FARF and delivered to pre-selected locations. Ideal locations are free of remnants of previous donations and are relatively easy to access. Stakes indicating the identification numbers and the dates of placement are hammered into the ground marking the locations of the donations. In

some cases, cages are placed over the donations to prevent local fauna from scavenging. In other circumstances, however, donations are left uncaged so that the effects of scavenging fauna on the rate of decomposition can be measured.

After donations have been placed at particular locations, FACTS staff partake in daily observation of the longitudinal decomposition of the donations until they cease to decompose. Notes and photographs are taken to document variables such as the rate of insect activity, the extent of skin slippage, the progression of gaseous stages, the amount of bodily fluid secreted onto the ground, the pungency of odor, and the temperature and weather conditions each day. Most donations do not reach the point of skeletonization but in fact mummify due to the dry climate of the Texas Hill Country. Occasionally, donations are buried in preparation for a course educating anthropology students, as well as the law enforcement community, on the proper methods of locating, excavating, and analyzing buried human remains.

After thorough documentation of the stages of decomposition, donations are again transported to the Osteological Processing and Research Laboratory. Here, donations are disarticulated and then macerated to remove remaining flesh, tissue, and hair. This is called processing. If organic material remains after the maceration stage, staff remove this by hand and re-macerate the body, if necessary, to remove all remaining soft tissue. Skeletal remains are then dried and labeled with the donations' identification numbers and each bone is carefully analyzed. Once completed, the remains are transported to the Grady Early Forensic Anthropology Research Laboratory for permanent placement into the Texas State University Donated Skeletal Collection.

Methods

Data for this study were collected via semi-structured interviews with living donors (who intend to donate their bodies to FACTS upon death) and next-of-kin donors (who have already chosen to donate the bodies of loved ones to FACTS). These populations were recruited through a letter written and sent by the director of FACTS, Dr. Daniel Wescott. This letter informed donors about the purpose of this research and provided the author's contact information. Participants who were interested in participating then contacted the author for an interview.

Semi-structured interviews were conducted with participants both in person and over the phone. While in person interviews were conducted whenever possible, phone interviews were utilized in cases where the participants lived more than 100 miles away from FACTS. Topics discussed in both in person and phone interviews included what motivated participants to donate, what the process of donating was like, what the participants believed happened to bodies at FACTS, and their opinions after undergoing the donation process. Interviews typically lasted one hour. All interviews were audio-recorded and transcribed verbatim.

Content analysis was used to independently analyze the four interview groups: phone interviews with living donors, in person interviews with living donors, phone interviews with next-of-kin donors, and in person interviews with next-of-kin donors. In cases where a participant was both a living donor and a next-of-kin donor, each donation experience was analyzed separately. After preliminary analyses of the four groups were complete, it was apparent that there were no substantive differences between the phone and in person interviews, and only minor differences between the

experiences of living donors and next-of-kin donors. Because of this, subsequent analyses of the interview data resulted in only one coding list.

All participants in this research provided written consent prior to being interviewed (for participants involved in phone interviews written consent was obtained electronically over email). These procedures and all of the research described in this thesis were approved by the Texas State University Institutional Review Board (Application number 2012F6568).

Results

A total of 38 interviews were completed; 23 with living donors (14 in person and nine over the phone) and 15 with next-of-kin donors (four in person and 11 over the phone). Of the 23 living donors, 39 percent were female. The ages of living donors interviewed ranged from 30 to 82 years with a median age of 58. Twenty nine percent worked in the medical field, law enforcement, or forensic science, fields related to the research conducted at FACTS. Additional demographic information on living donors can be found in Table 1.

Of the 15 next-of-kin donors, 87 percent were female. The most common relationship of the interview participant to the donation was siblings (27 percent). Forty percent of the next-of-kin donors were employed in a field related to the research conducted at FACTS. For further details about the demographic characteristics of living donors, see Table 2.

The analysis of the interview texts revealed three primary motivations for body donation that existed for both living and next-of-kin donors: 1) an interest in the scientific process, 2) a desire to be helpful, and 3) a desire for an alternative to a

traditional funeral. In addition, the analysis revealed two additional motivations which were specific to each group. Among living donors, a fourth motivation was the cost effectiveness of body donation, and among next-of-kin donors, honoring their loved one's wishes was another primary motivation.

Interest in the Scientific Process

Many participants in this study indicated that they were motivated to donate their bodies or the bodies of their loved ones due to their interest in forensic science generally. For some donors, this interest arose through their employment in a field that utilizes forensic research, including homicide, crime scene, and medicolegal death investigation. For other donors, however, this interest developed through watching television programs such as *CSI* and *Bones*, documentaries including *Biography of a Corpse*, *Anatomy of a Corpse*, and *Body Detectives* (films about the Forensic Anthropology Center at the University of Tennessee, Knoxville on the National Geographic and Discovery Channels), and/or reading books such as *The Body Farm* and *Stiff: The Curious Lives of Human Cadavers*. Regardless of its origin, this interest led these donors to become interested in the possibility of donating their own bodies, or the bodies of loved ones, to a forensic research center such as FACTS. In this way, donation allowed these individuals to be a part of forensic science in a way that was previously not available to them, as one living donor explained “I read *The Body Farm* and so we were talking about it and I said, “Do they really exist?” and I found out that they had one in Knoxville, Tennessee and so I got really interested and did research on it and I got all the paperwork because I wanted to do that.”

Donors interested in forensic science stated they wanted the donation of their bodies to aid crime-solving. They commonly envisioned their donations as having a direct impact in the finding of missing persons and the identification of causes and manners of death, as one participant explained, “I just want to catch criminals. Maybe that’s what it is about the whole thing, I want to catch criminals.” Furthermore, these participants envisioned the donation of their bodies as contributing to the serving of justice, as another donor explained, “the only thing I know, and this comes from my TV education, is I guess that I can hope that justice will be served because of something that’s learned from our donation.”

A common theme among donors who were generally interested in forensic science was that they felt the research at FACTS is both exciting and innovative, as a next-of-kin donor stated, “I thought it was really exciting because I think that forensic aspects of, you know, dating death and learning about death through microbiology is really exciting.” These sentiments were seconded by a living donor who stated, “It’s actually a little adventurous, for me anyway. I think it’s cool that my body’s going to be rotting in a trunk somewhere. Maybe it’s the macabre aspect of it that is appealing.” This sense of excitement about donation was a key motivating factor for these donors. As one family member who donated her mother to FACTS stated, “My mother wanted to do this because she felt the donation would be like another season of CSI.”

For donors who were employed in fields that utilize forensic research specifically, including two living donors and two next-of-kin donors, motivations to donate stemmed from their belief in the usefulness of forensic research to their respective fields, including solving homicide cases and investigating crime scenes, as

one participant stated, “There is no better way for a crime scene officer to give back than to, you know, add to the science.”

The Opportunity to Be Helpful

A second common reason for body donation among both living and next-of-kin donors was that donors wanted their remains to be helpful, in other words for their deaths to have a continued purpose as a living donor stated, “I think it’s a wonderful idea. I mean instead of just letting [my body], you know, do nothing, it’s giving opportunities for people to learn things from it and to further education and to further science and that’s basically why I did it. I think it’s a wonderful opportunity to be able to donate to future education and to the future because somebody’s going to be using it.” These feelings were especially prevalent among people with professional backgrounds in education, specifically teachers and other types of instructors.

Other participants were motivated to donate their bodies and/or the bodies of their kin because they equated donating bodies with organ donation, as one living donor described, “Oh, I would say [FACTS staff] would pull out my main organs and I would hope that if my main organs are usable, they can be donated and used for somebody else. And, if not, they would be used for some further research and then my body, once all the major parts are kind of salvaged, then I’ll just be burnt up.” Furthermore, several of the living donors who felt this way also stated that taking care of their health is necessary to ensure their donation is acceptable and some even indicated that they have taken proactive measures to ensure their bodies are “prepared for donation.” These included keeping up with scheduled doctor appointments to ensure they, and their organs, are healthy enough for donation, as one living donor stated, “I just got back from getting my

eyes checked for diabetes, I have no diabetes in my eyes. So I have been checked out thoroughly because I am donating my body so maybe that would help [someone else], too.” The correlation of organ donation with body donation is a misconception on these donors’ parts. The distinction between organ and body donation was not understood by the donors in these instances.

Donation as an Alternative to a Traditional Funeral

While some donors interviewed in this study were motivated to donate their bodies and/or the bodies of their kin out of a desire to be helpful and/or they were interested in forensic science, other donors’ primary reason for donating was their dislike of traditional funeral practices in the U.S. These donors expressed negative opinions in their interviews about traditional methods of body disposition including burial and cremation, as one living donor explained, “on the more emotional level, even though I do recognize [my body] as a vessel and I won’t be aware of anything once I’m gone, the thought of being entombed in a box or put into a crematorium, not air conditioned [is just not acceptable to me].” Many of these donors were attracted to disposition in the “natural setting” in the Texas Hill Country as an alternative to traditional burial or cremation. One participant described her next-of-kin’s decision to donate as, “He felt like I had opened up some sort of Eden to him with this idea because we live out in the forest. And we love the forest.”

Along with this, some donors stated this preference arose from the view that they live an alternative lifestyle and therefore should choose a non-traditional method of disposing their remains, as another living donor stated while describing funerals, “I’ve

just always thought they were unnecessary, and you know I, I just thought that this kind of thing [body donation to FACTS] is just perfect for me and my line of thinking.”

Cost Effectiveness of Donation to FACTS

Among living donors another common motivation for body donation was the cost of traditional funerals. These donors stated that they were motivated to donate because this was a cheaper alternative. Donors in this group commonly described the funeral industry as an “enterprise” concerned only with increasing profits at a time of grieving and vulnerability, as one living donor described “It’s just a tremendous racket [funeral homes]. And people are forced into it, you know, hospitals participate in it by making people turn their deceased over to funeral homes when in fact it’s not the law. You don’t have to do that. The funeral homes are just an industry that preys on vulnerable people.”

Living donors motivated to donate to FACTS because of cost were often inclined to research modern, non-traditional methods of disposition. Several donors described initially researching green burial under the premise that because a casket or cremation was unnecessary, green burial would be significantly less expensive than traditional methods. Donors also described inquiring into donation to medical schools or other medical research facilities. However, these options were terminated when the scarcity and costliness of green burial was revealed (prices begin at \$2,000.00) (Corley 2007) or donors did not meet the donation requirements of medical schools or medical research facilities.

Donation to FACTS was seen as an acceptable alternative because it bypassed the need to spend money on a funeral, and particularly for living donors, it alleviated the

possibility of leaving behind a financial burden for family members, as one living donor explained, “I think that spending money on a funeral you might as well take \$2,000 to \$10,000 and flush it. And if I want to flush that much money, I’ll do it while I’m living. And so it was an opportunity to serve science and also to dispose of a body in a way that wouldn’t cost the family.”

Donors in this group also repeatedly reflected on their own experiences planning funerals for a loved one as traumatic. These experiences encouraged them to plan for their own deaths and seek information about alternatives including whole body donation, as one living donor explained, “And I just thought one that it was, first of all, to not make decisions before death was sort of a selfish thing. It was not kind to your loved ones, people who can make very uninformed decisions, or to sort of guess what the deceased wanted to have instead of really discussing the situation beforehand or having any real input from the deceased because they didn’t want to face it themselves.”

Furthermore, although planning a funeral was a traumatic experience for some, the unexpected expense of a funeral was even more traumatic. Some living donors acknowledged that they cannot afford a funeral, even with a pre-arranged payment plan. Their primary motivation to donate their bodies to FACTS is that it is the cheapest option available, as another living donor explained, “The major reason I decided to donate in the first place was financial. Funerals are very expensive and I come from a pretty poor family. When my parents died they didn’t make any arrangements beforehand and left me and my two sisters with expenses and I didn’t want to do that to my family, if something happens to me... funeral arrangements and donating seemed to be my only choices.”

Honoring Loved One's Wishes

While next-of-kin donors did not mention cost effectiveness as a reason to donate the bodies of their loved ones, some of these donors did suggest another motivation in addition to interests in the scientific process and desires to be helpful and to have an alternative to a traditional funeral. This motivation was honoring their loved ones' wishes. For these next-of-kin donors the decision to donate their loved ones' bodies to FACTS would not have been made, or even conceived, if the loved one had not previously requested to participate in this type of donation, as one next-of-kin donor explained, "We were all in agreement for what he had wanted to do. It was important because it was so important to him. He would always remind me what he wanted to do."

Discussion

The analysis of interview texts conducted with both living and next-of-kin donors revealed five primary motivations for body donation to FACTS: an interest in science, the desire to be helpful, the desire for an alternative to traditional funeral practices, the need for a cheaper option (living donors only), and the desire to honor their loved ones' wishes (next-of-kin donors only). These motivations, in turn, reflect current, cultural trends in end of life decision-making and also suggest a dichotomy between donors: those who can choose their method of disposition and those who must select the cheapest option.

Donors who were motivated to donate due to an interest in science, the desire to be helpful, or as an alternative to traditional funeral practices were able to choose the method of disposition for themselves or their loved one. However, those that were motivated to donate due to the cost effectiveness, specifically those that could not afford

traditional methods of disposition, had no choice but to select the cheapest option, in these cases donation to FACTS. The dichotomy between donors who can choose a method of disposition and those who must select the cheapest option is further perpetuated in the overall implication of the donors' motivations to donate. Those who were able to choose a method of disposition desired the donation of their body to have a continued purpose while those who had to select the cheapest option were unconcerned with the perpetuity of their body but instead with the possibility of a financial burden for themselves or loved ones.

Meaning in Death

The idea of the body continuing its purpose through donation reflects an important cultural concept in the U.S.—death must have meaning. While death is a naturally-occurring event, the reaction to it is culturally and structurally based, as Sharon Kaufman explained in her definition of “dying and death” in the *Encyclopedia of Medical Anthropology: Health and Illness in the World's Cultures* (2004). Reactions to death and the decision of how to dispose of a body are influenced by cultural and familial traditions as well as socioeconomic status.

In contrast, a culture differing from the U.S. in their reaction to death is the Malagasy of Madagascar. The Malagasy honor their dead in a practice called *famidihana* in which the dead are taken out of their tombs to attend feasts, be updated on recent events, and be embraced by family and friends. This ritual is believed to ensure health and fertility in both society and agriculture. For the Malagasy, the dead continue to exert influence and power over the living. Death does not end a loved one's role in society but instead increases their influence and societal rank. Wrapping dead loved ones in fresh

linen and celebrating their memory and continued guidance in the afterlife appeases them and guides the living into success (Larson 2001).

In Tibet and parts of India, sky burial is practiced. In this method of disposition, the deceased are laid out for consumption by carrion birds including vultures. After removal of the flesh, the skeletal remains are pulverized in order to give the birds easier access to the bone marrow. Sky burial is revered as an act of altruism. Through consumption by the birds the body will once again become part of the earth, an entity that will continue to provide for the living (Martin 1996).

In the U.S., the concept that death must have meaning stems from a shift in cultural conceptions of dying; whereas death was once seen as inevitable, it is now viewed as an event over which one can and is encouraged to assert control (Kaufman 2004). This control is reflected in the donors' abilities to choose the method of disposition for themselves or loved ones. Control is further demonstrated in donors' abilities to idealize how their bodies will be utilized, such as in the case of the desire for the body to have a continued purpose.

Donors who were motivated to donate their bodies due to an interest in forensic science, the desire for helpfulness, or the desire for an alternative to a traditional funeral wanted their deaths to have meaning. Therefore, for these donors, their bodies must have purposes; it is not acceptable for them to be "wasted" through traditional methods of disposition. Similar to Kaufman and Morgan's findings on the perceived utility of organ donation, donation of their bodies to FACTS directly increases donors' capabilities to produce knowledge even after their deaths (2005).

The desire for the body to perpetuate knowledge is similar to Jean Baudrillard's explanation of the body's post-mortem production of knowledge, as outlined in *Symbolic Exchange and Death*. According to Baudrillard's definition, because a donated body is used as a scientific reference, it therefore has the abilities to produce and disseminate knowledge. The body is able to surpass its lifespan through donation; it will perpetuate itself through research. The results of this research will be applied to further knowledge in forensic anthropology and law enforcement (1993).

Living and next-of-kin donors who wanted death to have meaning perceived body donation as an extension of their own, or their loved ones', personal experiences; the decision to donate to FACTS was described as a personal decision, one that was unique and "right" for them or their loved ones. In the case of donors who were motivated by the desire to be helpful and who were employed in a field that benefited from forensic research, donation would allow their bodies to continue operating in a helpful, beneficial, and resourceful manner; the same ways they envisioned their current lives as operating. Death would also acquire meaning in ways that their bodies would not have been able to in life. This is exemplified through the donors' perceived utility of donations to enhance scientific research, aid in solving crimes, and promote the serving of justice. Donors perceived that their bodies would directly contribute to these fields of knowledge.

Additionally, through donation the importance of community values, including the sacrifice of the self and the view of donations as a social resource are purveyed (Cherry 2005). Mark Cherry's research reassesses arguments against the commercialization of organ procurement and transplantation. However, it offers

interesting theoretical viewpoints on the body and the notion of altruism. Donation conveys a sense of altruism through the perceived utilization of donated bodies as a community resource (Cherry 2005). Donation also associates the body with having “life–prolonging value” as Dalley et al. explicate in their article distinguishing the Uniform Anatomical Gift Acts of 1968 and 1987. The 1987 provisions articulated the idea that a body should be utilized in a manner promoting resourcefulness as well as altruism. The donor should not benefit monetarily (1993).

Although body donation emulates long–standing community values, it is important to note the next–of–kin donors’ motivation to honor their loved ones’ wishes for the disposition of their bodies reflects a recently manufactured social fact. The availability of options for the disposition of a body has increased in the past 45 years to include alternatives to burial and cremation. This is due to the passing of the Uniform Anatomical Gift Act of 1968 which allowed donations others than unclaimed or unidentified bodies to be accepted through willed body donation programs (Dalley et al. 1993). An individual would not have been able to contemplate donating their own or their next–of–kin’s remains previous to 1968 because it was not legally sanctioned (Lee 1997).

Cost Effectiveness

Donors who were motivated by the cost effectiveness of donation to FACTS formed their decisions in a structural context, particularly in relation to socioeconomic constraints. As Cherry noted in his research on the commercialization of organ procurement and transplantation, this involves assessing the costs and benefits of forgoing a traditional method of disposition on behalf of a cheaper option (2005).

Currently, in the U.S., the average price of a traditional embalming and burial is \$7,323; not including the purchase of a cemetery plot, monument, or marker (TFSC 2010: 6–7). The average cost of cremation, in comparison, is \$1,200 with prices varying between \$500 and \$3,000 (Funeral Consumers Alliance 2010). The cost of body donation depends on the institution as well as the location of the donor when they die. In regards to FACTS specifically, if the donor passes away within 200 miles of FACTS, they are picked up free of charge. However, if they expire outside of this radius they must be transported to FACTS by a mortuary transportation company or flown to Austin–Bergstrom International Airport. Most mortuary companies charge a set fee ranging from \$125 to \$500 along with a per mile fee (The Funeral Site 2013). The cost of transportation by air includes a shipment fee ranging from \$125 to \$1,095 depending on the weight of the decedent and distance between the airport from which the body is shipped to the destination airport (American Airlines Cargo 2012). Even with these expenses, however, body donation to FACTS is still a less expensive option for most people.

Understanding the socioeconomic conditions related to body disposal provide a more complete view of the effect of structure on the availability of options for body disposal and illuminate how donors make sense of the costs and benefits of donation. This relates to Kaufman and Morgan’s discussion of the changes involved in end-of-life decision-making with the advent of life-prolonging technology and the hierarchy of accessibility to this technology (2005). By analyzing body donation in its cultural and structural context, i.e. how body donation is constructed through meaning and how cost reflects socioeconomic status, the practical application of body donation (what to do

with a body upon death) can be more fully understood, as Sargent and Johnson advocate through their promotion of the critical–interpretive approach to medical anthropology (1996).

Moreover, donors in this study who were previously burdened with the excessive costs of funerals of loved ones actively sought less expensive options when planning their own, either by preference or necessity. Some donors were financially secure yet felt the extravagance of a traditional funeral was unnecessary and did not align with their lifestyle. Others however, were financially saddled, both prior to and after catering to the funeral requests of loved ones, and were unable to even consider arranging for another costly funeral—even if it was their own. In fact, this is what led them to FACTS in the first place. Even the latest Strategic Report from the Texas Funeral Service Commission notes the consequences of a financial burden, “Perhaps the most affected are the indigent, whose inability to afford a funeral may create additional trauma” (TFSC 2010:7). This trauma manifests itself in the form of financial insecurity and is not unfounded.

The cost of funerals continues to increase. Some sources contend that funerals are the third most expensive purchase one will make in their lifetime (TFSC 2010:8). While death is a universal phenomenon, socioeconomic status dictates how a body will be disposed of; therefore, the availability of funeral options is unequally distributed. In the case of indigent donors to FACTS, if not for the economic circumstances, options outside of donation would have been chosen. Although not structural violence in the traditional sense, structural inequality manifests when those that cannot afford traditional funeral options must decide to donate.

Previous research on the topic of body donation to forensic anthropology research centers has been conducted by Angi Christensen on the moral and ethical considerations of utilizing unclaimed bodies as donations at the University of Tennessee's Anthropology Research Facility (2006). She suggested that it is ethical to utilize unclaimed bodies, as well as the bodies of next-of-kin who did not previously express wishes to be donated, for forensic anthropological research because they lack autonomy. However, FACTS does not accept donations of unclaimed bodies. Since its establishment in September 2008, FACTS has received more than 115 donations. The number of donations received in the first two months of 2013 is more than the donations received in the first six months of 2012. It is apparent that donation to FACTS is steadily increasing. As body donation popularizes as an acceptable method of disposition, the motivations of these donors, and their relation to economic and cultural trends, will become increasingly imperative to study.

Conclusion

The purpose of this research was to analyze the motivations of those who chose to donate their bodies or the bodies of their loved ones to FACTS. Analysis of the interviews revealed three motivations for living and next-of-kin donors: an interest in the scientific process, a desire to be helpful, and a desire for an alternative to a traditional funeral. In addition, the analysis revealed two additional motivations which were specific to each group. Among living donors, a fourth motivation was the cost effectiveness of body donation, and among next-of-kin donors, honoring their loved one's wishes was another primary motivation. These motivations revealed the perception

that donation gives meaning to death and the implications of cost in choosing body donation as the method of disposition.

This research was limited by access to a specific sample of donors, those who donated to FACTS, and did not address the motivations of those who refuse to donate their body. The inclusion of this information would aid in providing a more comprehensive account of the cultural and structural constructs of body donation. Further research is necessary to understand the decision-making process of choosing body donation as a method of disposition and the perceptions of donors in relation to the utilization of bodies as donations.

Appendix

Table 1. Demographic characteristics of living donors (n=23).

Interviews conducted in person	n=9
Female (percent)	66.6
Age range (in years)	30 – 82 (median 58)
Marital status (percent)	
Single	26
Married	30
Divorced	35
Widowed	9
Reside outside of Texas (percent)	22
Highest level of education (percent)	
High school	26
Some college	26
BA/BS	9
Graduate degree	39
Annual household income (percent)	
\$0–25,000	22
\$25–50,000	18
\$51–75,000	30
\$76–100,000	13
>\$100,000	17
Work in forensic-related occupation ¹ (percent)	26
1. Work in a field related to research conducted at FACTS, i.e. the medical field, law enforcement, or forensic science	

Table 2. Demographic characteristics of next-of-kin donors (n=15).

Interviews in person	n=4
Female (percent)	87
Age range (in years)	39 – 83 (median 54)
Reside outside of Texas (percent)	47
Relationship to donation (percent)	
Spouse/Partner	20
Child	20
Parent	20
Sibling	27
Other	13
Annual household income (percent)	
\$0–25,000	13.3
\$25–50,000	6.7
\$51–75,000	26.7
\$76–100,000	20.0
\$>100,000	33.3
Work in forensic-related occupation ¹ (percent)	40
1. Work in a field related to research conducted at FACTS, i.e. the medical field, law enforcement, or forensic science	

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CHAPTER 3

The results of my thesis research will best be put into practice through providing this thesis to FACTS staff. Understanding the variety of motivations that lead people to donate their bodies or the bodies of their loved ones will permit FACTS staff to become better informed of the myriad of decisions involved in the determining of a method of disposition, more able to identify those likely interested in this type of donation and to market the donation process towards them, and improve the providing of information to potential donors about the donation process.

While a qualitative research methodology was necessary to understand the donors' motivations to donate, the addition of an applied aspect to this research allows for the results to be applied to the current practices and daily operations at FACTS. The results would be best applied in the creation of surveys, a journal publication, and the dissemination of the results through local media outlets such as local newspapers and funeral consumer alliance organizations.

FACTS Presentation

Speaking with donors provided valuable insight into their perceptions of FACTS. Due to many participants viewing the interview as a follow-up to registering to donate or donating their loved one, I believe this encouraged the addressing of any concerns or suggestions with the donation process, such as any difficulties in the process, that FACTS should be aware of. In the upcoming months, I will present my findings,

including these concerns and suggestions—which are not a part of my thesis write-up (Chapter 2)—to FACTS staff.

Surveys

Demographic information was collected from participants at the conclusion of each interview. This information included: sex, age, place of residence, occupation, annual household income, level of education, marital status, religious affiliation, and relationship to the donation if applicable. Information collected from interview participants will be used to create a survey for future living and next-of-kin donors to analyze population trends for each donor group.

This survey could also be used to identify motivations for donation when distributed to future living and next-of-kin donors. Disseminating surveys at the end of the donation registration process allows the information to be consistently distributed. Therefore, it will be able to be statistically analyzed; this would allow the donors' motivations to be correlated with demographic characteristics such as age, sex, and income level. The motivations could also be correlated with each other to note any trends with groupings of motivations. For example, tests could be run to possibly demonstrate the association of a particular motivation, such as alternative to a traditional funeral with age, or demonstrate patterns in the motivations to donate such as cost effectiveness motivating the donor along with an interest in scientific research.

Furthermore, an additional survey will also be created in the upcoming months and could be utilized to analyze the general public's opinion of and perceptions of FACTS. Surveys could be administered in person in a public setting or through an online medium to anyone who is not registered as a living donor or who has donated their kin.

While also obtaining demographic information, the survey would measure the participant's knowledge and opinion of the research at FACTS as well as their opinions of body donation to such facilities. The results of the survey with living and next-of-kin donors could be used as a control sample to compare responses of those who have donated to those who have not. The results of both previously mentioned surveys will be provided to the Director and Coordinator of FACTS.

Dissemination of Results to Public

I also plan to publish the research presented in Chapter 2 of this thesis in an applied anthropology journal such as *Human Organization*. This would disseminate this research in an academic setting and contribute to the necessary increase of knowledge regarding motivations for body donation. This research will also be disseminated to local funeral consumer alliance organizations, such as the Austin Memorial and Burial Information Society (AMBIS). This will provide an opportunity for those seeking information about alternatives to traditional funeral practices to learn about a local option for body donation and generate increased public knowledge of options for body donation through publication in local newspapers.

VITA

Hilary M. Martinez was born in Austin, Texas, on September, 11 1989, the daughter of Priscilla Ramos and Manuel Martinez. After completing her work at Cotulla High School, Cotulla, Texas, in 2007, she entered St. Edward's University in Austin, Texas. She received the degree of Bachelor of Science in Forensic Science from St. Edward's University in December 2010. In August 2011, she entered the Graduate College of Texas State University–San Marcos to complete a Master of Arts in Anthropology with a focus in Medical Anthropology.

Permanent Email Address: hilary.martinez11@gmail.com

This thesis was typed by Hilary M. Martinez.