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Introduction

The Quandary of the Sacred Vagina: Medical Education in a New Era

The anatomy lab has long held a fascinating and central position on the path to becoming a physician. And why not? Scholars of medical education and physicians have both written about how working with the cadaver prepares the medical student for this singular profession, in which personhood—for patient and trainee—is reworked or vacated entirely, death is a daily fact, and the body is cut into and opened up in ways that violate many deeply held cultural values. Commentators have noted that the anatomy lab also sets the model for the physician-patient relationship: a stoic expert applies knowledge to the inert and voiceless patient. Of course, none of these lessons is explicit. Trainees learn from their instructors and their peers about the so-called "soft skills" of being a physician from interactions with one another and everything that goes unsaid.

And yet, the anatomy lab is rapidly losing ground as the key mechanism for teaching trainees about the physician-patient relationship and the profession of medicine (Vinson 2019). Since the 1990s, the implicit and informal ways in which medical students were socialized have lost prominence in favor of explicit and formal systems of knowledge and practice that teach medical students how to become physicians. The rise of required courses on professionalism is just one such example, and one of the most visible. Attend any conference on health professions education today, and you will hear experts debate the most cutting-edge and scientifically vetted methods for producing the next generation of physicians.

With this shift toward the explicit, formal, and intensive has come a dramatic change in the profession's attitude toward feelings. In the old

model of the anatomy lab, learning to suppress your horror, disgust, fear, or sadness was as central a lesson as learning the shapes and locations of organs. However, newer models of educating trainees take feelings headon: medical students have memorial services to honor the humanity of their cadavers and grapple with their emotions around death and dying, attend art classes to develop their empathy, and, perhaps most tellingly, are judged on a portion of the United States Medical Licensing Exam (USMLE) on their ability to evoke and manage patient's feelings about their illnesses.

This shift is fascinating for a profession that has spent almost the entirety of the twentieth century cultivating detachment and dispassionate concern among its initiates. Nowhere is this shift more apparent than in teaching and learning the pelvic examination. In previous generations, medical students learned this exam on clinic patients who were given no opportunity to refuse. Medical students were taught to ignore their own and their patients' feelings about the exam, much in line with the model of expert-object established in the anatomy lab. In fact, patients who did have feelings about the exam—perhaps that the speculum hurt or that the exam reminded them of past trauma were pathologized. Today's medical students now almost all learn the exam on the body of a trained and well-paid layperson who is simultaneously also their instructor. These laypeople emphasize not just the manual skills of inserting a speculum and checking the internal organs for disease, but also the interactional aspects of how to make patients feel safe, comfortable, and respected. In addition, they acknowledge the medical students' own feelings of anxiety or squeamishness and provide a supportive environment for trainees to make mistakes.

Learning about the body from a body that sits up and talks back is a markedly different kind of socialization than learning from the cadaver or the inert clinic patient. This new kind of pedagogy is embedded in a broader transformation in the profession to value feelings between and within physicians and patients. Conversations about empathy and burnout abound, even as metrics assessing the encounter, such as patient satisfaction scores, proliferate. No longer is the patient a passive object receiving the physician's expert knowledge. The patient is centered in the relationship, the patient is empowered, the patient is to be engaged in decision-making. There is clearly a new landscape about feelings in clinical medicine.1

This, finally, is how we make good doctors, isn't it? We have upended paternalism and replaced it with empowerment. We have leveled the power imbalance. We are making more resilient and compassionate physicians. Undoubtedly, paternalism is better left in the past, and treating patients like objects is detrimental to both patients' and physicians' wellbeing. But the power of medicine has not diminished. Indeed, health itself is increasingly a virtue that all patients are required to manage in order to maintain their wellbeing. More and more experts and forms of expertise guide our lives and tell us the kinds of people we should be and the ways that we should act with regard to our health. The patient, by sitting up and speaking back, is certainly empowered, but to what end? What are the consequences of this shift for how feelings are managed in clinical medicine? What kinds of people are we shaping medical trainees—and by extension, patients—to become? What are the norms and values embedded in this new professional landscape? And what are the points of resistance, the fissures and exclusions, the bodies that are left out?

In this book, I take up these questions by looking at the teaching and learning of the pelvic exam in gynecological teaching associate (GTA) programs. The pelvic exam is a fascinating case for understanding medical socialization today, as it involves a two-pronged navigation of feelings. It is about the emotions of physician and patient, but it is also about the embodied experience of sensation for both. The GTA program today has been shaped as well by the legacy of feminist health activism and the science-driven reform efforts of medical educators. While it is surely an exceptional experience—one or several one-to-three-hour workshops during all of medical school—it is embedded in and demonstrative of larger trends in medical education and, indeed, the medical profession.

I argue that teaching and learning the pelvic exam through the use of GTAs demonstrates the tension between the ever-presence of feelings and the drive toward standardization in twenty-first-century United States medical education. Learning the pelvic exam from a trained layperson prepares medical trainees to embody the changing values of the medical profession. As feelings have come to matter in new and complicated ways, medical educators and indeed the profession as a whole have developed scientific methods for measuring, modifying, and appropriating affect in the clinical setting. By affect, I mean the capacity of

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thaties to make sense, and form connections with one another. These proliferating technologies serve to manage the behaviors of physicians and by extension, patients. And yet, such affective capacities can never he fully captured by the tools of science. In short, I argue that teaching and learning the pelvic exam through the use of GTAs demonstrates how affect has instrumental value for upholding the cultural, political, and commit interests of the medical profession—and the forms of resistance possible therein.

"The Quandary of the Sacred Vagina": The Pelvic Exam and Medical Socialization

The pelvic exam is a cornerstone moment for many medical students. It is the first time they are required to touch a real human being in a sensitive and sexually charged area of the body in a professional manner. In a 2015 article in Medical Education, the premier journal for the titular discipline, a physician educator wondered about "the quandary of the sacred vagina": "Why does the female pelvic examination receive so much attention in medical education?" (Posner 2015:1179). Other examinations like the male abdominal "can be painful if performed improperly," yet the "female reproductive system occupies a special place in our curriculum." This physician educator argues that the combination of the vagina being a "private part" and the reproductive organs being internal to the body makes this examination unique among those that medical students must learn. As such, the pelvic exam can invoke a lot of anxiety for medical students. "The true benefit of the GTA experience may be in starting to overcome one's fear of harming someone" (Posner 2015:1180). These questions about hidden interiors of the body, sacred orifices, fear and harm, have long captured my attention as a sociologist.2 What makes the vagina "sacred" enough to pose a quandary for medical students and educators? Given all the invasive and potentially painful techniques a medical student must learn to perform on another's body, how did it become possible that laypeople would voluntarily undergo this process—repeatedly? And why did medical educators agree that laypeople were the best method of instruction?

Prior to about the mid- to late 1980s, a medical student's first encounter with the pelvic exam would typically occur on an actual clinic patient, sometimes under anesthesia (Beckmann et al. 1985, 1992).3 A majority—72 percent—of today's medical students in the United States will practice the exam on a GTA (Dugoff et al. 2016). While the focus of this book is on medical education in the United States, GTAs are also used commonly in Canada, Australia, and Scandinavian countries, and they are gaining popularity in Turkey, the United Kingdom, and elsewhere (Janjua et al. 2017; Sarmasoglu et al. 2016; Smith, Choudhury, and Clark 2015). GTA programs are one of a number of simulated patient experiences that medical students have; almost all physical exam skills are now taught on trained laypeople. Simulated patients are also used in the USMLE (also called the Step exams) that all medical students have to pass in order to practice medicine in the United States.4 In this way, the growth of simulated patients—as in GTA programs—represents how medical education increasingly uses the tools of science to standardize how medical students learn to manage the physician-patient relationship.

For patients, the pelvic exam can very commonly be experienced at best as unpleasant and at worst as painful and frightening (Bloomfield et al. 2014). For almost seven decades it has been a once-yearly ritual for patients assigned female at birth.5 Until the mid-2000s, it was used as a gatekeeping mechanism for allowing patients to access hormonal forms of contraception, thus linking patients' bodily autonomy with medical control of the body (Stewart et al. 2001). Notable exceptions to this include the Women's Health Movement of the 1960s and 1970s, which encouraged self- and group-based pelvic exams and performance art such as that of Annie Sprinkle (Kapsalis 1997).6 But for most of us with vaginas, this exam invokes feelings of vulnerability, often magnified by the objectifying gaze of our physician.

At this point, you may be wondering, as a physician wondered in print in the American Journal of Obstetrics and Gynecology, "What kind of woman lets . . . novice medical students examine her?" (Kretzschmar 1978:373). Bound up in this question are all kinds of assumptions about sexuality, deviance, and masochism. Any person who has ever had a pelvic exam might immediately cross their legs and wonder why anyone would do this voluntarily and for money. Whenever I talk about my research, from professional conferences to cocktail parties, I am always greeted by surprise that this kind of thing even happens (let alone that I myself was once that kind of woman who let novice medical students examine me for money). When I speak to physicians about my work, almost every single one tells me with enthusiasm and respect about the GTA from whom they first learned the exam. I was so nervous, and she made it so comfortable.

This is exactly the reason why the pelvic exam—"the quandary of the sacred vagina"-receives so much attention in medical school. Indeed, after leaving medical school or residency, a physician may likely never perform this exam again. The routine pelvic exam is on the decline in the United States, now being performed every three to five years for most patients instead of every year. New technologies in the detection of cervical cancer-causing strains of the human papilloma virus (HPV) have made the cornerstone of the yearly pelvic exam, the Pap smear, less important if not soon to be obsolete. And yet, in 2016 alone, there were over 37 million office visits where a pelvic exam was performed (National Center for Health Statistics 2016). Its role in clinical practice extends beyond cancer detection, even if saving lives is its greatest success. The visual inspection and bimanual exam assess for sexually transmitted infections or endometriosis, and the speculum exam tests for vaginosis or allows for cervical biopsy. Thus, while your average physician is unlikely to practice the full exam as taught by GTAs on a regular basis, the GTA session itself remains a foundational moment in medical training.

GTA programs uniquely embody the tension between the drive toward science and standardization and the increasing centrality of care, relationality, and feeling in contemporary medical education. These programs arose as part of the wholesale shift toward standardized evaluation of clinical skills in the 1980s and 1990s, and yet they are fundamentally about feelings—about the experience of performing the exam and about what the exam feels like for patients to receive. GTAs teach from a checklist that was developed by experts on communication in the clinical encounter, even as their value resides in their highly detailed awareness of their own embodied sensations. In this way, the capacities of bodies to feel, sense, and relate, which I call affect, are caught in new and proliferating tensions as the medical profession transforms.

Medical Education and a Profession in Transition

GTA programs are the focus of this book, but they are indicative of larger trends in medical education and, indeed, in the profession in the United States. As I argue here, the medical profession has increasingly harnessed the affective capacities of its trainees and members in order to maintain its authority over patients. The reasons for this strategic deployment of affect has to do with profound structural transformations that occurred in healthcare and broader society in the United States during the 1970s and 1980s. To understand why these changes occurred and how medical education has grappled with them—especially in teaching and learning the pelvic exam—it is necessary to understand the social, political, and economic basis of the medical profession's authority.

Scientific knowledge is the bedrock of the medical profession's resilience in the face of structural and cultural changes in the landscape around it. This is due in large part to its ability to monopolize access to scientific knowledge about the body. Take, for example, its concerted efforts to shore up its authority in the nineteenth and early twentieth centuries, as its members began to regulate and standardize how trainees learned to become physicians. Prior to these efforts, physicians were a loosely organized group whose training varied widely and whose effectiveness in treating illness even more so.8 Two governing bodies—the American Medical Association (AMA), founded in 1847, and the Association of American Medical Colleges (AAMC), founded in 1876—issued requirements to its member schools regarding the training of students (Rothstein 1987). These tactics bolstered the authority of the profession and functioned to exclude those already marginalized in society.9 This meant that women—especially women of color—who had for centuries taken care of pregnancy and childbirth, as well as many common ailments for their communities, were pushed out as the nascent medical profession sought to establish itself and claim the marketplace (Mc-Gregor 1998).

Advances in science and technology in the early twentieth century, such as the availability of sulfa (antibacterial) drugs and the discovery of blood types, further shored up the profession's authority. The growth of hospitals and increasing specialization among physicians led the AMA and other governing bodies to recommend more advanced training. As

a result, the internship and residency became a crucial part of the elite physician's training. In addition, formal certification became commonplace. The AMA successfully lobbied all states to have licensing laws by 1900 and to require written exams for licensing by 1910 (Rothstein 1987). These included requiring four years' worth of courses and more rigorous education in the basic sciences. The National Board of Medical Examiners (NBME) was founded in 1916 to supervise licensing examinations. The exam covered the basic and clinical sciences, as well as a practical component undertaken at the bedside. This brought previously unstandardized aspects of the physician-patient relationship, such as communication and decision-making, under the auspices of an increasingly scientific and institutional governing body.

During the middle of the twentieth century, the medical profession's drive toward science was fully entrenched as the strategy for maintaining professional dominance. The "art" of medicine became a science (Berg 1995). A solid proficiency in basic sciences was considered the most valuable for clinical reasoning and decision-making. Medical schools were increasingly tightly regulated by the AMA and the AAMC, so that admissions and curricular standards became more rigorous. In order to attract the best and brightest students, these schools readily complied with such standards. Uniformity of licensing procedures and examinations across the country was intended to ensure that only those deemed totally proficient could practice medicine. Moreover, medical training was extended beyond the four years of medical school into internships and residencies. Specialization became the routine rather than the exception, and advances in science and technology continually challenged medical schools and physicians to adapt.

During the 1960s and 1970s, a number of structural transformations shifted the relationship between the medical profession and the public that it purported to serve. The emergence of managed care and patient consumerism reorganized the economic structure of medicine. The advent of health maintenance organizations under federal law in 1973 introduced benefits and drawbacks that radically altered the provision of healthcare in the United States. Managed care involves negotiations between insurance companies and providers to control costs, such as limiting the length of hospital stays and denying unnecessary tests or procedures. As a result, hospital stays declined rapidly during the 1970s,

as did the length of the routine clinical encounter. With the evolution of managed care into such health insurance plans as preferred provider organizations, healthcare became a product that the savvy consumer should shop for through choices of providers, hospitals, and clinics. Patients started to think and act more like consumers than docile subjects. In addition, patients became more active in other ways. The patient health movements that emerged in the 1970s and proliferate today can be seen as both a kind of consumeristic activism and a push-back on the professional authority of physicians during a time of generalized declining trust in experts. The Women's Health Movement, which helped reshape teaching and learning the pelvic exam during the 1970s and 1980s, is one such example.

As the type of patient changed during the 1970s, the type of medical student also changed. Women began entering medical schools during the 1970s and early 1980s in high numbers. Prior to 1970, women made up less than a tenth of medical students. By 1975, women accounted for one-fifth of medical students and one-third by 1985 (AAMC 2016). By the early 1990s, women made up roughly half of all medical students, and this continues to be the case. Similarly, relatively more people of color entered medical school in the 1970s and 1980s, primarily those of Asian descent, although since the 1990s and 2000s, Latinx and Black students have been making up larger portions of the medical student body (Lee and Franks 2010). These transformations shook up the culture of medical schools, as educators had to grapple with the gendered and racialized constructions of who got to count as a legitimate scientific expert.

With these structural transformations came an intensified interest in the medical profession's Holy Grail for controlling access to scientific knowledge: the licensing exam. Throughout the 1970s, licensing requirements for physicians became increasingly more stringent. Oral exams for hospital house-staff (residents) were eliminated in 1970 and replaced with a written test. The largest change occurred in 1992 with the requirement of the United States Medical Licensing Exam (USMLE) through a collaboration between the National Board of Medical Examiners (NBME) and the Federation of State Medical Boards (FSMB). As I demonstrate in this book, this introduced a new expert apparatus that governed what was considered appropriate professional behavior between physicians and patients, especially with regard to emotion. This also meant that

one-off experiences such as the pelvic exam became important opportunities for medical students to practice communication and interpersonal skills that they needed in order to pass high-stakes testing.

Out of the patient activism of the 1970s and the reorganization of how healthcare is paid for emerged a reconceptualization of the debate about the physician-patient relationship and the role of feelings in medicine. During most of the twentieth century, the prevailing form of emotion in medicine was one of detached concern or affective neutrality. Renee Fox's (1979) path-breaking work demonstrated how medical trainees strove to maintain emotional distance in the face of suffering and death. This was to ensure the centrality of science: while physicians were expected to be sympathetic toward patients, any further kind of emotional engagement was thought to cloud judgment and introduce bias into the clinical encounter. As recently as the late 1980s, detached concern has been explicitly socialized into medical students through formal and informal means, especially during crucial experiences such as the pelvic exam (Smith and Kleinman 1989).

However, during the 1990s, new constellations of knowledge reordered the relationship between science and affect as medical educators reconsidered the role of feelings in the clinical encounter (Underman and Hirshfield 2016). For example, clinical empathy is a model in which physicians are urged to consider patients' emotions—and their own emotions—when making medical decisions (Halpern 2011). Rather than viewing emotion as a source of bias to be reasoned away and avoided, clinical empathy makes the emotional connection a physician might feel with a patient part of clinical practice. In this way, feeling for and with patients, rather than the cultivation of detachment and emotional distance, becomes a core component of a good physician. This shift toward attending to one's own feelings and the feelings of patients is nowhere more evident than in teaching and learning the pelvic exam, which forms the cornerstone of my argument in this book—namely, that how GTAs teach medical students to engage with patients' feelings reflects a largescale shift in how medical authority is exercised on and through the affective capacities of patients and physicians.

The "professionalism movement" in medical education also began in the late 1990s and has accelerated so that professionalism is now a "third-pillar" in most medical school curricula (with the sciences and clinical skills being the first two). 14 Classes, workshops, and other formal parts of the curricula make aspects of professionalism such as medical ethics, the physician-patient relationship, and clinical reasoning explicit requirements of medical school. Professionalism is sometimes framed as the outward expressions of respect, compassion, and so forth, for patients and colleagues. It is often fostered through exercises that involve reflexivity, such as reading poetry, free-writing or journaling, taking photos or painting, or speaking with a mentor. In this way, learning the pelvic exam with a GTA is exemplary of these new technologies for cultivating professionalism and its attendant affective capacities.

Thus, by the dawn of the twenty-first century, the tension between science and affect was being articulated in new ways and with new consequences in medical education. Professionalism has become an explicit concern among medical educators. Medical students experience more overt and intentional efforts than ever before to socialize them into the profession. Not only are medical students taught clinical skills and trained to embody new sets of values, but they are tested on them as well. These shifting standards respond as much to changing expectations from the public as to corporate hospital models that track metrics such as patient satisfaction and physician efficiency.15 This book traces the ways new subjectivities for both physicians and patients are increasingly being produced through modification of the body's capacities to feel, sense, and relate. My conceptual framework draws together literature on expertise in biopolitical regimes-including how expertise "makes up" subjects of governance—with literature on affective economies. Taken together, these sets of literature show how expert knowledge and practice balance the social and cultural forces that emphasize care and compassion in clinical medicine with economic and political forces that demand the continued power and authority of the medical profession. These transformations are nowhere as evident in medical education as in the ways in which teaching and learning the pelvic exam has been reorganized.

Contemporary Clinical Governmentality

Since the 1970s, we have witnessed rapid and far-reaching transformations in the medical profession. The rise of informed consent and patient consumerism have meant that the physician-patient relationship has changed to emphasize a more flattened out rather than hierarchical exchange (Clarke et al. 2003; Reeder 1972). Technological advances, evidence-based medicine, and the electronic health record have reorganized medical knowledge (Clarke et al. 2003; Ebeling 2016; Joyce 2008; Reich 2012; Timmermans and Angell 2001; Timmermans and Oh 2010). Institutional pressures such as managed care, corporatization of healthcare, and the growth of the pharmaceutical industry and direct-to-consumer marketing have curtailed the autonomy of physicians (Bell and Figert 2012; Clarke et al. 2003). These transformations can all broadly be situated within the conceptual framework of biomedicalization, which sociologist Adele Clarke and her colleagues (2003) developed to account for the bottom-up and inside-out reorganization of medical knowledge and practice due to the proliferation of science and technology. And yet, despite these transformations, sociologists have only recently begun reconsidering the nature of professional dominance in healthcare (Vinson 2016). In this book, I use a case involving the teaching and learning the pelvic exam in medical education to understand the larger values and norms of the profession of medicine as it responds to these structural and institutional forces. Following theorists of biomedicalization, I situate the nature of contemporary medical authority within a neo-Foucauldian framework that conceptualizes power as productive and multifaceted. A neo-Foucauldian analysis also links the medical profession and how it shapes the behavior and personhood of its participants (physician and patient) to broader state and economic forces that structure our lives.

From the work of philosopher and historian Michel Foucault I draw on the concept of biopolitics to analyze the dual relationship between the production of knowledge about populations and the management of individual bodies as a form of social control (Foucault 1994, 1995). As Foucault famously wrote, biopolitics is a form of political rationality in which the state fosters or enables life or disallows it to the point of death (Foucault 1990). Family-planning programs in the early twentieth century are a classic example that Foucault himself used. The state gathered scientific data on the population in order to encourage the "right" forms of reproduction among middle-class white heterosexual married couples, while pursuing eugenics programs for those deemed

"unfit" to reproduce: people of color, the poor, the disabled, et cetera. In this way, the knowledge/power nexus targets the body and its productive capacities in order to shape society as a whole. Indeed, what makes biopolitics a useful concept is that it reframes power as not only or not just prohibitive. Power does not suppress through applications of force in biopolitics; instead, it is productive. Systems of knowledge shape Individuals' behaviors, attitudes, hopes, and aspirations. Thus, scholars began writing about the power of the medical profession as it pertains to this form of biopolitical governmentality (Armstrong 1983, 1995; Turner 1995, 1997), by which I mean this form of shaping populations through the acquisition and deployment of knowledge.

In a biopolitical analysis, power is conceived not so much as being centered in institutional spaces and wielded by individuals but as a productive force that operates through forms of knowledge. One outcome of this shift toward a Foucauldian or biopolitical understanding of the medical profession is that instead of speaking of experts, we can now speak of expertise. The former is concerned with the socially valued properties of the individual, which make that person an expert, whereas the latter considers the practices, knowledges, and tools that mark as distinct a body of expertise (Eyal 2013). As social theorist Nikolas Rose argues variously in his work on expertise in late modern capitalism, the exercise of governance is no longer necessarily organized through society or the state, but through an increasing array of forms of expertise. Through the truth claims of expertise, people can be governed "at arms' length": "Political rule would not itself set out the norms of individual conduct, but would install and empower a variety of 'professionals' who would, investing them with authority to act as experts in the devices of social rule" (Rose 1993:285). A very basic and low-stakes example of this that I use with undergraduates is about dental hygiene: we do not brush our teeth every day because it is a law; we do so because a professional (a dentist) equipped with a special body of knowledge (dental medicine) teaches us that this is the best way to live our lives (remaining cavity-free). Likewise, the number of such professionals who shape and guide our behavior in relationship to health and illness is proliferating. Physicians now work alongside advanced practice nurses, physician's assistants, health coaches, clinical psychologists and social workers, and so on and so forth, in order to manage disease, as well as to promote health itself to the population as a moral obligation. These health experts all operate within the episteme of medicine, meaning that the physician is not the only pathway to scientific knowledge about disease, illness, and health; rather, a network of practices, knowledges, and tools functions in the service of biopolitical governance.

A key aspect of this shift is that experts no longer exercise direct control via discipline. Instead, individuals are increasingly targeted by the productive operations of power to become self-responsible and selfgoverning (Metzl and Kirkland 2010; Rose 2009). In these new forms of governance through expertise, we are not only obligated to get professional help when we become sick, but also encouraged to constantly and actively monitor ourselves to maintain our health. To return to my example of dental hygiene, notices from the dental office to show up for our six-month cleaning and the institutional site of the dentist's office (the waiting room, the chair, the lights and tools) serve to discipline us to accept the dentist's role as an arbiter of dental expertise. But it is the equipping us with knowledge about dental hygiene via public health campaigns about brushing and flossing that turns us into good dental citizens. Not brushing thus takes on a moral quality: tell someone you decided not to brush your teeth this morning and see how what the response is. Congratulations, you have taken medical authority into your own body. This process works for all areas of health and illness. Diet, exercise, taking medications for our anxiety and vitamins to strengthen our bones, all function to promote health as a moral obligation. This is what I mean by biopolitical governance making us self-responsible.

However, this shift should not be taken as evidence that, because the medical profession no longer has a stranglehold on scientific knowledge, we as patients are liberated, but rather that control operates variously through knowledge. No longer being beholden to institutional spaces of power and direct exercises of authority does not mean we are free to live as we want. Instead, it means that expertise serves to continuously modify and guide the choices we make about our lives. Thus, a study of expertise "opens up for investigation the complexity and diversity of the relations between authorities and subjects, and the ways in which such practices have not suppressed freedom but, on the contrary, sought to 'make up' subjects capable of exercising a regulated freedom and caring for themselves as free subjects" (Rose 1993:288). The burden of biopolitical power is now placed onto individuals through processes of turning them into the kinds of people who can and will act as "good" subjects. It is this process of crafting subjects through the sharing and spread of biomedical knowledge that I am concerned with in this book. I explore how both physicians and patients are "made up" by experts and the spread of expert knowledge through the GTA session in order to explicate the norms and values of "good" members of our society.

And yet, the major social institutions around which Foucault framed his theory are breaking down (Deleuze 1992). The clinic no longer operates as the only way in which the norms and values of medicine become embodied in patients. Indeed, the shift from discipline to control that has more broadly reshaped the institutions and structures of contemporary society has also reshaped medical authority. In societies of control, power circulates ubiquitously and relies on modification and modulation rather than discipline (Deleuze 1992). In this way, theories of control, rather than discipline, better account for the circulation of "health itself" in society and the new ways in which patients increasingly are self-responsible and self-monitoring, instead of simply or only submitting themselves to the authority of the physician in ways enabled by the physical environment of the clinic. Although work on biopolitics has captured the transformation in the nature of biomedical power, It has not fully accounted for the mechanisms by which patients and physicians are transformed as subjects. This is where my concept of this book intervenes: expert systems of knowledge and practice produce contemporary subjects of biopolitics by acting on and through affect.

The Affective Turn and Clinical Medicine

We are in the midst of an "affective turn" in the social sciences, cultural studies, and the humanities, in which new attention is being paid to embodied forms of feeling.16 Affect is the capacities of bodies to feel, sense, and relate. I draw from a Deleuzian tradition, in which affect can be thought of an intensity lived at the level of the body.¹⁷ Given that teaching and learning the pelvic exam in the GTA session involves circulations of sensation within the body and between bodies, and given how charged this exam is by feelings of shame, anxiety, and disgust, this concept is essential to my analysis. Conceptualizing affect in this way captures embodiment and our capacities to form connections with the social and material world around us, as well as the new ways in which power works on and through our bodies under scientific and capitalist regimes.

Why would I use the term "affect" instead of "emotion," since there is such a rich literature on emotion in sociology already? For example, Arlie Hochschild's (2012) canonical book, The Managed Heart, introduced the concept of emotional labor, which is work that requires the management of one's own emotions (feeling rules) and emotional expressions (display rules) in order to induce or suppress emotions in others, usually paying clients. This concept has been influential in many fields and has made its way into the medical education literature. However, a growing body of literature is starting to recast emotional labor in the terms of affective labor to better capture the nature of work in late modern capitalism (Hardt 1999; Weeks 2007). For example, what is being produced by the programmers who write the algorithms that guide what stories show first in your Facebook feed? This is not quite emotional labor. Instead, it is about producing emotional or affective states in order to produce capital—that is, money for advertisers.

While affect and emotion are interrelated concepts, they have important differences and I use them differently throughout the book. Put simply, affect is the pre-social, pre-linguistic, pre-conscious experience, while emotion is the individualized, named, recognized state (Gould, 2009). Brian Massumi writes, "An emotion is . . . the sociolinguistic fixing of the quality of an experience which is from that point onward defined as personal" (2002:28). Or: "An emotion or feeling is a recognized affect" (Massumi 2002:61). This may seem like splitting theoretical hairs, but this difference is important for the other properties of affect that make it a useful concept. Unlike emotion, affect is not fixed or contained inside one body of one individual. Instead, it circulates between bodies, between signs, between material objects and discourses. Because of this inability to fully capture and contain affect, affect has the property of a verb: it does things. It moves, it connects, it severs. This property of affect is what I find most useful for understanding the embodied nature of medicine. Affect allows for physicians and patients to "move with and be moved by" (Myers 2012) one another and the spaces, objects, and tools of the clinic. In my analysis, I follow sociologist Deborah Gould

(2009) in using the word affect to describe this vital force and the word emotion to describe the recognized state.

Affect is produced and circulated in social relationships. In her masterful work on the social production of emotion, Sara Ahmed contends that affect is produced in historically specific circulations among subjects, which she calls affective economies. "In such affective economies, emotions do things, and they align individuals with communities" (Ahmed 2004:119). For example, hate for a feared outsider binds a nation together as one. The collective grief or rage experienced by a marginalized community moves its members to action in pursuit of social justice (Gould 2009). In this way, affect circulates through sideways or "sticky" associations and generates the surfaces and boundaries of individual and collective bodies. Due to the weight of history, some bodies are "stickier" than others and accumulate more affective charge. Thus, capacities to experience and display emotion, and the resultant modes of embodiment, are produced in specific historical and cultural contexts and become bound up with the political and economic structures in which they are valued. In this way, we can more fully parse the different ways in which communities of color, for example, experience the physician-patient relationship compared with white people.¹⁸ Or we can better account for why Black men self-report the highest rates of empathy of any group in standardized tests of physician-patient communication and yet are rated the lowest, while white women consistently perform the best (Berg et al. 2015). Some bodies simply come into medical school with different affective charges due to historical and material conditions of social life. Stereotypes about white women as nice and kind or Black men as dangerous and aggressive become layered into the body as affects that circulate in these spaces.

Because of its capacity to "surface" bodies and create boundaries, affect is increasingly becoming the target of regimes of governmentality. By this I mean that affect is becoming both the target of and the tool through which the conduct of the population is guided, controlled, and disciplined. 19 The emerging literature on affect and control demonstrates the role of affect in contemporary processes of biopolitics (Anderson 2012; Clough 2003, 2008; Clough et al. 2007). Accordingly, biopolitical power acts on and through affect, making affect both the target of power and its condition for existence. Power acts on and through us by modifying and managing our lived intensities of the social world and thus our emotion. Modifications of how people feel assist in the production of certain kinds of subjects: how we are made to feel shapes the kinds of people we want—and are able—to be. In biomedicine, hope or trust makes patients into willing consumers (Brown 2015). A whole range of psychological research on "person perception ability" links the ability of physicians to successfully judge a patient's emotional state with patient satisfaction and compliance.20 This also means that affect has an economic value, either directly or indirectly. Directly, we see affect as a commodity in selfhelp and motivational industries, where the imperative is to live happily. Indirectly, we see it in the rise of "do what you love" directives—wherein "doing what you love" is more important than economic stability—and of "self-care" economies at work. For example, in the health professions, "self-care" in the form of exercise, journaling, bubble baths, and so forth, is promoted in place of addressing structural issues that lead to burnout. Affect is thus endlessly exploited in the service of capitalism.²¹ In this way, affective governance is a new mode of producing physicians and patients under corporatized regimes of for-profit healthcare.

Affective Governance in Medical Education

By linking theories of affect with those of governmentality, I argue that not just emotion but our capacities to sense, relate, and feel are bound up in the workings of power via deployments of expertise.²² In this way, I contend with a conceptualization of affective governance in medical education.23 I use this phrase to capture all of the ways in which affect has become a target of contemporary forces of governance in the training of the next generation of medical students, as well as the forms of resistance available within such strategies. Further, my analysis considers affective governance in medical education across several scales of action.

First, I am interested in the regimes of affect that characterize medical education. I draw on a Foucauldian notion of regimes (Bell 2009; Foucault 1982, 1995; Klawiter 2008; Moseby 2017), which considers the historically specific and temporally bounded processes by which systems of knowledge and discourse are formed. Regimes are the particular kinds of mechanisms that exist in a given time and place and govern what is true or not based on that locality's means of knowing. We can see these at work in how affect is known in specific ways in medical

education and increasingly incorporated in its professional projects. I opened this introduction with some examples of the ways that medical students' feelings matter in new ways. We can see a new regime of affect at work in concern about burnout, in mindfulness and meditation training in medical schools, in standardized licensing questions that evaluate medical students' abilities to manage their feelings and their patients' feelings. Even debates about the anatomy lab demonstrate this new regime of affect: costly and environmentally questionable as cadavers are, they're still important for medical students to acquire the feel of working with human tissues (Prentice 2013). A concept related to regimes of affect is economies of affect in medical education. Economies of affect are those zones or spaces within which affects circulate and are valued by expert knowledge (Ahmed 2004; Richard and Rudnyckyj 2009). Economies are essentially systems of management that value affective capacities within the structural or institutional spaces that they circulate in or flow through. While regimes are macro-level, I see economies as being more meso-level. Put another way, while regimes capture the changes in knowledge and organization in medical education around affect, economies capture the interpersonal or site-specific dynamics of affective flows.

Second, I am interested in the ways in which subjects of these new regimes of affective governance in medical education take up these regimes into their own bodies. I use the concept of technologies of affect to capture this. I define technologies of affect as those knowledges, practices, techniques, and discourses that seek to measure, manage, harness, and produce the affective capacities of medical students, and by extension patients. Technologies are those systems of knowledges and kinds of practices that enable larger structures of power to shape the conduct or behaviors of individual subjects. For example, in Discipline and Punish, Foucault traces the emergence of the prison as a kind of technology, comprised of physical environment, timetables for prisoner activity, ideas and knowledges about "rehabilitation," behavior and attitude of guards, and so forth, which shaped the prisoner into a certain—reformed—kind of person. One way to think of technologies is as instruments (in the forms of knowledges, discourses, and practices) that link macro-level strategies of governance with individuals. Foucault wrote of discipline as a key mechanism of power by which the major

intuitions in society (such as the prison, the clinic, or the school) shape the behavior of its members.

In biomedicine, the practices, knowledges, and discourses that make up technologies of affect modify and mobilize the embodied capacities to feel of both physicians and patients. Physicians are targeted by these technologies in order to become more efficient workers while also maintaining authority in the encounter. Patients are targeted in order to produce the kinds of people who will take up biomedical expertise into their own bodies to manage their own health and wellness and participate in economies as workers and consumers. The concept of technologies of affect accounts for transformations in the profession of medicine in which physicians increasingly rely on using emotion to ensure patient trust and compliance. In this way, it updates theories of professional dominance for the new landscape of health logics under capitalism formed by biomedicalization. Technologies of affect account for the mutuality of subject formation in biomedicine, so that sociological work on both professional socialization and on the disciplining of patients are linked.

I will describe a number of technologies of affect in medical education, but my particular focus is on the role of simulation, using the case of teaching and learning the pelvic exam. Simulation, as in the GTA session, is produced within the expertise of medical education, and it guides and shapes the behaviors and attitudes of medical students. However, the techniques and skills that medical students are taught through simulated encounters such as the GTA session shape not only their subjectivities as future physicians. Medical students learn sets of practices that are intended to also shape the behaviors and attitudes of patients. The key target of intervention in these interlinked sets of practices is affect. By shaping the bodily capacities of medical students—and by extension, patients—the expertise of medical education seeks to produce subjects of these new forms of biomedical power. Thus, technologies of affect seek to (re)establish the authority of the medical profession by shaping patients' emotional selves.

Outline of the Book

The data for this book come from a qualitative study of GTA programs at three medical schools in Chicago. Between 2011 and 2013, I conducted

Interviews with three groups of stakeholders: GTAs and their program coordinators, medical faculty, and medical students. I also collected educational data from 2011 to 2019. These sources included medical journal articles, syllabi and lecture notes, meeting minutes and center reports, materials used to train GTAs and those handed out to students, and so forth; in total, I had over a thousand pages to sort through. From 2015 to 1017, I was a postdoctoral research associate in a department of medical education, which exposed me to the larger practical and research apparatus of the discipline. Finally, and perhaps most crucially, I worked as a GTA in two major cities between the years of 2005 and 2015. I would not have known that such a job exists without having done it-most people who have not gone to medical school do not. In addition, my questions about expertise, the politics of care, and the body are intimately shaped and inspired by the decade I spent doing this work. I address these issues in the methodological appendix.

In chapter 1, I provide a brief history of how sensitive exams have been taught and the debates within and beyond medical schools about how to teach these. I then consider the role of the Women's Health Movement and the rise of medical education research in the formation of the GTA program. I argue that feminist practices of care have transformed how the pelvic exam is taught in medical education, even as medical education researchers coopted these practices to serve the interests of the medical profession. Thus, in demonstrating the rise of affective governance in medical education, I also consider the instrumental ends that affects like caring and empathy serve. I continue this theme in chapter , where I contextualize the growth of GTA programs within a larger trend in medical education toward standardizing clinical skills education. I argue that medical education research produces technologies of affect in order to shape the conduct of physicians and patients. I use simulated patients and the communication and interpersonal skills checklist that GTAs use to evaluate medical students' performance as examples of such technologies.

In chapter 3, I argue that GTAs perform a kind of intimate labor that relies upon care and attentiveness to their bodies, their coworkers' bodles, and the bodies and emotions of their students. I analyze the accounts that GTAs give for their motivations to do this work and some of the challenges they face on the job. In doing so, I demonstrate how GTAs' intimate labor is intended to produce caring ties between future physicians and their patients, and thus to produce certain kinds of expert subjects who can uphold medical authority in the era of corporatized healthcare. I continue this theme in chapter 4, where I argue that the seemingly artificial context of the GTA session prepares medical students to embody the norms and values of a changing profession. I analyze medical students' accounts of the pelvic exam as a pivotal moment in their training and link these to how medical educators describe the importance of this foundational encounter.

In chapter 5, I turn my attention to how GTAs train medical students to become aware of novel sensations in their own bodies in order to locate and make an object of attention out of the internal reproductive anatomy. I argue that this attention to "feeling with" the body posits feeling as a collectivized, embodied practice, in which affects circulate within and between bodies, and I explore the implications of this concept and practice for theories of clinical perception. Finally, in chapter 6, I explore another subject-making practice by analyzing how GTAs teach medical students techniques of patient empowerment in the pelvic exam. I argue that patient empowerment represents another technology of affect, this one intended to produce patients as "partners," subjects who are responsible for participating, and obligated to participate, in the maintenance of their own health. I consider how these technologies construct the ideal patient—and who is left out by them.

In the conclusion, I revisit my argument about affective governance in medical education. I consider some of the implications of theorizing affective governance for healthcare. I demonstrate forms of resistance to normalizing technologies of affect and argue for reforms in medical education that can challenge the ways in which affect becomes instrumentalized under for-profit corporate healthcare regimes.

Thus, taken together, this book uses the case of teaching and learning the pelvic exam in contemporary United States medical education to understand the complicated ways in which affect—that is, bodily capacities to sense, relate, and form connections—are appropriated by expert knowledges and practices in the service of maintaining professional dominance and biopolitical control. The coalescing of this new regime is evident in how feminist practices have challenged sexist and racist practices in teaching and learning the pelvic exam, even as these same practices have been coopted by medical education. In this way, in chapter 1 and throughout the book, I hold the positive impacts of feminist politics of care alongside their exclusions and limitations, demonstrating how medicine simultaneously is transformed by and coopts interventions and challenges.