Survive & Thrive: A Journal for Medical Humanities and Narrative as Medicine

Volume 4 | Issue 1

Article 15

2019

"Taking the Skin Back:" Abjection and Reflective Practice in a Cadaver Lab

Mitra Emad University of Minnesota Duluth, memad@d.umn.edu

Follow this and additional works at: https://repository.stcloudstate.edu/survive thrive

Recommended Citation

Emad, Mitra (2019) ""Taking the Skin Back:" Abjection and Reflective Practice in a Cadaver Lab," *Survive & Thrive: A Journal for Medical Humanities and Narrative as Medicine*: Vol. 4 : Iss. 1, Article 15. Available at: https://repository.stcloudstate.edu/survive_thrive/vol4/iss1/15

This Article is brought to you for free and open access by the Repository at St. Cloud State. It has been accepted for inclusion in Survive & Thrive: A Journal for Medical Humanities and Narrative as Medicine by an authorized editor of the Repository at St. Cloud State. For more information, please contact rswexelbaum@stcloudstate.edu.

"Taking the Skin Back:" Abjection and Reflective Practice in a Cadaver Lab

Cover Page Footnote

Acknowledgements I am most grateful to the first and second year medical students who shared their time and experiences with me, often expressing themselves vividly and with sage honesty. Those who volunteered to participate in this study very much wanted students and patients to read this paper. Many thanks as well to my colleague and friend, David Beard, who patiently yet insistently saw the core truths of this paper. And huge thanks to the hidden collaborators in all my work on this planet, my daughter, Selene Emad-Syring, who transcribed many of the interviews, and my husband, David Syring, who unfailingly sees the writer in me when I don't.

"Taking the Skin Back:" Abjection and Reflective Practice in a Cadaver Lab

Mitra Emad, University of Minnesota Duluth

"These body fluids, this defilement, this shit are what life withstands, hardly and with difficulty on the part of death. There, I am at the border of my condition, as a living being. My body extricates itself as being alive, from that border such wastes drop so that I might live, until, from loss to loss, nothing remains in me and my entire body falls beyond the limit – *cadere*, cadaver." (Julia Kristeva, 1982:3).

Walking into a cadaver lab in a society where death and the dead remain largely invisible can yield a jolting sense of the unexpected. How do first year medical students navigate such abject terrain? For Julia Kristeva in the epigraph above, *abjection* isn't just about revulsion or being "grossed out." Abjection is about falling outside the limits of what the body can handle - finding oneself suddenly and radically embodied and disembodied at the same time. As a cultural anthropologist studying how human bodies become sites for cultural information and cultural construction. I've long been curious about how medical students learn in such a context. First year medical students are freshly on the path to becoming physicians, our society's most respected, remunerated, and sought after health care practitioners. As they enter the anatomy and physiology lab in their first semester, they undergo an intensive (and well-documented) rite of passage (Segal 1988; Carter 1997; Giegerich 2001; Noonan 2002; Goodwin, Machin and Taylor 2016). Spending a semester with them in the cadaver lab meant that I was also subject to the experience of abjection. As I observed all the classic anthropological components of a rite of passage occur before my eyes, I also reflected on and took note of my own reactions and responses to being in the cadaver lab. This essay provides an ethnographic and reflexive rendition of my anthropological field trip to anatomy and physiology class and to my own embodied understanding of abjection. Ultimately, I argue that reflective practice isn't just about "thinking critically and consciously about one's practice" (Mamede and Schmidt 2004), though it certainly is that.

Reflective practice is a deeply human mode of being that we are thrown into when we encounter the type of abjection Kristeva identifies.

In Donald Schön's now classic examination of how professionals learn to think within the cosmologies and methodologies of their profession(Schön 1983), he suggests that reflective practice is often stimulated by intense and sometimes unexpected experiences. A few weeks into the semester, one student recalled:

When you first walk in it's kind of weird to see body bags lying on the tables. You sense more that there are other people in the room. I remember that when we opened it [the body bag] up, all the cadavers were lying face up. And that was kind of like, oh my gosh, it's a real person. But she looked kind of dead, too.

Schön indicates that surprise, puzzlement, or confusion can spark epistemological reflection. As he suggests, "we can think about doing something while doing it" and "some of the most interesting examples of this process occur in the midst of a performance" (54). While Schön's work focuses on seasoned professionals, for whom the "performance" has become routine, his concept of reflection as a mode of reframing future action has been taken up in medical education (among many disciplines).

Since the publication of Schön's generative work (and its practical pedagogical follow-up [Schön 1987]), many disciplines have embarked upon integrating reflective practice curricula into professional education programs. Medical education curriculum in particular has increasingly emphasized the development of reflection and reflective practice skills (Chaffey et al, 2012). In general, Schön's approach has been whittled down to "the action of thinking critically and consciously about one's practice" (Chaffey et al, 2012:198). While calling for research on the nature of reflective practice in medicine, Mamede and Schmidt focused their study of primary care doctors on delineating a 5-part structure for accomplishing reflective practice (2004). Ultimately, Mamede and Schmidt move Schön's work into a coherent methodology through which reflection can yield a more "deliberate practice" that allows physicians to serve their patients better (2004).

But this structured, deliberate mode of reflection is not how reflection begins for first year medical students entering anatomy and physiology class and facing cadaver dissection. A deliberate approach to reflection may or may not be part of the curriculum in first year professional medical education (and it largely was not at the institution where I conducted this fieldwork); but it is the experience of abjection that throws students into the arms of reflective practice at the outset of their training. In Jenner's report on the advantages pre-med students identified about working with cadavers versus studying medical illustrations, one of the students called the cadavers "the recently living" (Jenner 2012). This vivid description indicates that cadavers are a kind of first patient for developing doctors, even though the students' purpose is not to diagnose or treat, but simply to learn the anatomical and physiological structures. Their encounter with "the recently living" inherently includes a potential for experiences of abjection, of disturbances in cultural givens and norms, as well as disruptions in assumed identity formations of personhood, gender, and deviance. Simply by walking into a room with corpses, medical students immediately encounter an up-ending of cultural norms. This is precisely an arena in which surprise, puzzlement, and confusion, along with abjection, yield a very different, more organic, form of reflection.

For example, the student quoted above continued recalling the first day and noted her own developing proficiency as she grappled with the social stigma around handling a dead body:

And I felt like once the first cut was done, oh yeah, they're not really alive, so it's okay. And you can't really screw up as much as you thought you could.

For medical students learning in the heightened atmosphere of a cadaver lab, a steady flow of surprise, puzzlement, and confusion, along with the need to engage with their own bodily sensations of abjection require a constant if tacit epistemological conversation around questions like, *What am I doing now? How do I know what I know? What is it that I know?*

"Hanging Out with Dead People and their Dissectors"

My field notes from the first day of medical school anatomy lab include a section called "Faces" followed by a list of words: trepidation, worry, excitement, intense focus. Another section further down in my notes is called "Un/Covering the Face" followed by a tabulation of how many dissection tables students had covered their cadaver's faces (3) and how many dissection tables students had left their cadaver's faces uncovered (also 3). Without my conscious awareness at the time, the faces of both the dead and the living humans in the room compelled my interest. I was especially curious about how the students gained professional mastery of the specifics of medical practice specifically *in and through the body* - the cadaver's body under dissection, as well as their own bodies. For one semester, I watched these first year medical students learn anatomy and physiology through dissection. I listened to them reflect on their first hands-on practice on the body of another human, and I worked at noticing how their own bodies functioned to mitigate experiences of abjection. In the process, I also found myself susceptible to being thrown into reflective practice through my own abjection.

One day, early on in the project, I was conversing with one of my own cultural studies students about the anatomy lab as a field site, and he remarked, "so you're hanging out with dead people and their dissectors." I found this a compelling description of my ethnographic stance in relation to the anatomy lab. As I began to sink into the project, I wanted to attend to "the dead people" in as much as I wanted to attend to the students ("their dissectors"). The location and situatedness of the dead in any culture is of tremendous interest to anthropologists (Fabian 1972, Palgi & Abramovitch 1984, Metcalf & Huntington 1991), allowing a flourishing subfield focused on the anthropology of death to develop in cultural anthropology. If medical students experience abjection, it's because they have dead bodies "under their hands" in ways that simply are not present in contemporary society. Dead people draw our attention precisely because they exist outside the social sphere. Cultural practices around death and cadavers in Euro-American societies remain fairly hidden and when they do emerge into the public sphere, subject to popular cultural renditions of spectacle (Goulding, Saren, and Lindridge 2013) and forensics (serialized television, in particular Bones and CSI). As I began the fieldwork for this project, I also wanted to peer into the world of a cadaver lab from the perspective of an outsider and try to peel back (reflect on) my own assumptions and socializations about the "correct" and "proper" place of the dead in the social sphere.

During the Fall 2008 semester, I regularly observed students and their professors at a local medical school in the Applied Anatomy lecture and laboratory settings, interviewed 25 self-selected first year students and ran four focus groups in which 22 second year students participated. (The focus group volunteers were paid, the interviewees were not. The majority of volunteers 30 out of 47 are female.) Even though my cultural anthropology training welcomed and explored broader, "domestic" notions of fieldwork, as well as interdisciplinary methodologies, this project was the first time I dipped quite so heavily into a broader social scientific toolbox; focus groups, for instance, have never been part of my methodological repertoire in the past, and I found them disconcerting and awkward even as I conducted myself with utmost confidence and professionalism during focus group meetings. In other words, I had a high level of "imposter syndrome" which only resolved as I transcribed the results and realized that this particular population - medical students – thrived as interlocutors in a focus group setting.

Through all of these classic and new fieldwork methods, the initial development of reflective practice through unexpected moments, even a sense of crisis, was evident as I watched these newly practicing "dissectors." In the first days, weeks, and even the entire semester of applied anatomy lab, medical students are thrown into an experience that is not only new, but also socially disruptive. However much they may have prepared to view, handle, even "dig into" a cadaver, these initial experiences engaging with a dead body as a learning object falls outside the realm of what is expected, carrying a strong patina of crisis, and ultimately of Kristevan abjection. Specifically the intensity of the "first cuts" experience in the anatomy lab, a moment long identified in many studies as a "rite of passage," sparked reflective moments that I endeavored to capture in this ethnography.

First Days, First Cuts - Rites of Passage

My first day in the lab is the students' second day of Applied Anatomy. So far, they have "met" their cadavers, flipped them over, and begun to "reflect" the skin of the back. A few weeks later, when I ask 25 of the 60 students (in individual interviews) what they remember about the first few days of class, there is certainly a sense of trepidation:

"Oh, yeah, I was very nervous the first day.... I let all of my lab partners go first.... I just told them, 'you guys go ahead.' Some of them had had experience. So I let them do the first cuts, which were on the back and everything."

The concept of "first cuts" had already become a common language for the students. Some had even prepared ahead of time:

"I read a book on it. I read *A Semester of Gross Anatomy* [Giegerich 2001] I think it was called, and that kind of helped me understand what it might be like.... The most stressful moment was doing the first cut on the cadaver. Because then it is still a fully intact human being. Once you do the first cut, then it's like now they are never going to look like what they looked like before. The more you go on, the less they look like a full person." The experience of being thrown into the cadaver lab was also mentioned repeatedly in the individual interviews:

"I was glad they [had us go to the lab] the first day; it really threw you in there. It was kind of terrifying, I think. They didn't talk about it enough, what we were going to see. After [that first lab session], I don't like how much you forget that it's a person. We flipped it over and took the skin off the back, and now it's like a scientific tool.... Learning the leg muscles, that's what you think about. You don't think that this person used to be alive, they had kids, they had a job, you know. You just depersonalize it as much as you can. I guess if you thought about it all the time, it would just weigh on you."

Several ethnographic elements appear significant to me in these quotes: one is certainly the developing trope of the *first cut*. This turns out to be a fairly ubiquitous concept throughout the international subculture of Applied Anatomy, First Year Medical School. In fact one of the popular books about anatomy lab mentioned by students and written for a general audience is entitled *First Cut* (Carter, 1998). The notion of making your first cut clearly constitutes the "separation" stage of Van Gennep's classic tripartite structure of rites of passage (1909, [Chicago 1960]) referred to throughout cultural anthropology. In the separation stage of the rite, the initiate is stripped of his previous identity markers in preparation for entering a liminal period. Changing costumes can be symbolic of the separation stage: students had been asked to bring their "scrubs" pajama-like outfits popularly represented on television medical shows as the clothes worn by residents in hospitals, often with white lab coats over. Most of the students changed into scrubs or old sweatsuits prior to entering the laboratory, signifying their readiness for the liminal work of dissection. The first cut, and concomitant trepidation, signifies a departure not only from previous non-physician identity states in which one does not wield a scalpel, but also from social taboos against viewing. touching, and certainly cutting into dead bodies.

The attendant meaning delineated by one student in an interview is that rites of passage can be recognized when

"You have to do things that you don't want to do to do, but it's worth it, because I think it will help me."

Overcoming the "not wanting to" is the hurdle faced by many students as they engage in the liminality of the lab. "Not wanting to" aligns with Julia Kristeva's notion of abjection as "one of those violent, dark revolts of being" (1982:1). As in the quote above - "you just depersonalize it as much as you can" - most students dealt with abjection by moving quickly towards the third stage of rites of passage, integration:

"I remember being a little anxious about it over the summer. You hear the stories, like about cutting open the skull. And then we got to school and it was scientific and professional, and at the same time, respectful. It seemed like it turned very quickly to a depersonalization or a desensitization. Your cadaver became just your cadaver, the guy that you knew or the girl that you came in and worked on and learned anatomy from and you thought about them less and less as a person. I think it was right along with what I expected; it just took me a little while to get there."

"I remember the first thing that they had us do was flip the bodies over. So it was like, oh my gosh, you want us to touch it, we're going to break it if we touch it; that's what was going through my mind. And everyone kind of heaves it over. And our cadaver is kind of small, so I was just thinking, ah, you know, careful, careful. And then I think we were all okay with that, but when it came down to actually making the first cut, nobody really wanted to do it. But then, my lab partner said, "oh, I'll do it," so she made the first cut. And I felt like once the first cut was done, oh yeah, they're not really alive, so it's okay. And you can't really screw up as much as you thought you could. Then we just spent the rest of the time.. I think I got to reflect one of the sides, because we all took the skin back. It was pretty cool. It's real work that you're doing."

"We were all looking at each other; who is gonna make the first cut? I found it almost symbolic that day that we started medical school together, we started the cadaver lab together. . . . It was touching to recognize the sacrifice that person had made, that person's family had made for our medical education."

Deciding who would make the first cut, watching or making it, and then reflecting on that liminal moment, a moment in which they defied the circumspect dead body and social norms against "defiling" the corpse how were the students to return to a stable social identity as physicians-in-the-making? Thinking about the corpse "less and less as a person," remembering "they're not really alive, so it's okay," or "recognizing the sacrifice that person had made ... for our medical education" are all ways of integrating a new identity formation by mitigating abjection.

Applied Anatomy sessions began in the classroom in order for students to receive instruction on that day's dissection. While the lecture portion certainly functioned to deliver important course content and dissection guidelines, the classroom lecture and space mitigated liminality and functioned to integrate students into a stable physician-in-the-making identity. The lecture classroom is a small amphitheater style room, with projection technologies, whiteboard, and several computers at the front of the room, along with a lectern and long table. The room holds only a few more than the 60 chairs required to seat the first year class. This is their room for most of their coursework in the first year. It can be dimmed for projecting images, and runs very warm. At the start of the first Applied Anatomy lecture, Dr. H explains that every class session will have an "orientation" (a lecture) prior to entering the lab. These sessions typically last about one hour prior to laboratory work. All the PowerPoints are made available to students to download, and as I look down the rows, I can see that most students already have the PowerPoint for the day up on their laptop screens before the lecture begins. Many take notes directly into the "notes" section of the slide; those with tablets "write" directly on the PowerPoint slide. Dr. H reminds students to spend the lab time going back over the PowerPoint if they are not dissecting today. The first actual dissection (after the meet-your-cadaver session) is "superficial back, deltoid, and scapular regions." At several points in the lecture, Dr. H asks students to self-palpate in order to feel the structures on their own bodies - this recurs throughout the course. After the lecture, we head downstairs to the basement of the medical school. For me to gain access to this field site was a challenge – it is not a welcoming site. The halls in the basement wind around and all look the same to me. I make a wrong turn and try to follow the students instead of figuring it out myself. They stop in locker room style bathrooms to change into their dissection clothes, "scrubs" fresh out of the packaging, still creased at the folds. The door to the lab is locked and requires a code on the keypad to gain entrance. While I haven't asked, the professors for this class have not granted me access via the code. I have to wait for a student to let me in or once, later in the semester, I knock and interrupt a quiz. On the first day (for me, second day for the students), Dr. H sees me standing at one end of the room with my notepad open, writing and abruptly comments, "it's understood that

you don't discuss anything about this outside, correct?" I remind him that he's seen the project description and that I have gone through IRB (Institutional Review Board) approval, without which I would not be allowed entrance. I assure him that I'll maintain confidentiality, but as I speak I wonder if he understands that this is in fact my research. After my speech, during which Dr. H refuses eye contact, he grunts once and walks quickly away from me.

Compared to the classroom, the lab is guite cold, and I'm glad to be wearing a wool blazer, having picked out academic fancy dress in order to appear as professional as possible. The lights are bright, the floor is shiny with drains at regular intervals along the floor. There are ten gurney-style stainless steel tables with wheels, each with a cadaver face down on a white plastic, zippered bag. The cadavers range in color from grey or grayish green to an unnatural pink. They look sort of smooshed, like clay, but appear startlingly human at the same time. Each table has a small podium attached which holds a 3-ring binder with the pages of the dissection guide clipped inside. Above each table is a computer screen with that day's PowerPoint ready to flip through. Three faculty members are there to help, walking over to each team and giving advice or a brief lecture. Posted on both the front and back walls is a list of each cadaver by number, age, sex, cause of death and other conditions. I learn from this list that half of the cadavers are male and half are female, that only four were 80 years old or older at time of death, which I find surprising; especially when I see that the youngest cadaver died at the age of 38. I also immediately notice that several were severely demential at time of death and I wonder about the process of body donation.

On the first day, I stay at one end of the room and write down my observations without fully walking in among the tables. I also jot down comments I overhear, which revolve around "It's hard to dissect something you know absolutely nothing about." Students' body language is tense, hunched-over, some are sweating and red-faced in the cold room. Their movements appear tentative and muttered comments of "I don't know" along with facial expressions of minor to major disgust abound. Their hands often rest on the cadavers while they are talking, listening, or studying rather than dissecting.

One student near me is apparently close to tears, and I wonder if it is an emotional response to working on the corpse. He asks a professor, "what if we don't finish by 4?" Dr. A responds, "then you come back and finish it another time." He mutters, "wow" and looks worried. She lectures a bit about what to look for in this first dissection, and the student begins to look calmer. As she talks, she stands behind the student and asks him to raise his arm, palpating his shoulder to demonstrate the region they are dissecting. She discusses which muscles you need for this kind of mobility. The student turns to look at her, and his expression now is one of excitement; "that makes sense," he says, and his teammate nods. Later in the semester, the student stated:

"I think just knowing that you're going to do anatomy lab, that it's an important, necessary, and required part of becoming a physician - this is necessary [not only] for our degree, for what our future work will entail; if you want to work with the human body, you have to work with the human body from birth to death. So knowing that from the beginning made it a lot easier to just say, okay, okay, I have to get used to this."

Afterwards, the students return to the lecture classroom. "So you made your first cuts," Dr. H remarks. He then returns to the lecture for the day with no further mention of what has occurred. At the end of the class, the students pack up their notebooks and laptops, their dinner containers and water bottles, put on their coats, and go home.

"Taking the Skin Back" - Reflecting on the Rite of Passage

First year medical students feel a lot of pressure to "get it right." Whether they are annotating PowerPoints in the lecture classroom or making their "first cuts" in the anatomy lab, the stress of feeling there is a lot at stake increases, and, the intensity and sense of crisis can fuel reflection. Interestingly, good teachers will use the students' openness towards reflection to help move the sense of crisis into a sense of competency, as Dr. A did by palpating the student's shoulder and discussing the mobility of shoulder muscles with him.

One of the first arenas of *reflection* that I encountered was pretty unreflective. In fact the word meant something entirely different.

Then we just spent the rest of the time dissecting. I got to reflect one of the sides [of the cadaver], because we all took the skin back.

Here "reflecting" refers to scraping the skin of the cadaver back, in order to reach tissues and muscle structures underneath. *Reflecting* as a method of dissection entails removing the surface layer in order to *see* what is underneath, often more vividly than a written description or even an illustrated lecture, slideshow, or textbook can reveal. And the process of revelation involves the hands touching, fingers poking, lifting, moving the tissues in order to reveal the structures that somehow must "match" with the illustrations provided.

Standing in that particular lab on that particular first day of medical school with that particular group of young, scared, energized physicians-in-the-making, I found myself wondering: *Is reflection all about ripping the skin back?* Why not use the metaphor to trace the pathway of any reflective practice? While I was not allowed to join in the dissection process itself, I decided to join the medical students in thinking of reflection as tearing off the surface, as learning to feel confident that no harm will come from this action, and as reaching deep down (into the messy, icky "stuff") to pull out the "structure," the knowledge, the "truth of the matter"? In my time in the lab, I watched all the different ways that the first year, first day medical students accomplished reflection - some delicately slicing at the cadaver, worry lines creasing their foreheads, others quite confident that the patient was dead, making that initial incision and then pulling the skin from the fascia in big swaths.

The key to these students' initial foray into reflection is their liminality. Becoming a medical student means pulling the skin back on society's expectations, allowing a non-compliance to social norms to emerge. They are not professionals yet. They move in and out of different identities. Sometimes they are professionals, when they get clinical experience for instance, or when they teach or mentor each other. Then they are learners again the next moment as they try to find a new structure or learn a new dissection protocol. As anthropologist Victor Turner has talked about liminality in a foundational anthropological text, the students are "betwixt and between" (Turner 1967). Those dissecting cadavers with a sense of openness, even enthusiasm, ride the waves between life and death. Those that are grossed out by dead bodies ride the waves between abjection and the acquisition of knowledge. All of them ride the waves between placidly memorizing new information and skillfully wielding a potentially dangerous and quite sharp instrument.

Ultimately they all walk out of the "first cuts" rite of passage room, ready to toss over their shoulders:

"It was pretty cool. It's real work that you're doing."

Abjection and Reflective Practice

When we take the skin back, what do we find? Throughout this study, I found that tracing the pathway of reflective practice requires attention to experiences of abjection. Even though I was trained in a cultural anthropology graduate program that emphasized reflexivity, I was surprised to find how important my own experience of abjection was in formulating my identity as an anthropologist-in-the-cadaver-lab. Just as the students began to learn a more deliberate model of reflective practice by being thrown into reflection through abjection, I also found myself developing as a reflective practitioner as an ethnographer in the field.

The Anthropologist's Abject Moment

I am at a fall equinox party on a farm on the south shore of Wisconsin with my family. Kids and dogs run and play, the sun is low and bright, the breeze is warm, the leaves are glorious in autumn foliage. Many of my friends are there, we laugh and talk, catching up on our lives. Several grills are producing barbecued vegetables, sausages, burgers, and chicken. My friend Laura and I stand beside a picnic table, nibbling the last of our plates and chatting. We both eve the last piece of barbecued chicken on a platter near us. I can see her deciding it's too big a piece, and I know it's too big for me. "Want to share it?" I ask. "Sure!" she replies. We continue chatting after I say, "mind if I use my fingers?" and proceed to pull the large breast piece of the grilled chicken into smaller pieces so that we can share it. Laura's wife, Denise walks by and double-takes as she sees me tearing bits of chicken apart. "Mitra!" she chortles. "What are you doing? You're spending too much time in that anatomy lab!" I am startled by her comment, the smell of the lab rushes in, I look down at my hands tearing meat from bone, and push myself away from the table, gagging, retching, and sobbing. I think I am going to vomit. But then I just sob uncontrollably, big lurching, vomit-like sobs. I vaguely hear Denise mutter "holy crap" and then she takes my arm and says "come on let's walk." She walks me away from the crowded picnic table, where I am sure in retrospect people are staring at me, though I am utterly oblivious at the time. She hugs me until the large, gulping sobs give way to just basic teary crying. Then she says with stern affection, "you know, when I was doing field research on sex offenders, I had no one to talk to who could really understand what I was doing and why I was doing it. So I had reactions like this; it comes out of the blue when it's just under the surface all the time. You need to talk to someone about what you're doing." She was right. I was deeply startled at my own reaction; it had been decades since my own emotions caught me off guard like this. I'd birthed two children, one of them chronically ill, lived well over 40 years, studied in intense settings of illness and death before, assisted a dear friend through radiation and chemotherapy, attended an autopsy, toured

anatomy labs, etc. Why was I reacting like this? After this day, I would not be able to cook or eat whole chicken for the rest of the semester. It wasn't a choice; I was revolted. In an abject state. Once I left the lab for the last time, chicken returned to its rightful, non-abject status in my diet. What was this all about?

I did end up talking to two friends about my experiences in the lab – both of strong stomach and themselves very curious. They asked great questions and I realized that I had been censoring myself, especially because my husband had made it very clear that he did not want descriptive information about the lab. He and I had met in grad school and had shared nearly two decades worth of ethnographic field projects with each other, so it felt very strange not to be giving him play-by-plays of this project. But the lab was not a place he would ever choose to go, though he supported my work unconditionally.

In understanding this experience, many months later, I became especially intrigued with Julia Kristeva's use of food to get at how abjection disturbs identity, system, and order. The idea that in my abject moment, I was protecting myself:

"Loathing an item of food, a piece of filth, waste, or dung. The spasms and vomiting that protect me. The repugnance, the retching, that thrusts me to the side and turns me away from defilement, sewage, muck. . . . But since the food is not an 'other' for 'me' . . . I expel myself, I spit myself out, I abject myself within the same motion through which 'I' claim to establish myself. . . . (Kristeva 1982:2)

I asked a few students in informal settings (not the individual interviews) if they experienced any "weird food aversions" and they looked at me baffled. Because I was not participating as an actual student, the classroom, the lecture, and the professors helping out in the laboratory, as well as the developing community of students were not available to me to help stabilize my identity in an abject environment. So the 'I' who is spitting herself out in this incident had not properly interpellated the cadaveric innards of a room full of corpses into the medico-scientific realm and so succumbed, fell (*cadere*) into what Kristeva calls "the most elementary and archaic form of abjection": food loathing (1982:2).

Being Nice to the Cadaver

For the students, who benefited from the classroom, the professors, and each other, abjection took a different form. Face and hands were frequently remarked upon as sites of identity and the most difficult to

depersonalize. One woman was unable to dissect the cadaver's hand because she had been working hard not to look at the cadaver's fingernails, which "send me into a tailspin." Interestingly, whether or not to cover the cadaver's face during dissection was an immediate and "obvious" choice to most students, though the choice fell into two polar opposites. Either, it was, "well, yes of course you cover the face, how could anyone think any differently about it! It would be disrespectful to leave the face uncovered!" Or, "why would you want to cover the face; we need to remember the cadaver's humanity!" Due to the frequency with which this issue was brought up by the students in the interviews, I added a question about it, including a follow-up question asking if students felt that, whether they did it themselves or not, covering the face was a sign of respect or a distancing device. This follow-up question often brought them up short; they would stop and say, "I hadn't thought of it that way." For nearly half it was obviously a way to create distance and focus on your work, for another half it was about respect/disrespect. When asked to define "respect" many students echoed this quote from a focus group:

"Disrespectful behavior is out of line: being rough with the cadaver, tearing it up, sexual references, childish language."

The trope of "being nice to the cadaver" came up frequently in the interviews and focus groups; speakers were always women. Men did not refer to the cadavers in this manner.

"I was very kind to him; I tried to make really nice cuts; I didn't like when partners would tease and call him names. [laughs] I was very sensitive and so wanted to leave him in peace and be respectful; you know, that whole thing."

"I would rather leave the body at peace."

"I feel like she was probably really a gracious person and generous, because she gave her body to science, for us to benefit."

The speaker quoted above about the first day – "oh my gosh, we're going to break it we touch it; . . . careful, careful!" – also described watching an autopsy:

"It was kind of the same reaction . . . like, ah, be kind of careful with that, 'cause you don't want to wreck anything. I just view a dead body as being more fragile than a regular body or don't want to hurt anyone."

For this student, there is still an uncanny sense that the cadaver might be alive. This reverberates through many of the interviews, including one where the student describes herself trying to comfort the cadaver:

"One day, we were reviewing as a group, and whoever had done the dissection that day was teaching us. I looked down, and I had my hand holding our cadaver's hand, like this [demonstrates full-on hand-holding, not just a light touch]. I don't know it was weird; it definitely had an impact on me. I've caught myself doing it a couple of times now, so I had probably done it before. But it's just kind of . . I don't know . . it almost was just like a natural reaction, like if someone who think of as ill or sick you're trying to comfort them."

In one interview, I was surprised to hear a female student bring up the word "mutilation," and I asked her, "So you see dissection as mutilation?" and she responded, "Well, we are." When I responded, "I don't hear that word among you guys very often." She stated the following:

"Oh, yeah. I do [see it that way]. I mean I know that they can't feel it, but sometimes you just feel like you're hurting the body even though, obviously they have no sense of feeling. It's just like, oooooooh. My teammate and I had to saw through the skull to take the brain out, and it's pretty weird. Then now we're taking the face off. And I think it's more in this head and neck area that it seems more personal than the rest of the body, where you can just cover up the face and get on with your work."

A male student also used the word "mutilation," though in a much different context. He spoke of "losing it," in a desensitized, "controlled" manner. He had not fully engaged the third stage of the rite of passage, and found himself stuck in the liminality of doing something he fundamentally did not want to do. I asked him: "Does it seem like that? Does it seem like mutilation?" He responded:

"At times it does. There's days where it's like 'I don't want to be here, I don't want to be doing this.' And you just kind of rip through everything, instead of actually using it to learn what you're supposed to be learning. It's like. .well, this is just part of the drill. We are so desensitized to it, I guess."

While this student was able to reflect on being desensitized or distant from the cadaver, he still regarded dissection as a form of mutilation, "ripping through everything" rather than learning the anatomical structures. While this was not his daily experience of the cadaver lab, his honesty revealed that liminality remains a constant possibility throughout the semester.

Asking another student in an individual interview to recall a specific experience or episode during dissection that stands out in her memory prompted her to the following conversation:

Student: I think what stands out in my mind most recently is cutting the leg off. [long pause]

Anthropologist: I heard about that.

Student: Oh, my gosh. That was very dehumanizing, I felt. Not that everything else hasn't been. I always have to cover the faces, and I'm really thankful that I'm not dissecting the face. I'm not. That was the first thing I did was I looked up what are my

dissections. "Whew - not the face!"

Anthropologist: Why is the face important?

Student: For me, it just says so much.

Anthropologist: The person is still there for you?

Student: I guess; I don't know. I mean that's their face; people remember them for that face! They don't remember them for their leg. And maybe it's because I remember faces much better than names. I forget names all the time; I'm definitely a face person. But yeah, that day was intense. I got sick to my stomach. I nearly started crying. But I didn't.

Anthropologist: So, you had to actually do it, not just watch? **Student:** No, but I was holding her. And trying to be really nice. It was awkward.

Anthropologist: Did you really get sick to your stomach? **Student:** I was very nauseous. The sound of bone cutting through, the ripping of it, ugh. This was her private parts, and just [makes sound "shooo"]; that was just really weird.

Even those that express a wish to leave the body at peace or refer to dissection as mutilation, also emphasize that the cadaver lab is invaluable to their learning experience. Towards the end of each interview, I brought up the use of imaging technology in some medical schools to replace cadaver labs, and asked students "why even have a cadaver lab?":

"I think it's valuable to learn this way. And it's the only time . . I know this too, even though I get sick of going in there, the smell, and it's so much extra time that you have to be here, but it's the only time in our career that we get to do this. I think we're lucky. So I think it's very valuable. You need to know, you have to know that you have to have that base, so when you're learning about it later, you can think, 'Okay, yes, I know where the kidneys are. I know how they're connected, 'cause I saw it and touched it' versus playing around on a computer."

"I learn from experience. I would say I learn way more about the body from the cadaver than being in the lecture. You can feel the tendon underneath the inguinal canal where the hernia comes through. You can feel the ligaments and you can have that motion. So I know that actually doing it, you know, unraveling the body, you learn from that. I see it as definitely a beneficial thing."

"The hands-on is more than you can do anywhere else; Netter [the textbook] is awesome, but it doesn't really matter if you haven't had a chance to try a little and fail. I think that's part of it. It is kind of cool to just be able to unwrap everything. You can look at something and think that you can see what you're seeing, but . . . until you dig around and see what it's like, you don't really know. . . . Yeah, when you dig for stuff, you learn it pretty well."

"I think that just physically seeing it and being able to hold things in your hand, and finding things yourself is really beneficial."

Conclusions

By the end of the semester, cadavers are mostly wrapped and covered, students are less tense, leaning easily against their tables, nearly knocking heads with each other in their eagerness to look at minute anatomical details; their hand movements are more confident and more varied: pinching, poking, pulling, scraping, twirling instruments, holding pieces apart for partners to use tools in the area or to point out hidden structures. There is also a lot more movement around and between tables; the gaze has extended to different angles, different bodies. Teachers also seem to use broader gestures, often their full bodies, to demonstrate as they speak, when they are not leaning into dissection.

By moving from memorizing specific geographies of the body (with the help of lectures, the textbook, and PowerPoint slides, all of which are annotated and engaged with through their own technologies - laptops, pens, paper, etc) to working with their hands on human bodies, grounding their knowledge in specific manipulations and techniques of the body, the students in the educational setting of the anatomy lab, mitigate abjection to become reflective practitioners. In delineating her notion of abjection, Julia Kristeva, etymologically raises the spectre of the cadaver, from *cadere*, to fall.

"There looms, within abjection, one of those violent dark revolts of being, directed against a threat that seems to emanate from an exorbitant outside or inside, ejected beyond the scope of the possible, the tolerable, the thinkable. It lies there, quite close, but it cannot be assimilated.... Unflaggingly, like an inescapable boomerang, a vortex of summons and repulsion places the one haunted by it literally beside himself." (1982:1).

The word "exorbitant" is revealing here: outside the scope of law. Dissecting cadavers has historically been outside the scope of moral, religious, and also juridical law, even as the practice goes back to the Renaissance as a key component of professional medical training (McLachlan and Patten 2006). Prior to laws like the 1832 Anatomy Act in the United Kingdom, dissecting cadavers largely occurred outside public and juridical sanction, such that students were rarely allowed hands-on dissection, and were relegated to observing professional instructors. While the students in this study may or may not be aware of this historical context for their endeavors, they are placed "literally beside [them]selves" as they look down into the face of abjection, *cadere*, to fall, catching themselves on science, the scientistic discourses of applied anatomy.

"These body fluids, this defilement, this shit are what life withstands, hardly and with difficulty on the part of death. There, I am at the border of my condition, as a living being. My body extricates itself as being alive, from that border such wastes drop so that I might live, until, from loss to loss, nothing remains in me and my entire body falls beyond the limit – *cadere*, cadaver. (1982:3).

In order to live, in order to extricate themselves as being alive, the students engage in interpellation – a call and response of science; they stand around the table together, looking down at abjection, pointing and remembering, re-membering: brachial plexus, not *cadere*, inguinal canal, not *cadere*. They live through the interpellation of the cadaver into something that is no longer human, but fully emergent as a [learning] tool. Ready to hand, the cadaver is a standing reserve of tactile scientific knowledge; one only has to "dig around" to pull out fascinating artifacts, "structures." This act of interpellation, as they "dig around" in the cadaver, learn and teach each other, is not one to which they are subject, but one through which the uncanny is rendered home-like. Freud refers to an

essay previous to his own on "the Uncanny" by Ernst Jentsch. In his 1906 essay, "On the Psychology of the Uncanny," Jentsch defines the uncanny in terms of "doubts whether an apparently inanimate being is really alive; or conversely, whether a lifeless object might be, in fact animate." This notion of the uncanny is beautifully exemplified in the students' "being nice" to their cadaver's, even as they "know" these are dead bodies that can not be harmed. They also repeatedly equate "respect" with not mutilating the body, not "tearing it up" but rather "digging around" for information, for learning. What can be mutilated and torn up has not yet been interpellated into a tool, ready-to-hand for future information retrieval.

Works Cited

Carter, Albert Howard. (1997) *First Cut: A Season in the Human Anatomy Lab*. Picador.

Chaffey, Lisa, Evelyne deLeeuw, and Gerald Finnigan. (2012) "Facilitating Students' Reflective Practice in a Medical Course." *Education for Health*. 25:3.

Fabian, Johannes. (1972) "How others die: Reflections on the Anthropology of Death." *Social Research*. 39:49-61.

Giegerich, Steve. (2001) *Body of Knowledge: One Semester of Gross Anatomy, the Gateway to Becoming a Doctor*. Scribner.

Goodwin, Dawn, Laura Machin, and Adam Taylor. (2016). "The social life of the dead: The role of post-mortem examinations in medical student socialisation." *Social Science & Medicine*. 161:100-108.

Goulding, Christina, Michael Saren, & Andrew Lindridge. (2013). "Reading the body at von Hagen's 'body worlds'." *Annals of Tourism Research*. 40:306-330.

Jenner, Andrew. (2012) "EMU's Cadaver Dissection Gives Pre-Med Students Big Advantage." *EMU News*.

Kristeva, Julia. (1982) *Powers of Horror: An Essay on Abjection*. Translated by Leon S. Roudiez. Columbia University Press.

Mamede, Silvia and Henk G. Schmidt. (2004) "The Structure of Reflective Practice in Medicine" *Medical Education*. 38:1302-8.

McLachlan, JC and D Patten. (2006) "Anatomy Teaching: Ghosts of the Past, Present, and Future." *Medical Education*. 40:3, 243-253.

Metcalf, Peter and Richard Huntington. (1991) *Celebrations of Death: the Anthropology of Mortuary Ritual*. Cambridge University Press.

Noonan, David. (2002). "Is the Cadaver Dead? Cutting up a corpse to learn human anatomy has always been a rite of passage in medical school. Those days may end." *Newsweek*, 62.

Palgi, Phyllis and Henry Abramovitch. (1984) "Death: A Cross-Cultural Perspective." *Annual Review of Anthropology*. 13: 385-414.

Schön, Donald. (1983) *The Reflective Practitioner: How Professionals Think in Action*. Basic Books.

Schön, Donald. (1987) Educating the Reflective Practitioner. Jossey-Bass.

Segal, D. (1988). "A Patient So Dead: American Medical Students and Their Cadavers." *Anthropological Quarterly*. 61:1, 17-25.

Turner, Victor. (1967) *The Forest of Symbols: Aspects of Ndembu Ritual*. Cornell University Press.

Van Gennep, Arnold. (1909, [1960]). *The Rites of Passage*. University of Chicago Press.

Acknowledgements

I am most grateful to the first and second year medical students who shared their time and experiences with me, often expressing themselves vividly and with sage honesty. Those who volunteered to participate in this study very much wanted students and patients to read this paper. Many thanks as well to my colleague and friend, David Beard, who patiently yet insistently saw the core truths of this paper. And huge thanks to the hidden collaborators in all my work on this planet, my daughter, Selene Emad-Syring, who transcribed many of the interviews, and my husband, David Syring, who unfailingly sees the writer in me when I don't.